6.1.2 Potential Impact from Proposed upgrade

Increasing production from 50,000 tpa to 60,000 tpa would increase overall actual emissions by 20%. Mass emissions rates, with the exception of TF particulates, would still fall well below the AQIA emission rates (see Tables 6 and 7) with exception of the particulate emission rates for the Tilting Furnaces. These exceedances however are more than compensated for by the Holding Furnace emission rates which are only 25% of those originally anticipated. Therefore the air quality impacts associated with the proposal upgrade will fall well below those predicted in the original AQIA which were found to be acceptable by the Department and the EPA. No further assessment is justified.

6.1.3 Conclusion and Environmental Safeguards

As discussed in Sections 6.1.1 and 6.1.2 air emissions based on actual air monitoring mass emission rates plus an additional 20% increase across all pollutants will fall well below those estimated and used for assessment in the original AQIA. Air quality Impacts will therefore be less than those predicted in the AQIA.

Midal will continue to comply with all air quality safeguards identified in the original EA (GHD 2012) and detailed in the Statement of Commitments reproduced in Table 8.

Table 8 - Statement of Commitments – Air Quality

Air Quality	Measures to reduce the potential for air quality impacts would be incorporated into the design of the facility as described in Section 8.5 of the Environmental Assessment. The specification provided to prospective equipment suppliers would dictate the technical and environmental performance the equipment would be expected to meet, based on Midal's operational requirements and the conditions of approval for the project. The cooling towers would comply with the *Public Health (microbial control) Regulation 2006* and The NSW Code of Practice for the Control of Legionnaires' Disease 2004. These would be read in conjunction with the Australian/New Zealand standard AS/NZ 3666 Parts 1, 2 and 3: Air-handling and water systems of buildings – Microbial control. A dust management plan would be prepared as part of the CEMP detailing measures for the control of dust generation.

In addition Midal operates under EPL 20254 which imposes numerous compliance obligations. Midal will continue to comply with all requirements of its EPL.

6.2 Noise

6.2.1 Existing Noise Conditions

The proposed increased production from 50,000 tpa of molten metal receival and metal product to 60,000 tpa will not require any additional equipment or modification to process. Midal will utilise spare capacity of its existing plant to receive and process metal in production timetable gaps currently existing.

Condition 31 of the original Project Approval (10-0039) established noise criteria for the project. Identical requirements were included in Midal's EPL 20254 Condition L4. Condition M7 of the EPL also

required Midal to undertake attended noise monitoring of the site within 3 months of operations commencing.

A Noise Compliance Assessment was undertaken by AECOM in August 2014. It was determined that "Predicted noise levels indicate compliance with the EPL limits at all receiver locations". A copy of this report is located on Midal's website.

6.2.2 Potential Noise Impact from Proposed Upgrade

As the proposed modifications are entirely consistent with the originally approved and assessed process no changes to noise levels are anticipated. There will be no new plant or equipment and the operational process remains the same. Noise measured at the receptors will not differ from that already existing.

6.2.3 Conclusions and Environmental Safeguards

Midal will continue to comply with all noise safeguards identified in the original EA (GHD 2012) and detailed in the Statement of Commitments reproduced in Table 9.

Table 9 - Statement of Commitments – Noise

Noise	The project would be designed and operated to ensure that noise criteria and not exceeded. A construction noise management plan would be prepared as part of the CEMP to detail how construction noise impacts would be minimised, including the measures identified in Section 10.5 of the Environmental Assessment.

6.3 Greenhouse Gas and Climate Change

6.3.1 Existing Greenhouse Gas Conditions

In the original EA (GHD 2012) Annual Greenhouse Gas emissions were calculated based on scope 1, 2, and 3 emissions.

I. Scope 1 emissions are greenhouse gas emissions created directly by a person or business from sources that are owned or controlled by that person or business.

II. Scope 2 emissions are greenhouse gas emissions created as a result of the generation of electricity, heating, cooling or steam that is purchased and consumed by a person or business. These are indirect emissions as they arise from sources that are not owned or controlled by the person or business who consumes the electricity.

III. Scope 3 emissions are greenhouse gas emissions that are generated in the wider economy as a consequence of a person's or business's activities. These are indirect emissions as they arise from sources that are not owned or controlled by that person or business but they exclude Scope 2.

It was estimated in the original EA that the Scope 1, 2 and 3 Emissions for the Midal Project were as follows:-

Scope 1 – 25,000 (t CO_2-e)
Scope 2 – 27, 000 (t CO_2-e)
Scope 3 – 975,000 (t CO_2-e)

TOTAL – 1, 027, 000 (t CO_2-e)

Midal has recently submitted its 2014/2015 NGER Report

The Greenhouse Gas Emissions (t CO_2-e) reported are substantially lower than that detailed in the original EA (GHD 2012) as detailed in Table 10. Scope 3 emissions are excluded as Midal has no control over them.

Table 10 - Greenhouse Gas Emissions (t CO_2-e)

	Original EA (GHD 2012)	NGER 2014/15
Scope 1	25, 000	7,100
Scope 2	27, 000	5, 339
Total Scope 1 and 2	52,000	12, 439

Midal's Greenhouse Gas Emissions are approximately 25% of that detailed and assessed in the original EA.

6.3.2 Potential Greenhouse Gas Emissions Impact from Proposed Upgrade

The proposed 20% increase of metal receival and processed at Midal will result in a proportional 20% increase in greenhouse gases emitted i.e. from 12,439 (t CO_2-e) to approximately 14,927 (t CO_2-e). This is still only 29% of that anticipated and asses in the original EA. Impacts are expected to be less than those predicted in that EA.

6.3.3 Conclusion and Environmental Safeguards

Midal will continue to strive to reduce greenhouse gas emissions from its Tomago facility by choosing low emission options for installation and operation at the facility. Midal's actual greenhouse gas emissions from the proposed 60,000 tpa operation will be approximately 29% of that anticipated in the original EA (GHD 2012).

Midal has and will comply with its statement of commitments related to Greenhouse Gas and Climate Change as reproduced below in Table 11.

Table 11 - Statement of Commitments – Greenhouse Gas and Climate Change

Greenhouse Gas and Climate Change	Potential energy efficiency measures including recovering waste heat and utilising renewable energy (as detailed in Section 17.4.1) and avoidance of natural hazards from climate change (as detailed in Section 17.4.2) would be considered in the detailed design phase of the project.

6.4 Hazards and Risk

The Department of Planning and Environment in their advice of the 9 September 2015 (Appendix 1) recommended that Midal prepare a State Environmental Planning Policy No., 33 Hazardous and Offensive Developments Assessment (SEPP 33) as detailed below:-

*Hazard and Risk – it is recommended that you undertake a preliminary risk screening prepared in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development, and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity, package size, and location of all dangerous goods and hazardous materials on site. This assessment should identify the hazards, arising out of the modification and the existing site as well as an external hazards (i.e. natural hazards) to determine the potential for off-site impacts and estimate the combined risks from the existing site and the modification (overall site).

A study to prepare the requested SEPP 33 assessment of the proposed production increase at Midal to determine if the policy applies to the site and whether additional studies are required for the facility was undertaken. In addition the study reviewed any changes to production equipment and to determine

whether there are any changes to the risk profile of the site as a result of the proposed increase in production output of the facility. A full copy of the study is included as Appendix 4.

The study concluded as follows:-

The review of the proposed production rate increase at the Midal Cables Tomago facility identified that there was no increase in Dangerous Goods (GD) storage quantities as a result of the production rate increase. Notwithstanding this, it is noted that the original storage of dross (Class 4.3) exceeded the SEPP 33 threshold quantities and therefore it was concluded that SEPP 33 still applies to the site.

As it was considered that SEPP 33 still applied to the site, a review of each of the hazards identified in the original hazard assessment was conducted to determine whether the proposed increase in production rate would result in a change to the risk profile such that acceptable risk criteria would be exceeded. The assessment conducted identified that the increased production rate did not result in significant changes to the site operations such that the existing risk profile would change causing acceptable risk criteria to be exceeded. Hence, it is concluded that the facility remains only potentially hazardous and not actually hazardous and would continue to be permissible within the current land zoning.

Midal has and will comply with its Statement of Commitments related to Hazard and Risk as reproduced in Table 12.

Table 12 – Statement of Commitments – Hazard and Risk

Hazard and Risk	The risk management and mitigation procedures outlined in Section 16.5.3 of the Environment Assessment would be implemented during operation of the project. Emergency management procedures would be developed to respond to potential fire and explosion scenarios.

6.5 Traffic and Transport

6.5.1 Existing Traffic and Transport Conditions

The Midal facility operates 24/7. The original EA (GHD 2012) estimated the following workforce

- 42 shift workers per 12hr shift (total 84)
- 35 Administration staff
- Total 119 Employees

Total daytime light vehicle trips was estimated at 164 (this includes 5 contractors likely to be on site as well as the dayshift and administration staff). Night time light vehicle trips was estimated at 84.

At peak operation (then estimated after 5 years of operations) transporting product (based on 50,000tpa and 25 tonnes of product/truck) would generate 2000 truckloads or approximately 12 truck trips per day on average with an additional 6 truck trips per day associated with materials delivery and site services.

It was concluded in the original EA (GHD 2012, Section 14.4) that "there are no significant impacts expected on intersection performance due to the project..."

As at December 2015 the Midal workforce was as follows: -

- Shift workers – 52 (4 X shifts X 13)
- Day Maintenance and Lab – 4
- Administration – 23
- Total = 79

Total daytime light traffic trips is approximately 80, about half of that originally estimated.

Midal has reached the 50,000 tpa production capacity within 18 months rather than the anticipated 5 years. Product truck movements have been restricted to week days with 20 trips/day. There are approximately 10 truck trips per weekday associated with supplies and services. Actual truck trips are slightly higher than projected (14 vs 12 for product and 7 vs 6 for supplies and services) assuming a 7 day operation.

6.5.2 Potential Traffic and Transport Impact from proposed upgrade

Midal proposes to increase the mass of molten metal received, processed and transported as rod and cable from 50,000 tpa to 60,000 tpa.

The workforce required to accommodate the increased production will not increase from that currently working on the site. The current workforce is 79 compared with the 119 originally contemplated in the original EA (GHD 2012). Light vehicle traffic will be remain below what was determined originally with negligible impact.

The transportation of product and the supply and services required to support the upgrade with increase proportionally. Truck trips for product transport will increase from 14 to 17 and supplies and services from 7 to 9 assuming a seven day operation.

The transport of effluent pumped from the septic tank following the WWTP conversion would occur once every 9-10 days. There is no change to the number of vehicle movements as a result of the WWTP upgrade.

Overall, the upgrade is expected to result in marginal increases in traffic flow along Tomago Road, McIntyre Road and School Drive during weekday peak periods.

6.5.3 Conclusions and Environmental Safeguards

The proposed upgrade will not result in additional lightweight vehicle movements compared with that indicated in the original EA. In fact lightweight vehicle movements will decrease due to operational efficiency gains decreasing the Midal workforce numbers.

Heavy vehicle numbers will increase proportionally from that originally contemplated in the project. The original traffic assessment determined that the Midal project would have no significant impacts. Due to relatively low increase in heavy truck trips per day i.e. 5 associated with the upgrade it is again determined that Traffic and transport impact would not be significant.

Midal would continue to support the operational actions included in the original statement of Commitments as detailed in Table 13.

Table 13 – Statement of commitments – Traffic and Transport

Traffic and Transport	All heavy vehicle loading and unloading movements would occur within the site and internal access roads and designated loading and unloading zones would be provided for specific site operations. Staff and heavy vehicle movements would be separated by containing all staff vehicle movement to designated off street parking areas on newly constructed private access roads. A separate direct private haulage road would be provided to connect the project with the smelter.

6.6 Groundwater

6.6.1 Existing Groundwater Conditions

The operation for the existing waste water treatment plant and associated effluent irrigation area has the potential to increase nutrient and other contaminant areas and downstream towards the Hunter River.

The treatment plant failed to continuously meet EPL requirements and was therefore isolated from the irrigation area in September 2014. The partially treated effluent continues to be collected and taken to a Hunter Water regional waste water treatment plant for additional treatment and disposal.

Midal is required to monitor groundwater at 3 locations for various parameters on a monthly and quarterly basis. Complete monitoring data can be found on the Midal website.

In Summary:-

- Background (Point 8 – North of Midal site)
  - Nitrogen levels vary between 0.5-2.7mg/L
  - Electrical conductivity varies between 60-110µS/cm
- Immediately South of Irrigation Area (Point 7)
  - Nitrogen levels increased from 1-18mg/L and are anticipated to decrease towards background levels
  - Electrical conductivity increased from 200-900 µS/cm and is decreasing towards background levels.
- South East of the Irrigation Area (Point 6)
  - Nitrogen levels increased from 1-10mg/L and are anticipated to decrease towards background levels
  - Electrical conductivity increased from 200-1100 µS/cm and is decreasing towards background levels.

The cessation of effluent irrigation removed the ongoing source of Nitrogen and Salinity. The groundwater will return to background quality with ongoing rainwater flushing and nutrient uptake by cover vegetation.

6.6.2 Potential Groundwater Impact from Proposed Upgrade

The ongoing potential of groundwater contamination caused by a poorly performing waste water treatment plant will be eliminated following the installation of the septic tank/ pump out system.

Midal is committed to designing, installing and operating the septic tank/pump out system in accordance with the requirements of Port Stephens Council.

Midal is also committed to connecting to a regional waste water sewer once a cost effective option becomes available.

6.7 Cumulative Impacts

The cumulative impacts associated with the proposed increase in the mass of molten metal received and processed and the replacement of the existing wastewater treatment plant have been assessed in Sections 6.1 Air, Section 6.2 Noise, Section 6.3 Greenhouse Gas and Climate change. Section 6.4 Hazard and Risk, Section 6.5 Traffic and Transport and Section 6.6 Groundwater. The assessment of cumulative impacts have been made against those originally determined in the original EA (GHD 2012)

The air cumulative impact has established that the proposed upgrade would generate significantly less air pollution than that originally anticipated and which was approved.

The noise cumulative impact will be the same as that originally anticipated and approved.

The cumulative Greenhouse Gas Emission will only be 29% of those originally established.

Overall Hazards and Risks will not be greater than for the original development and will be adequately managed.

Traffic and Transport impacts for the proposed upgrade will see a reduction in light vehicles and a minor increase in heavy vehicles which will result in only a minor impact.

The removal of the existing waste water treatment plant for replacement with a septic tank pump out system will eliminate the groundwater contamination potential from this source.

Overall the proposed upgrade will improve the environmental impact associated with the original development. Monitoring and operational experience has allowed actual environmental impacts to be measured and better quantified.

7 ENVIRONMENTAL MANAGEMENT

Midal has developed an Environmental Policy which details its objectives and performance expectations.

At the apex of Midal's Environmental Management process is the operational Environmental Management Plan (OEMP). This document details the environmental management structure, approval and licensing requirements, reporting (internal and external), training requirements and emergency response requirements. It describes the implementation monitoring and review processes, including internal and external audits.

The OEMP also has an appendices and series of specific management plans including:-

- Air Quality Management Plan,
- Energy Efficiency Plan,
- Traffic Management Plan,
- Landscaping and Vegetation Management Plan,
- Wastewater and Irrigation Management Plan,
- Stormwater Management Plan,
- Groundwater Management Plan,
- Emergency Plan,
- Safety Management Plan, and
- Waste Management Plan

These plans describe in detail the processed, actions and objectives for each of the specific areas of interest.

The OEMP and the various plans are reviewed on a regular basis (usually annually) to ensure currency and relevance.

Midal also operates under a Project Approval issued by the Department of Planning. The approval requires a number of conditions to be complied with. The Project Approval compliance is audited independently every 3 years. Midal constantly reviews its compliance and ongoing actions.

The EPA has issued Midal with an Environment Protection Licence (EPL 20254). This licence describes performance, monitoring and reporting requirements which Midal is obliged to comply with.

Both the Department and the EPA require annual reviews of performance in the form of an AEMR (for the Department) and an AR (for the EPA).

Midal also provides internal environmental training for all of its employees.

A Pollution Incident Response Management Plan (PIRMP) has been developed and tested to ensure appropriate actions are taken should an environmental incident occur.

The above processes ensure that Midal's environmental standard and performance are sufficient to minimise its environmental footprint.

The proposed upgrade will be reflected in the reviews of all plans and processes. As detailed in Section 6.7 the actual impact from the existing and upgraded facility will be less than that defined in the original EA (GHD 2012).

Midal will continue to exceed environmental expectations.

8 STATEMENTS OF COMMITMENTS

Table 14 provides a summary of mitigation measures which will be implemented during the construction and operation of the proposed modification. The Statement of Commitments included in the 2012 EA will be implemented as applicable to the upgrade and replacement of the wastewater treatment plant.

Table 14 – Summary of environmental mitigation measures

Aspect	Mitigation Measures
Air Quality	- Measures to reduce the potential for air quality impacts will be incorporated in the upgraded facility in accordance with Section 8.5 of the 2012 EA - Specifications provided to prospective equipment suppliers would dictate the technical and environmental performance the equipment would be expected to meet, based on Midal's operational requirements and the conditions of approval for the project. - A dust management plan would be prepared detailing measures for the control of dust generation during septic tank installation - Midal will comply with its EPL conditions and obligations
Greenhouse gas and Climate change	Potential energy and efficiency measures including recovering waste heat and utilising renewable energy (as detailed in Section 17.4.1) and avoidance of natural hazards from climate change (as detailed in Section 17.4.2) would be considered in the detailed design and operation of the facility.
Traffic and Transport	All heavy vehicle loading and unloading movements would occur within the site and internal access roads and designated loading and unloading zones would be provided for specific site operations. Staff and heavy vehicle movements would be separated by containing all staff vehicle movement to designated off street parking areas. A separate direct private haulage road will be maintained to connect the facility with the smelter.
Hazards and Risks	Midal will comply with all aspects of the original PHA and subsequent Hazard Audit findings.

Noise	The project and proposed modification would be designed and operated to ensure that noise criteria are not exceeded
Groundwater	- The proposed septic/pump out system will be installed and operated in accordance with the requirements of Port Stephens Council. - Midal will connect to a regional waste water sewer once a cost effective option becomes available.

9 CONCLUSION

In 2015 Project Approval 10-0039 was granted for the construction and operation of the Midal Cables International Pty Ltd aluminium rod and conductor manufacturing facility at Tomago under Part 3A of the EP&A Act.

Midal is now proposing to:

- Increase the mass of molten aluminium that can be received and processed on site from 50,000 tpa to 60,000 tpa and solid aluminium products that can be dispatched from the site from 50,000 tpa to 60,000 tpa, and

- Replace the existing waste water treatment plant with a septic/pump out system.

The proposed modification is to be assessed under S75W of the EP&A Act.

The EA has been prepared in consultation with the Department to address the potential environmental issues associated with the proposed modification. Key Environmental issues associated with the proposed modifications include air quality and odour and greenhouse gas and climate change. Other environment issues assessed include traffic and transport, hazards and risks, noise and groundwater assessment of each of the issues in relation to the proposed increase in production capacity and the replacement of the waste water treatment plant has established that the proposed modification would not have adverse impact on the environment or the community. In fact the impact of the proposed modification would generally be less than predicted in the original EA due to the conservative nature of the original EA assumptions. Midal will continue to implement appropriate management and mitigation measures as detailed in this EA.

10 REFERENCES

Reference 1 – Midal Cables International Pty Ltd – Tomago Aluminium Rod and Conductor Manufacturing Facility (GHD, February, 2012)

Reference 2 – Air Quality Impact Assessment (AECOM, March 2014)

APPENDIX 1

Department of Planning Advice

From: Kerry Hamann [mailto:Kerry.Hamann@planning.nsw.gov.au]
Sent: Wednesday, 9 September 2015 10:29 AM
To: Casey Samuels - HR Manager (Australia) <cs@au.midalcable.com>
Cc: Joanna Bakopanos <Joanna.Bakopanos@planning.nsw.gov.au>
Subject: FW: Increase Midal metal to 60,000

Hi Casey

As discussed, can you please prepare an Environmental Assessment in support of your request. The EA should include but not be limited to the following information:

General

- A discussion of the existing development and operations, including a current aerial photo of the site / site layout plan to identify the key components of the site layout.
- A description of the site including a map of the site and surrounding land, nearest residents, watercourses, other industry.
- A table detailing compliance with existing conditions of the approval.
- A discussion of the proposed modification, including need and justification. Please note any conditions of approval that you seek to be modified.

Environmental Assessment

- **Traffic.** Will there be any increase in traffic? How does this compare to existing and approved traffic movements.
- **Air quality**. A project specific and cumulative air quality assessment is required, which has been prepared in accordance with current EPA guidelines. I can provide these if you are unsure. What are the existing concentration and load limits for key pollutants i.e. SO2, NO2, PM10 and CO. How will they increase? Consult with the EPA if necessary in preparing your documentation.
- **Noise** – would there be a noise increase? What is the existing noise monitoring, and are there any noise issues related to current operations?
- **Hazard and Risk** – it is recommended that you undertake a preliminary risk screening prepared in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development,* and *Applying SEPP 33* (DoP, 2011), with a clear indication of class, quantity, package size, and location of all dangerous goods and hazardous materials on site. This assessment should Identify the hazards, arising out of the modification and the existing site as well as any external hazards (i.e. natural hazards) to determine the potential for off-site impacts and estimate the combined risks from the existing site and the modification (overall site).

Any other impacts that may arise out of the proposed modification should also be assessed.

Once you have prepared this documentation, please submit a draft via email to me for review. Once the Department is satisfied with the information we will consult with other relevant authorities including the EPA and Council.

Please call me if you have any questions on 9228 6516.

Kind regards

Kerry

Kerry Hamann
Industry Assessments
Department of Planning & Environment | GPO Box 39 | SYDNEY NSW 2001
T 02 9228 6516

Available: Monday, Tuesday & Wednesday.
For urgent enquiries on Thursday or Friday please contact Chris Ritchie on 9228 6413.

David Latter

From: fiona.gibson@planning.nsw.gov.au
Sent: Thursday, 3 March 2016 11:31 AM
To: David Latter
Subject: Midal Cable, Tomago (MP 10_0039 MOD 1)

Hi David,

As discussed earlier this morning please submit the section 75W modification application online through the Department's website at the following link:
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7266

If you scroll down the page and submit via the next link "click here" (see insert of **red box**)

In your application documents if you can please outline that any specifications regarding the waste water facility, including capacity, operation and maintenance and any changes to conditions.
If these specifications and aspects of the facility are being worked through separately with Council, please can you outline this in the application documents.
Any site plans of the waste water facility that can be submitted with the application would also be helpful.

Once the application has been lodged online, I will let you know when it has been accepted and we can commence the notification and assessment process.

Please feel free to give me a call if you wish to discuss further.

Kind Regards,

Fiona Gibson
Planner – Modification Assessments
Planning Services
Department of Planning and Environment
23-33 Bridge Street | GPO Box 39 SYDNEY NSW 2001
T 02 9228 6371 Info Centre: 9228 6111 E fiona.gibson@planning.nsw.gov.au

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Assessment Type - All

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Midal Cables - Tomago Cable Manufacturing Facility

Tomago Cable (Midal) Manufacturing Facility Increase production

The Tomago Cable Manufacturing Facility is proposing to increase the production annum to 60,000 tonnes per annum.

Other assessments against this site:

- Tomago Cable Manufacturing Project (Part3A)

Key dates and other information

Job Status	SEARs Issued
Assessment Type	Part3AMod
Project Type	Mining, Petroleum & Extraction > Metal Mine
Application Number	MP 1-_0039 MOD 1
DGRS Issued:	09/09/2015

Location details

Street	School Drive
City	Tomago
State	NSW
Post Code	
Country	Australia
Local Government	Port Stephens Council

For further information, please contact the planner, Kerry Hamann on 9228 6516.

To lodge any required documentation (e.g. Response to Submissions, revised EIS, modification application, please click here. **(for proponents/applicants only)**

APPENDIX 2

Independent Environmental Audit Findings and Actions

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action	Due Date
Minister's Conditions of Approval					
3.3	Unless otherwise specified by the Director-General, the Proponent shall: (a) comply with all monitoring (points) requirements and pollutant discharge concentrations as specified by the EPA in the EPL; and (b) ensure that the stack discharge design requirements comply with the EPL.	The 3% oxygen correction factor resulted in TSP, NOx and SOx results over the original EPL limits. The oxygen correction factor has now been changed to 17%, however review of historical data indicates the following exceedances still occurred: Sept 2014 Tilting Furnace 2 SO2 Nov 2014 Tilting Furnace 1 – SO2 Tilting Furnace 2 – TSP Feb 2015 Tilting Furnace 1 – TSP Review the following information to assist with determining the cause of any exceedances and potential mitigation measures. • process; • any existing mitigation technology in place; • the burner characteristics; and • CO percentage	NC-1	The EPA has revised the Midal EPL and has removed the requirement to monitor for SO2 due to the insignificant mass emissions from Midal within the Tomago Aluminium dominated SO2 environment. The only source of SO2 emissions at Midal relates to the combustion of natural gas. Higher results of SO2 appear to result from monitoring equipment interference. No further action required. Solid particle emissions periodically exceed the EPL limits for both the holding furnaces and the tilting furnaces. The process involved in the furnaces includes the holding and heating of molten aluminium, the addition of various alloys and the removal of oxides from the surface of the molten metal prior to metal transfer and casting. The following actions are proposed: • Review the possibility of heating flame impingement and sweeping of the surface dross during firing leading to elevated solid particulate emissions. Modify if impingement is creating exceedances • Review emissions during alloy addition, identify if certain alloys are enhancing particulate emission and modify/change process. • Review and modify dressing process to reduce particular emissions if required. Additional baseline measurements for solid particle emissions was conducted without ladle additions, transfers, alloying, fluxing or skimming operations with burner on minimum fire. Exceedance was recorded on tilting furnace with high O2 measurement again raising the calculated particulate measure. EPA advised of intention to request removal of O2 correction from particulate limits in EPL due to furnace design.	Complete Complete
3.17	Except as may be expressly provided in an EPL for the project, the Proponent shall comply with Section 120 of the POEO Act.	Stormwater discharged off site though 2 gross pollutant traps to remove solids. During the site inspection, the refuelling pod for the forklifts was stored close to a stormwater drain (within 20m).	NC – 1	The refuelling pod is contained eliminating leakage from the container. There is the possibility of spillage during refuelling operations. The following action is proposed: • The refuelling pod is to be recorded to within a bunded area	

		Process water treatment plant waste water tank overflowing to nearby stormwater drain – quality of this water unknown. Consider relocation of the refuelling pod for forklifts away from stormwater drains. Actions to prevent overflows from the wastewater tank attached to the process water treatment plant to prevent discharge to stormwater to be completed. Alternatively testing completed to confirm water is within ANZECC (2000) guidelines.		Following Hazard audit recommendations, refuelling pod is self bunded, but will be relocated to an area closer to maintenance building away from drains. A spill kit has also been located next to pod to address concerns of any potential minor spill during refuelling. Process Water overflow will be fully retained and disposed of appropriately. No discharge to storm water is permitted. Process water tested and confirmed within ANZECC guidelines. Membranes replaced in RO plant and additional maintenance improvements being made.	End Apr 2016 End Apr 2016
3.18	The Proponent shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Environmental Protection Manual: Technical Bulletin Bunding and Spill Management.*	Noted during the site inspection that some DGs were stored outside bunded areas eg IBC in "Building 1" – this area drains to process water sump so impact would be limited to operations/process. Waste oil also noted in unbunded IBC along east fence line outside maintenance building. Bund used to store the emergency emulsions spill tank noted as leaking. Oily residue also noted on water inside bund. Chemicals in process water treatment building (reverse osmosis plant) stored on ground. Consider bunding all dangerous goods on site including waste material. The bund used to store the emergency emulsions spill tank requires repair.	NC – 1 Open	The following actions are proposed: All IBCs and other DG containers and their contents on site are to either be contained with their own bund, to be relocated to a purpose built bunded area, to be relocated within the production building or to be removed from site and disposed of appropriately. • The emergency emulsion spill tank bund is to be fully covered and partially enclosed to eliminate the ingress of stormwater. The existing bund is to be resealed to provide secure storage. Emergency emulsion spill tank bund has been pressure cleaned and a roof has been installed. Bund wall to be re-sealed and additional side walls to be added • The RO chemicals are to be stored in the onsite storage container. Separate plastic storage bunds purchased for RO chemicals - Complete	End May 2016 Complete
3.29	Prior to start up, the Proponent shall submit to the Director-General a report detailing compliance with Conditions 27 and 28 (above) of this Schedule, one month prior to the commencement of operation of the project.	Assessment of the compliance of the Fire Safety Study, Final Hazards Analysis, Emergency Plan and Safety Management System has not been assessed. Consider completing assessment of compliance against requirements of reference documents into table with cross reference to relevant sections of the plans.	NC-2 Open	The following action is proposed: • Compliance with the Fire Safety Study, Emergency Plan and Safety Management System as then existing and required by the DA will be assessed during the annual review of the current relevant documents. Compliance with the Final Hazard Analysis will be included in the Hazard Audit currently being undertaken. • Independent Hazard Audit completed Oct 2015 – actions being implemented, Emergency Plan revised Dec 2015, Safety Management System currently being reviewed	All actions to be reviewed by end of Jun 2016

3.45	The Proponent shall ensure that all water, electricity and gas infrastructure at the site complies with Section 4.2.7 of the NSW RFS's *Planning for Bush Fire Protection 2006.*	ERP sent to RFS with site visit completed 18/7/14 by RFS (Ron Carter). Issues raised and addressed but no formal paperwork/report issued by RFS. Consider completion of internal assessment to ensure that requirements in Section 4.2.7 of the NSW RFS's Planning for Bush Fire Protection 2006 have been met.	NC-2 Open	The following action is proposed • An internal compliance assessment with Section 4.2.7 of the NSW RFS's Planning for Bush Fire Protection 2006 will be undertaken as part of Midal's preparation for the bushfire 2015/2016 season **Internal assessment of requirements in Section 4.2.7 has been conducted**	Complete

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action	Due Date
Minister's Conditions of Approval					
3.3	Unless otherwise specified by the Director-General, the Proponent shall: (c) comply with all monitoring (points) requirements and pollutant discharge concentrations as specified by the EPA in the EPL; and (d) ensure that the stack discharge design requirements comply with the EPL.	The 3% oxygen correction factor resulted in TSP, NOx and SOx results over the original EPL limits. The oxygen correction factor has now been changed to 17%, however review of historical data indicates the following exceedances still occurred: Sept 2014 Tilting Furnace 2 SO2 Nov 2014 Tilting Furnace 1 – SO2 Tilting Furnace 2 – TSP Feb 2015 Tilting Furnace 1 – TSP Review the following information to assist with determining the cause of any exceedances and potential mitigation measures. • process; • any existing mitigation technology in place; • the burner characteristics; and • CO percentag	NC-1	The EPA has revised the Midal EPL and has removed the requirement to monitor for SO2 due to the insignificant mass emissions from Midal within the Tomago Aluminium dominated SO2 environment. The only source of SO2 emissions at Midal relates to the combustion of natural gas. Higher results of SO2 appear to result from monitoring equipment interference **No further action required.** Solid particle emissions periodically exceed the EPL limits for both the holding furnaces and the tilting furnaces. The process involved in the furnaces includes the holding and heating of molten aluminium, the addition of various alloys and the removal of oxides from the surface of the molten metal prior to metal transfer and casting The following actions are proposed • Review the possibility of heating flame impingement and sweeping of the surface dross during firing leading to elevated solid particulate emissions. Modify if impingement is creating exceedances • Review emissions during alloy addition. Identify if certain alloys are enhancing particulate emission and modify/change process • Review and modify drossing process to reduce particular emissions if required **Additional baseline measurements for solid particle emissions was conducted without ladle additions, transfers, alloying, fluxing or skimming operations with burner on minimum fire. Exceedance was recorded on tilting furnace with high O2 measurement again raising the calculated particulate measure. EPA advised of intention to request removal of O2 correction from particulate limits in EPL due to furnace design.**	Complete Complete

3.17	Except as may be expressly provided in an EPL for the project, the Proponent shall comply with Section 120 of the POEO Act.	Stormwater discharged off site though 2 gross pollutant traps to remove solids. During the site inspection, the refuelling pod for the forklifts was stored close to a stormwater drain (within 20m). Process water treatment plant waste water tank overflowing to nearby stormwater drain – quality of this water unknown. Consider relocation of the refuelling pod for forklifts away from stormwater drains. Actions to prevent overflows from the wastewater tank attached to the process water treatment plant to prevent discharge to stormwater to be completed. Alternatively testing completed to confirm water is within ANZECC (2000) guidelines.	NC – 1	The refuelling pod is contained eliminating leakage from the container. There is the possibility of spillage during refuelling operations. The following action is proposed: • The refuelling pod is to be recorded to within a bunded area Following Hazard audit recommendations, refuelling pod is self bunded, but will be relocated to an area closer to maintenance building away from drains. A spill kit has also been located next to pod to address concerns of any potential minor spill during refuelling. Process Water overflow will be fully retained and disposed of appropriately. No discharge to storm water is permitted Process water tested and confirmed within ANZECC guidelines. Membranes replaced in RO plant and additional maintenance improvements being made.	End Apr 2016 End Apr 2016
3.18	The Proponent shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Environmental Protection Manual: Technical Bulletin Bunding and Spill Management.*	Noted during the site inspection that some DGs were stored outside bunded areas eg IBC in "Building 1" – this area drains to process water sump so impact would be limited to operations/process. Waste oil also noted in unbunded IBC along east fence line outside maintenance building. Bund used to store the emergency emulsions spill tank noted as leaking. Oily residue also noted on water inside bund. Chemicals in process water treatment building (reverse osmosis plant) stored on ground. Consider bunding all dangerous goods on site including waste material. The bund used to store the emergency emulsions spill tank requires repair.	NC – 1 Open	The following actions are proposed: All IBCs and other DG containers and their contents on site are to either be contained with their own bund, to be relocated to a purpose built bunded area, to be relocated within the production building or to be removed from site and disposed of appropriately • The emergency emulsion spill tank bund is to be fully covered and partially enclosed to eliminate the ingress of stormwater. The existing bund is to be resealed to provide secure storage Emergency emulsion spill tank bund has been pressure cleaned and a roof has been installed. Bund wall to be re-sealed and additional side walls to be added • The RO chemicals are to be stored in the onsite storage container Separate plastic storage bunds purchased for RO chemicals – Complete	Complete End May 2016 Complete
3.29	Prior to start up, the Proponent shall submit to the Director-General a report detailing compliance with Conditions 27 and 28 (above) of this Schedule, one month prior to the commencement of operation of the project.	Assessment of the compliance of the Fire Safety Study, Final Hazards Analysis, Emergency Plan and Safety Management System has not been assessed. Consider completing assessment of compliance against requirements of reference documents into table with cross reference to relevant sections of the plans.	NC-2 Open	The following action is proposed: • Compliance with the Fire Safety Study, Emergency Plan and Safety Management System as their existing and required by the DA will be assessed during the annual review of the current relevant documents. Compliance with the Final Hazard Analysis will be	

				Included in the Hazard Audit currently being undertaken. Independent Hazard Audit completed Oct 2015 – actions being implemented, Emergency Plan revised Dec 2015, Safety Management System currently being reviewed	All actions to be reviewed by end of Jun 2016
3.45	The Proponent shall ensure that all water, electricity and gas infrastructure at the site complies with Section 4.2.7 of the NSW RFS's *Planning for Bush Fire Protection 2006*.	ERP sent to RFS with site visit completed 18/7/14 by RFS (Ron Carter). Issues raised and addressed but no formal paperwork/report issued by RFS. Consider completion of internal assessment to ensure that requirements in Section 4.2.7 of the NSW RFS's Planning for Bush Fire Protection 2006 have been met.	NC-2 Open	The following action is proposed: • An internal compliance assessment with Section 4.2.7 of the NSW RFS's Planning for Bush Fire Protection 2006 will be undertaken as part of Midal's preparation for the bushfire 2015/2016 season. Internal assessment of requirements in Section 4.2.7 has been conducted	Complete
4.5 (a)	Within three (3) months of the submission of any: (a) audit required under this approval; (b) incident report under condition 8 of this schedule; or (c) annual review under condition 5 of this schedule, The Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General. *Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.*	This requirement is included in Section 4.3.2 of the OEMP. OEMP, Air Quality Management Plan, Energy Efficiency Plan, Traffic Management Plan, Soil and Water Management Plan all have issue dates over 12 months. Check reviews of the plans are completed annually as a minimum even if minimal changes are considered to be required.	IO	The following actions are proposed: • Outstanding relevant current plans will be reviewed by end of 2015 • All ongoing plans will be reviewed on an annual basis. The review schedule will be included in the 2016 Environmental Calendar. All plans reviewed for 2015 and added to 2016 calendar	Complete.
4.6	Upon detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall immediately (or as soon as practical thereafter) notify the Department and other relevant agencies of the exceedance/incident. Within seven (7) days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Incidents were reported to EPA however, DP&E was not informed (oversight). The OEMP Section 4.3.4 does not clarify the reporting requirements i.e. all incidents to be reported to EPA, DP&I and where relevant, the PSC. Pollution Response and Incident Management Plan (PRIMP) includes reporting agencies with exception of DP&E Consider including agency reporting requirements in the OEMP and PRI	NC-2 Open	The following action is proposed: • The OEMP, ERP and PIRMP will be reviewed and modified to ensure internal consistency with respect to reporting of exceedances, incidents and to whom they are to be reported. ERP reviewed and sent to NSW Fire & Rescue, EPA, PSC and DoP. OEMP and PIRMP currently being reviewed	End Mar 2016

Statement of Commitments

	Habitat enhancement would be incorporated into the OEMP, including ecological burn, House Mouse control and bush regeneration programs.	The OEMP does not currently include habitat enhancement including ecological burn, House Mouse control and bush regeneration programs. Consider revising the OEMP to include habitat enhancement including ecological burn, House Mouse control (to prevent potential impacts to New Holland Mouse during implementation of controls) and bush regeneration programs.	NC-2	The following action is proposed: • Midal will discuss habitat enhancement with TAC and incorporate the agreed activities within the OEMP. Discussed with Tomago Aluminium and they have no plans at this stage for habitat advancement on the surrounding properties	Complete
	To minimise potential bushfire risk, asset protection zones would be established as outlined in Section 15.3.1 of Environmental Assessment. Preparation of a site management plan during construction and operation of the project would	It was noted that waste material was stored along the eastern boundary near the maintenance workshops. Consider minimising fuel loads along the site boundaries i.e. storage of waste materials kept to as low as possible levels.	IO	The following action is proposed: • The long term storage of combustible materials along boundaries will be eliminated where practicable. The boundary storage will be reviewed on a quarterly basis to ensure the standard is	

	also be undertaken to assist in reducing bushfire risk.			being maintained. The boundary review will form part of the Environmental Calendar from 2015. Included in Environmental Management Checklist for routine audit	Complete
	The risk management and mitigation procedures outlined in Section 16.5.3 of the Environmental Assessment would be implemented during operation of the project. Emergency management procedures would be developed to respond to potential fire and explosion scenarios.	All mitigation procedures implemented with exception of bollards/protective barriers have not been installed around the gas metering station. Consider installing bollards/protective barriers around the gas metering station.	NC-1	The following action is proposed: • Safety barrier/bollards will be installed to protect the gas metering station. The design will be established following discussion with the gas supply company who will required regular access to the facility Safety barrier purchased awaiting installation	End Mar 2015
	Potential energy efficiency measures including recovering waste heat and utilising renewable energy (as detailed in Section 17.4.1) and avoidance of natural hazards from climate change (as detailed in Section 17.4.2) would be considered in the detailed design phase of the project	The Plan includes the requirements of this condition with exception of: "Investigate opportunities to recover waste heat from furnaces" Consider the inclusion for investigating opportunities to recover waste heat from furnaces into the Energy Efficiency Plan.	NC-2	Chec's detailed design phase report - may be in there already and therefore can close this off otherwise can go in EEP The following action is proposed: Midal will engage an appropriately qualified consultant to investigate opportunities to recover waste heat from the furnaces.	End Apr 2016

EPL20254

L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	During the site inspection, the refuelling pod for the forklifts was stored close to a stormwater drain (within 20m). Process water treatment plant waste water tank overflowing to nearby stormwater drain – quality of this water unknown. Consider relocation of the refuelling pod for forklifts away from stormwater drains. Actions to prevent overflows from the wastewater tank attached to the process water treatment plant to prevent discharge to stormwater to be completed. Alternatively testing completed to confirm water is within ANZECC (2000) guidelines.	NC – 1 (duplicated with CoA 3.17)	See CoA 3.17	
L2.5	Water and/or Land Concentration Limits Refer Point 5 table, page -109 of EPL.	Monitoring was completed weekly with ongoing results outside criteria for all parameters with exception of phosphorus which was not analysed (oversight). Irrigation stopped on 20th September 2014. Groundwater report for 2014 indicates the increases in nitrate in monitoring well MW4 and ammonia in monitoring well MW5 are most likely related to the commissioning of the WWTP in April. The concentrations of nitrate and ammonia were in excess of the ANZECC guidelines of 0.7mg/L for nitrate and 0.9mg/L for ammonia. Results for January 2015, April 2015 and July 2015 indicates ammonia levels are back below ANZECC guidelines for all monitoring locations and Total Nitrogen levels appear to be trending downwards. Continue monitoring groundwater for any increases in parameters that indicate the historical application of irrigation is still occurring.	NC-1 Open	The follow actions are proposed: • Groundwater Monitoring Midal will continue Monitoring groundwater as required by its EPL on a monthly and quarterly basis. • Waste Water Treatment Plan Should the WWTP be recommissioned, a detailed plan consistent with the WWTP Remediation Plan forwarded to the DoP and EPA will be developed requiring direct oversee by Midal. EA drafted in support of application remove WWTP and replace with septic pump out • Exceedances 'See responses in CoA 4.6)	Ongoing YTBD

		Consider developing a system to increase oversight of the sewage treatment plant and associated contract. Consider including in the OEMP protocol to be followed in the case of any monitoring exceedances in the environmental incident response section to prevent delayed response to exceedances			
L4.1	Noise generated at the premises must not exceed the noise limits in the table below. The locations referred to in the table below are indicated by Table 3.1 of the "Noise Impact Assessment – Report for Tomago Cable Manufacturing Facility", prepared by GHD dated February 2012. Refer to table on page 11 of EPL. Note: These noise limits are based on the predicted levels shown in Appendix E of the Environmental Assessment, dated February 2012, prepared by GHD titled "Midal Cables International Pty Limited Tomago Aluminium Rod and Conductor Manufacturing Facility".	Monitoring completed August 2014 at five locations listed in EPL with exception of two locations where there was not a residence at the address listed. Monitoring locations replaced with residences located closest to monitoring points. Consider varying the EPL locations to reflect actual monitoring locations in case of requiring to complete any further monitoring in response to noise complaints or EPA request.	IO Open	Noise Monitoring Locations The following action is proposed: • Midal will liaise with the EPA to determine if the monitoring locations in the EPL should be modified to reflect the actual locations monitored in the Noise Impact Assessment.	End Mar 2016
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Noted during the site inspection that some DGs were stored outside bunded areas e.g. IBC in "Building 1" – this area drains to process water sump so impact would be limited to operations/process. Waste oil also noted in unbunded IBC along east fence line outside maintenance building. Consider bunding all dangerous goods on site including waste material.	NC – 1 Open (Duplicated with CoA 3.18)	See response to COA 4.6	
O6.1	All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.	Bund used to store the emergency emulsions spill tank noted as leaking. Oily residue also noted on water inside bund. The bund used to store the emergency emulsions spill tank requires repair.	NC – 1	See response to COA 3.18	
O6.2	Bunds must: (a) have walls and floors constructed of impervious materials; (b) be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed); (c) have floors graded to a collection sump; and (d) not have a drain valve incorporated in the bund structure, or be constructed and operated in a manner that achieves the same environmental outcome.	Oily water stored in bund area outside Building 1. The bund is currently not impervious nor is a collection sump installed. Review the bund design and implement actions as required.	NC-1	See response to COA 3.18 In addition to the above, the following is proposed • A review of the oily water waste storage bund will be undertaken with the objective of determining the floor grade and the installation of a floor sump. Installation of the sump will not adversely impact on the bund security. Installation of sump to be investigated at time of bund refurbishment	
O6.3	All liquid chemicals, fuels and oils must be stored in containers inside suitable bund(s). Bund(s) are to be designed, constructed and maintained in accordance with the EPA technical guideline "Bunding and Spill Management".	Noted during the site inspection that some DGs were stored outside bunded areas e.g. IBC in "Building 1" – this area drains to process water sump so impact would be limited to operations/process. Waste oil also noted in unbunded IBC along east fence line outside maintenance building. Chemicals inside process water treatment plant also unbunded. Process water treatment plant waste water tank overflowing to nearby stormwater drain – quality of this water unknown.	NC-1 (Duplicated with CoA 3.18)	See response to COA 3.18	

		Consider bunding all dangerous goods on site including waste material. Actions to prevent overflows from the wastewater tank attached to the process water treatment plant to prevent discharge to stormwater to be completed. Alternatively testing completed to confirm water is within ANZECC (2000) guidelines.			
M1.2	All records required to be kept by this licence must be: (a) in a legible form, or in a form that can readily be reduced to a legible form; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) produced in a legible form to any authorised officer of the EPA who asks to see them.	OEMP does not currently include requirement to keep records for 4 years. Consider including requirement to maintain records for four years in the OEMP (record keeping section) reference to record keeping matrix	NC-2 Open	Updated requirement into record keeping matrix completed whilst on site. The following actions are proposed: • The OEMP will be modified to require monitoring records to be maintained for at least 4 years and preferably indefinitely. Record keeping added to Section 5.1 of the OEMP	Complete
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	Review of results indicate all requirements met with exception of the time sample was taken and name of person for effluent, groundwater, stormwater (spreadsheet) The name missing has been picked up and results from July updated accordingly. Addition of time to be completed. Consider including all requirements into spreadsheets	NC-2	The following action is proposed: • That all contractors and employees collecting samples required by the EPL will include the time of sampling in their CoC information. Time of sampling now included on all monitoring reports	Complete
M2.3	Water and/ or Land Monitoring Requirements – Please refer to Point 5 and Point 6, 7, 8 tables on page 14 on EPL.	Review of results indicate all parameters sampled as per required frequency with exception of phosphorus in the effluent. Noted that sampling frequency for the effluent in the EPL does not align with the Wastewater and Irrigation Plan. Also visual check for oil and grease and sampling for faecal coliforms in the effluent is not included in list of analytes. Consider the inclusion of the correct sampling frequency and analytes for the effluent from the EPL into the WIMP to prevent incorrect sampling frequencies if/when irrigation recommences.	NC-1	The following action is proposed: • As detailed in CoA 4.5(e) all outstanding plans are to be reviewed by end Dec 2015. The consistency between EPL frequency (what is currently undertaken and required) will be ensured. Sampling plan aligned with EPL requirements in all management plans	Complete
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	OEMP does not currently include requirement to keep records of complaints for 4 years. Consider including requirement to maintain records for four years in the OEMP (record keeping section)	NC-2	The following actions is proposed. • The OEMP will be modified to ensure all complaint records are maintained for at least 4 years. Record keeping added to Section 5.1 of the OEMP	Complete
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Phone number on website listed as 02 4028 0200 - tested number on 03/08/2015 at 1:30pm – goes directly to office which is manned 9:00am to 5:00pm. Operational hours are 24 hours. Phone number to be changed to enable 24 hour access for complaints.	NC-2	The following action is proposed • Review the telephone system to ensure that the complaints number identified has a 24/7 response. Contact number changed to ladle phone which is in use 24/7	Complete

M7.1	To assess compliance with the noise Limit Conditions of this licence, attended noise monitoring must be undertaken in accordance with the conditions of this licence, and; (a) at each of the locations listed in the noise Limit Conditions; (b) occur once only within 3 months of the commencement of regular operations, and (c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy.	Monitoring completed August 2014 at five locations listed in EPL with exception of two locations where there was not a residence at the address listed. Monitoring locations replaced with residences located closest to monitoring points. Consider varying the EPL locations to reflect actual monitoring locations in case of requiring to complete any further monitoring in response to noise complaints or EPA request.	IO (Duplicated with L4.1)	See response to EPL – L4.1	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	OEMP does not currently include requirement to keep records for 4 years. Consider including requirement to maintain records for four years in the OEMP (record keeping section) and add to record keeping matrix	NC-2	The following action is proposed: • The OEMP will be modified to ensure the AR's are maintained at least every 4 years. Record keeping added to Section 5.1 of the OEMP	Complete

Management Plan Commitments – Implementation

Operations Environment Management Plan

2.4	Reporting Summary Table – lists reports, timing of issue and recipients.	Pollution monitoring data that is required to be collected by a licence condition must be published by the licensee in accordance with section 66(6) of the POEO Act and with the written requirements issued by the Environment Protection Authority (EPA). The data that is published on the website for the effluent excel data does not currently include the required information which must be published with the data as detailed in EPA publication "Requirements for Publishing Pollution Monitoring Data" issued in 2013. The table in the OEMP does not currently list the monitoring data required to be published and has additional reports not required. Consider aligning the reporting table to reports and monitoring data required to be uploaded onto the Midal website under approval/regulatory commitments and a link to an email address to request any further information as required. Consider reviewing the monitoring data included on the website to ensure that all EPA requirements are included in the information.	NC-2	The following actions are proposed: • The OEMP monitoring data table will be modified to align with eh EPA and EPL requirements OEMP revised to reflect EPL requirements • The monitoring data uploaded to the website will be reviewed to ensure compliance with Guideline requirements Monitoring data reviewed when available at weekly meeting between WHS & E Manager & Environmental Specialist	Complete Ongoing
3.4	Midal will conduct a letter drop to resident and businesses within 500m of site inviting interested parties to receive an "environmental update" email on a six monthly basis. Email will contain a link to the environmental reporting section website. The letter will contain a link to the website where complaints and queries can be lodged electronically, a 24 hour phone number	Letter sent to residents and businesses in area on 21 July 2015 and includes information about the business as well as reference to website for further information, and phone number to contact in case of any issue – 02 4028 0200. This number is not available 24 hours – previous finding. Does not include reference to subscribing to email updates that may be provided.	NC-2	The following action is proposed: • A 6 monthly Midal update will be prepared and uploaded to the website. An email address will be provided by letterdrop prior to the next 6 monthly web update.	

	and address to mail complaints.	Consider developing a six monthly operations update onto the website for access by the community and businesses. If no comments or complaints are received within the first 12 months of operations consider removing requirement for the email update from the OEMP.		Final 6 monthly letterbox update sent out Feb 2016. No feedback, comments or complaints have been received in 18 months of operation. Mail update will be removed from the OEMP and an operations update will be developed and be published on the website.	Completed

Energy Efficiency Plan

2.1	During the first year of regular production Midal will collate the energy use and production output data. The baseline data will be recorded using the Energy Use Proforma in Appendix A.	Operations commenced 1 July 2014 therefore 12 months of data should now be available. The Energy Use pro forma has not been completed to date. Consider reviewing the last 12 months of data to develop a baseline.	NC-2	The energy use information has been included in the NPI and NGER returns however the Energy Use Proforma has not been completed. The following action is proposed: • The Energy Efficiency Plan will be reviewed before the end of 2015. In the interim, the existing Energy use Proforma will be completed. Proforma completed and baseline data now included in NPI and NGER returns	Complete
3	Midal will include renewable energy suppliers in request for tenders at the end of each energy supply contract.	The current electricity provider is Origin – this provider does offer % "GreenPower". 100% Black power purchased under current agreement. Consider the review of purchasing renewable energy post baseline energy use review to gauge costs.	NC-2	The following action is proposed: Following the completion of the Energy Use Proforma Midal will review the costs associated with "green energy purchase" and the impact on operational costs. Proforma completed. Cost review conducted and conversion would result in a 20K increase in annual operating costs. Green energy purchase is not considered viable under the current financial climate.	Complete

Traffic Management Plan					
4.4.1	□ Visual monitoring of all traffic movements on site will be carried out to ensure the safe movement of traffic and the protection of persons and property through and around the site. □ Inspection of private roads following periods of heavy rain or adverse conditions prior to heavy vehicle traffic use to ensure driver and vehicle safety. □ Regular inspection of signage and barriers to ensure they are clearly visible and performing their function in directing traffic and alerting drivers of safety issues	Formal checks of traffic movements and condition of private roads after heavy rain not completed or recorded. Consider including requirements to a checklist (where practicable) – this checklist can be expanded to include other safety and environment aspects not currently captured in the daily checklist and completed at a less frequent rate.	NC-2	The following action is proposed: • The daily checklist will be overhauled to ensure all committed observations are made. Included in Environmental Management Checklist for routine audit	Complete
Air Quality Management Plan					
6.0	Undertake regular and\ appropriate housekeeping measures (e.g. immediately clean up spills; maintain site in a clean and orderly state etc.)	No old spills noted during site walkover. Site is relatively clean and orderly. Efforts on housekeeping could be increased as although site is new, there are some materials building up in areas such as the fence line along the eastern boundary behind the workshop (Building No 3). There were also numerous grease drums stored to the east of the unloading area. Consider increasing housekeeping efforts to prevent build-up of waste and redundant equipment/materials.	IO	The following action is proposed: • The daily checklist will be overhauled to address housekeeping standards. Included in Environmental Management Checklist for routine audit	Complete
Soil and Water Management Plan					
4.2	Store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Environmental Protection Manual: Technical Bulletin Bunding and Spill Management	Noted during the site inspection that some DGs were stored outside bunded areas e.g. IBC in "Building 1" – this area drains to process water sump so impact would be limited to operations/process. Waste oil also noted in unbunded IBC along east fence line outside maintenance building. Consider bunding all dangerous goods on site including waste material.	NC – 1 (Duplicated with CoA 3.18)	See response to COA 3.18	
4.2	Refuelling of site vehicles and transfer/decanting of liquid chemicals (>200L) will take place in a bunded area	During the site inspection, the refuelling pod for the forklifts was stored close to a stormwater drain (within 20m). Review the refuelling activity and assess risks of spills from refuelling pod when placing in final location. e.g. area outside Building 3 which requires resurfacing may be suitable for forming rollover bund area to capture any small spills from refuelling – will need to be risk assessed for spills, collision risks etc.	NC – 1	(See CoA 3.17) The following action is proposed: • The relocation of the refuelling pod will ensure that the area designated will be appropriately bunded to contain any refuelling spillages	April 2016
4.2	Spill kits are made available for small spills outside of bunded areas and any spillage is to be cleaned up immediately	Noted that spill kit was not stored with mobile refuelling pod. Spill kits were located in side process buildings. Consider locating spill kit with refuelling pod and near any other high risk activities.	NC-1 Open	The following actions are proposed: • A review of the spill kit locations as detailed in the Safety Plan will be undertaken to ensure appropriate location of kits. A kit will be located adjacent to the relocated refuelling pod. Spill kit located next to refuelling pod	Complete

4.2	In the event of a large or hazardous spill, contact emergency and relevant authorities, where required as detailed in the Emergency Response Plan in Appendix ERP of the OEMP.	ERP includes EPA fax number for notification within 48 hours. Duty to notify is immediate with penalties up to $2million for failure to notify in accordance with POEO Act. Consider modifying the ERP to include requirement to notify EPA immediately when becoming aware of an incident. In addition, ensure requirement is highlighted in training and inductions.	NC-1 Open	The following action is proposed: The ERP/ OEMP/TIRMP are to be reviewed to ensure internal consistency with respect to notification. ERP-08 reviewed to indicate immediate notification	Complete

Operational Management Plan – Wastewater and Irrigation

3.1.2	The wastewater treatment system will be serviced, monitored and certified quarterly by a Port Stephens Councils accredited service provider. Inspections and routine cleaning of the system will be conducted during servicing	RFI outstanding for these records		Awaiting response Last service report carried out on 12.11.15 by AWTS Maintenance Services	Complete
3.1.3	Holding staff inductions and refresher training to provide workers with the necessary knowledge about risks associated with recycled water	During site inspection, 2 staff completed fix of leak from tank and therefore handle raw sewage. Training for site staff not currently completed. Consider completing training for staff that may be exposed to sewage including hygiene requirements.	NC-1	The following action is proposed: • All maintenance and operational staff likely to come into contact with raw and or treated sewage will be trained using existing SOP Training provided to maintenance personnel 16.11.15	Complete
3.1.3	Instructions not to consume food or drink whilst working with recycled water	Training for site staff not currently completed. Consider completing training for staff that may be exposed to sewage and include this requirement.	NC-1	See response to OMP 3.1.3 - WW&I	
3.1.3	Maintaining a procedure for reporting and recording incidents involving recycled water (contacts are listed in Section 4.6).	PRIMP lists some aspects of recycled water spills in Section 9 but does not include contact details in Section 3 (the incident involves a sewage spill). Section 4.6 of the WIMP has provision for contact details but has not been completed. Consider including contact details in case of sewage spills into PRIMP and WIMP. Consider including all required information in Standard Operating Procedure being developed.	IO	The following action is proposed: • Review and include details in SOP. Emergency contact details added to Section 4.6 of the WIMP	Complete
3.2.1	As-Built drawings and a certificate of installation will be provided to Council once they are available prior to undertaking commissioning and validation activities	As built drawings and certificate of installation to be provided to PSC	NC-2	As built drawings received by Midal have not been considered adequate to date. Still trying to obtain more detailed drawings. Irrigation plans obsolete pending removal of WWTP to be replaced by septic pump out	TBD
4.5	All new staff members are subject to an induction process including training in the following as relevant to their level of responsibility: □ Day-to-day operation and maintenance of the irrigation systems and associated equipment □ Awareness of the potential environmental and human health impacts of recycled water, and safe working practices □ What to do and who to contact during a spill event or other emergency □ Awareness of the key requirements of guidelines for use of reclaimed water and wastewater irrigation	To be included once Standard Operating Procedure developed.	NC – 2 (duplicated with S3.1.3 of WIMP)	See response to OMP 3.1.3	

3.3.1	Irrigation application rates will be monitored by an online flowmeter. Measured application rates of greater than 50 mm over the course of the prior seven days, or an average greater than 31 mm/week over the course of three months, will prompt: □ A visual inspection of the irrigated area to determine whether the site is saturated □ An investigation by the operator of the irrigation system to determine the causes and, if necessary, to rectify the high application rates.	Flow meter not installed on system – flow is estimated by pump capacity * pump run time – to be recorded daily when plant is irrigating. Not completed for initial commissioning but include in current plan. WIRAP issued to EPA and DP&E 25 June 2015 with revised method of calculating flow rates to irrigation area. Consider aligning Wastewater and Irrigation Management Plan to align with WIRAP.	IO	The following actions are proposed: • The measurement of irrigation volume will be as detailed in the WIRAP issued to DoP and EPA on 25/06/2015. If the WWTP is to be recommissioned: WWTP to be replaced with septic pump out system	TBD
3.3.2	The performance of the treated wastewater will be assessed through sampling and analysis by a NATA accredited laboratory, in accordance with the following: TSS Quarterly Total P Biannually Total N Biannually BOD5 Quarterly pH Quarterly TDS Quarterly Cations Quarterly SAR Quarterly Metals Annually Exceedances against the objectives listed in Section 2.3.6 will require a follow-up sample to be taken within two weeks of the initial sampling. If an exceedance is observed in the follow-up sample, Midal shall notify Port Stephens Council who may request that Midal instigate an investigation into the reasons for the exceedance, and take corrective actions	Review of results indicates all parameters sampled as per required frequency with exception of phosphorus in the effluent. Noted that sampling frequency for the effluent in the EPL does not align with the Wastewater and Irrigation Plan. Also visual check for oil and grease and sampling for faecal coliforms in the effluent is not included in list of analytes. Consider the inclusion of the correct sampling frequency and analytes for the effluent into the WIMP to prevent incorrect sampling frequencies if irrigation recommences	NC-1 (duplicated with EPL M2.3)	See response to EPL L2.3	
3.2.2	Midal shall monitor the treated effluent and system performance for the first three months of operation in accordance with the following: □ Daily wastewater volumes entering/discharging from the system □ Weekly pH and turbidity readings (turbidity tube and hand held pH meter) □ Weekly visual confirmation of performance of functions □ Monthly influent and effluent sampling of Biological Oxygen Demand (BOD5), Total Suspended Solids, Total Nitrogen, Total Phosphorous, pH and faecal coliforms	System under commissioning and therefore requirement not evoked. Currently pumped out. Envirocycle contracted to commission but contract did not include requirements to record flows entering and discharging from the system.	NC – 2 (duplicated with Section 3.1.3 of WIMP)	Maintenance contract runs out Jan 2010 when final decision will be made to continue with commissioning plant or continue to transport to Hunter Water sewage treatment plant. Consider including monitoring requirements as per this condition if contract is renewed/extended. The WWTP has not and continues to perform poorly. Treated effluent is being collected and transferred to an approved Hunter Water WWTP for further treatment. The following action is proposed: • The WWTP will undergo a 3 month commissioning period in accordance with the WIRAP should the WWTP be brought back into service. WWTP to be replaced with septic pump out system	TBD

3.3.3	It is expected that pH and EC values will remain within the background range. However, an annual review of pH, EC and nutrient data should be undertaken. Groundwater hydrographs would be reviewed annually to verify that actual groundwater elevation changes are consistent with changes predicted in this assessment. Should increases in groundwater elevation be greater than expected, impacts on groundwater dependent ecosystems would be reassessed	Groundwater report for 2014 indicates the increases in nitrate in monitoring well MW4 and ammonia in monitoring well MW5 are most likely related to the commissioning of the WWTP in April. The concentrations of nitrate and ammonia were in excess of the ANZECC guidelines of 0.7mg/L for nitrate and 0.9mg/L for ammonia. Results for January 2015, April 2015 and July 2015 indicates ammonia levels are back below ANZECC guidelines for all monitoring locations and Total Nitrogen levels appear to be trending downwards. Continue monitoring groundwater for any increases in parameters that indicate the historical application of irrigation is still occurring. Consider developing a system to increase oversight of the sewage treatment plant and associated contract. Consider including in the OEMP protocol to be followed in the case of any monitoring exceedances in the environmental incident response section to prevent delayed response to exceedances.	NC-1 (duplicate finding with L2.5)	See EPL L2.5 Response	
3.3.4	The soil of the irrigation area will be sampled annually and tested by a NATA accredited laboratory, in accordance with Table 3.4	Irrigation of area not completed for 12 months – irrigation currently on hold. Baseline soil conditions have not been established. Consider sampling soil for parameters to establish baseline prior to irrigation recommencing (when applicable) so that sewage impacts can be more readily identified from existing conditions (background).	IO	The following action is proposed: • Prior to the commencement of wastewater irrigation soil sampling in accordance with Table 3.4 will be undertaken. Soil testing completed – no significant differences found from initial soil testing	Complete

Stormwater Management Plan

4.1	The maintenance schedule for the system will consist of routine inspection and removal of captured pollutants every 3 months with structural inspections occurring typically every 12 months or as specified by the product supplier. Refer to Table 2 for frequencies and inspection tasks.	Not currently completed – to be added to maintenance schedule (MEX)	NC-1	The following action is proposed: • The maintenance of the stormwater management system will be included in MEX and will be undertaken in accordance with the schedule detailed in Table 2 of the SMP. Stormwater management system added to Oracle maintenance system	Complete
2	Refuelling of site vehicles and transfer/decanting of liquid chemicals (>200L) will take place in a bunded area;	During the site inspection, the refuelling pod for the forklifts was stored close to a stormwater drain (within 20m). Review the refuelling activity and assess risks of spills from refuelling pod when placing in final location. e.g. area outside Building 3 which requires resurfacing may be suitable for forming rollover bund area to capture any small spills from refuelling – will need to be risk assessed for spills, collision risks etc.	NC – 1 (Duplicated with Section 4.2 of SSMP)	Refer to response Section 4.2 SWMP	
2	Spill kits are made available for small spills outside of bunded areas and any spillage is to be cleaned up immediately;	Noted that spill kit was not stored with mobile refuelling pod. Consider locating spill kit with refuelling pods and near any other high risk activities.	NC-1 (Duplicated with Section 4.2 of SSMP)	Refer to response Section 4.2 of SWMP	
4.3	Following the initial year of operation the groundwater data will be reviewed and if no significant change is noted then the monitoring of static water level, pH and EC will be conducted	Groundwater report for 2014 indicates the increases in nitrate in monitoring well MW4 and ammonia in monitoring well MW5 are most likely related to the commissioning of the WWTP in April. The concentrations	NC-1 (duplicate finding with EPL L2.5)	Refer to EPL L2.5 response	

	on a quarterly basis.	of nitrate and ammonia were in excess of the ANZECC guidelines of 0.7mg/L for nitrate and 0.9mg/L for ammonia. Results for January 2015, April 2015 and July 2015 indicates ammonia levels are back below ANZECC guidelines for all monitoring locations and Total Nitrogen levels appear to be trending downwards. Continue monitoring groundwater for any increases in parameters that indicate the historical application of irrigation is still occurring. Consider developing a system to increase oversight of the sewage treatment plant and associated contract. Consider including in the OEMP protocol to be followed in the case of any monitoring exceedances in the environmental incident response section to prevent delayed response to exceedances.			
4.4	A quarterly review of pH, EC and nutrient data will be undertaken and non-parametric trend analysis should be carried out. Based on the results of this review, a trigger and response plan should be implemented as follows: □ If a statistically significant decreasing trend in pH is evident, undertake quarterly monitoring for dissolved heavy metals (Al, As, Cd, Cr, Cu, Fe, Mn, Pb, Hg, Ni, Zn) until the cause is identified. □ If a statistically significant increasing trend in EC is evident, undertake major cation and anion monitoring on a quarterly basis until cause is identified. □ If a statistically significant increasing trend in nutrients is evident, the nutrient balance and performance of irrigation system should be reviewed.	Excel spreadsheets for quarterly results include charts to assist with trending data for nutrients. Excel spreadsheets for monthly data include charts to assist with trending pH and conductivity. Consider including trend lines on the graphs to assist with tracking trends.	IO	The following action is proposed: • The graphic presentation of data will be reviewed. Insufficient data points for statistical significant trending for all quarterly results. Linear trend line added for EC, pH & Depth to Groundwater	Complete

Waste Management Plan

2.4	The following actions/strategies will be implemented across site to maximise efficient waste management: □ all personnel working onsite will undergo a site induction. The induction will include a section on waste management practises on site; □ clear instructions detailing recycling procedures and waste segregation procedures are to be maintained at various locations across site; □ all waste receptacles and storage areas are to be clearly identifiable; and □ there is to be no long term storage of waste materials on site.	Check to ensure waste receptacles and storage areas clearly identifiable and long term storage of waste not currently completed. Consider including requirements to a checklist (where practicable) – this checklist can be expanded to include other safety and environment aspects not currently captured in the daily checklist and completed at a less frequent rate.	NC-2	The following action is proposed • The daily audit checklist will be reviewed and expanded to include waste storage and management as detailed in the WMP Included in Environmental Management Checklist for routine audit Recycling bins labelled and included in site environmental induction	Complete
2.4	The waste management contractor is required to interact and liaise regularly with Midal's HRSEM. To meet Midal's expectations and achieve the outcomes in this Plan, they must carry out: □ Monthly site inspections of all waste bins, waste oil tanks, grease drums etc. and complete a Weekly Site Inspection Checklist; □ Liaise with operational personnel, as required,	All requirements met with exception of Monthly inspections of waste bins, waste oil tanks etc not completed by waste contractors and key performance indicators not developed. Consider including requirements to a checklist (where practicable) – this checklist can be expanded to include other safety and environment aspects not currently	NC-2	The following action is proposed • Midal will develop Waste Management KPIs to ensure waste management objectives are achieved. Waste management targets include in KPI's	Complete

	to achieve the objectives of the Waste Management Plan; □ Assist the Environmental Coordinator, as required, to develop Key Performance Indicators (KPI"s) and targets in relation to; o reducing waste volumes to landfill; o identifying re-use opportunities; o identifying recycling opportunities; o identifying opportunities to reduce waste management costs; □ Prepare Monthly Waste Management Reports; □ Provide all required waste tracking documentation; □ Organise offsite waste disposal and recycling, as required; and □ Provide and maintain the necessary equipment.	captured in the daily checklist and completed at a less frequent rate. Consider developing waste KPIs and track using waste data provided by waste contractor.			
3	To ensure the plan has been implemented regular waste inspections will be undertaken by the HRSEM or their representative. The aim of the audits is to look for reuse, recycling and minimisation initiatives which will include the following checks: □ Housekeeping; □ Waste segregation; □ Liquid wastes volumes and storage The inspections will be recorded using the inspection sheet in Appendix A. A summary of any waste management issues and actions arising throughout the year will generally be presented in the Annual Environmental Management Report.	Checks using form not currently completed. Consider including requirements to a checklist (where practicable) – this checklist can be expanded to include other safety and environment aspects not currently captured in the daily checklist and completed at a less frequent rate.	NC-2	Refer to response WMP 2.4	

APPENDIX 3

EPL Variation Request Support Document