

Salt Ash Sand Quarry

Section 75W Modification
Assessment
(MP 07_0094 MOD 4)



October 2018

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Cover photo

Salt Ash Sand Quarry (DPE 2018)

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1. Introduction

On 24 November 2017, ATB Morton Pty Ltd (ATB Morton) submitted an application to modify the project approval for Salt Ash Sand Quarry (MP 07_0094) under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The modification application seeks approval to increase transport rates, truck movements, operational hours and extraction stages. This report provides an assessment of this modification application.

1.1 Background

ATB Morton operates Salt Ash Sand Quarry (Salt Ash Quarry), located approximately 22 kilometres (km) west of Nelson Bay and 3 km east of Salt Ash village in the Port Stephens local government area (see **Figure 1**). Access to the quarry is via Janet Parade off Nelson Bay Road.

Salt Ash Quarry was granted project approval (MP 07_0094) on 29 October 2010 to undertake sand extraction operations until 31 December 2030. Product transportation from the site was limited to 201,000 tonnes per annum (tpa) via 3 laden truck movements per hour, averaged over a working day (7:00 am to 5:00 pm weekdays and 8:00 am to 1:00 pm Saturday). The depth of sand extraction was also restricted to 1 metre (m) above the maximum predicted groundwater level.



Figure 1 | Site Location

The project approval has been modified on three occasions under section 75W of the EP&A Act. In March 2011, the project approval was modified to alter the intersection upgrade requirements for Nelson Bay Road and Janet Parade. In August 2011, the project approval was modified to allow for an alternative biodiversity offset site in Tomalla, rather than in Markwell as originally proposed. Lastly, in August 2014, the project approval was modified to redesign an acoustic bund and also involved minor changes to its biobanking agreement and calculation of its rehabilitation bond.



2. Proposed Modification

On 24 November 2017, ATB Morton submitted a fourth modification application under section 75W of the EP&A Act to increase production at Salt Ash Quarry. The modification application was supported by an Environmental Assessment (EA) (see **Appendix A**). This modification specifically seeks to:

- increase the sand product transportation rate from 201,000 to 400,000 tpa;
- increase approved laden truck movements from 3 to 3.5 truck movements per hour (averaged over the working day), which would equate to increasing laden truck movements from 30 to 42 per day;
- extend weekday operational hours from 7:00 am to 5:00 pm to 6:00 am to 6:00 pm; and
- alter the sequence of extraction stages by swapping Stages 2 and 3 (see **Figures 2 and 3**).

The modification would not result in changes to the approved:

- disturbance area or depth of extraction;
- transport routes for sand product deliveries;
- operational hours for Saturday, Sunday or public holidays;
- impacts on Aboriginal cultural heritage, ground and surface water, or visual impacts; and
- number or type of operating plant.

ATB Morton is seeking this modification to enable it to respond to increased market demand for its sand product from local and Sydney-based construction projects. ATB Morton also identified that its rehabilitation program would be logistically more efficient under the proposed extraction staging plan.

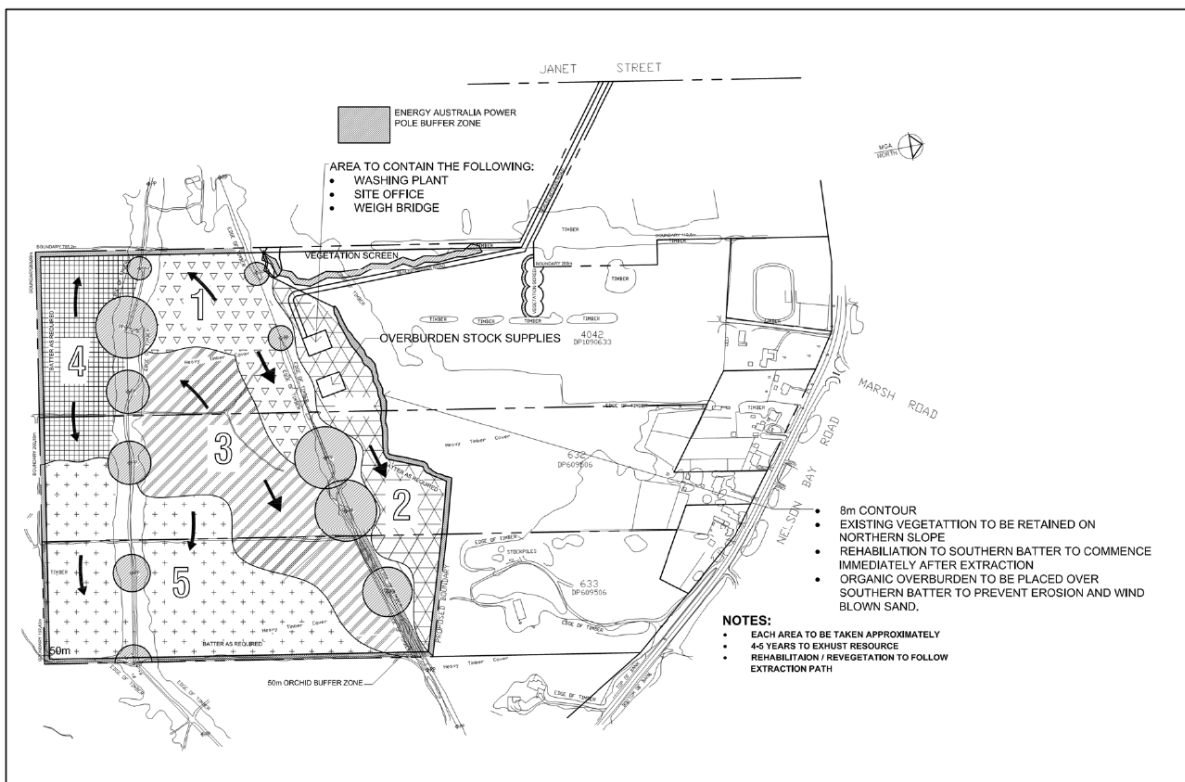


Figure 2 | Approved extraction stages

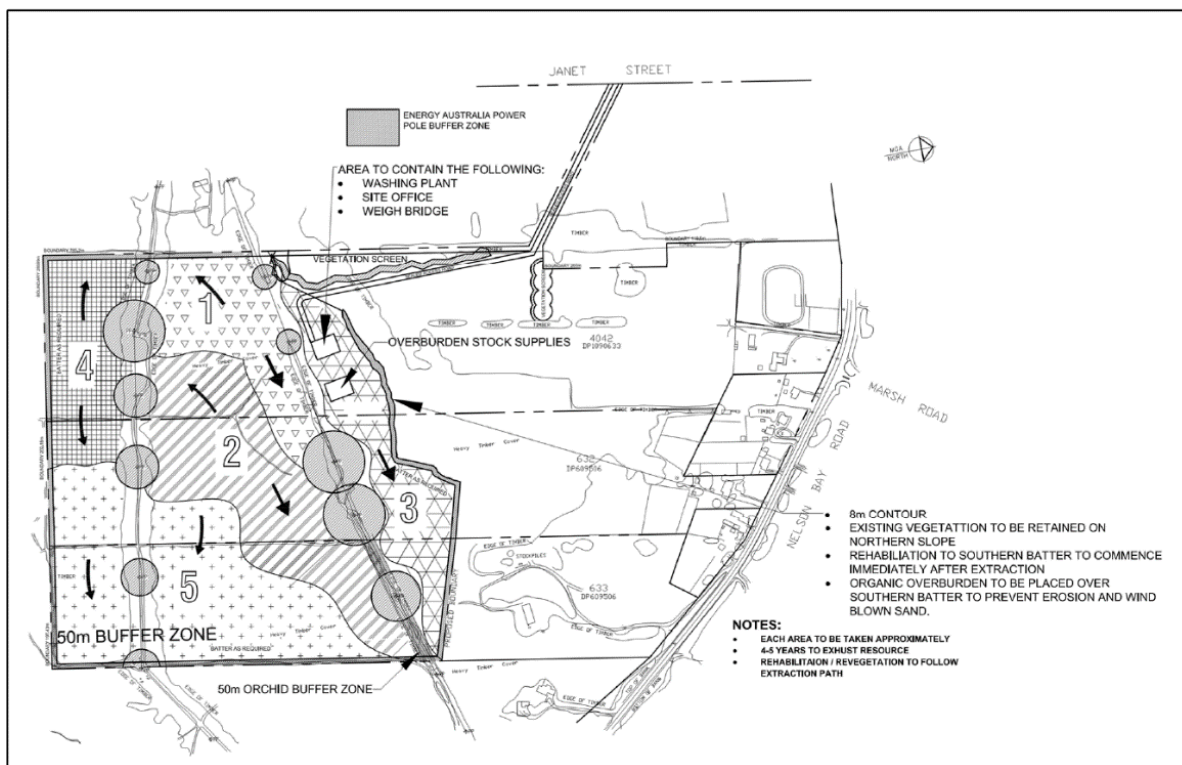


Figure 3 | Proposed extraction stages



3. Statutory Context

3.1 Section 75W

MP 07_0094 was granted approval on 29 October 2010 under Part 3A of the EP&A Act. The project is a transitional Part 3A project under Schedule 2 to the *EP&A (Savings, Transitional and Other Provisions) Regulation 2017*. The power to modify transitional Part 3A projects under section 75W of the EP&A Act as in force immediately before its repeal on 1 October 2011 is being wound up. However, because the request for this modification was made before the 'cut-off date' of 1 March 2018, the provisions of Schedule 2 (clause 3) continue to apply and the application must be handled under the former section 75W of the Act.

The Department is satisfied that the proposed modification is within the scope of section 75W and may be determined accordingly.

3.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, under the Minister's delegation of 17 October 2017, the Executive Director, Resource Assessments and Compliance may determine the application, as less than 25 objections from the public were received, Port Stephens Council did not object to the proposal and ATB Morton had not reported any political donations.

3.3 Environmental Planning Instruments

The following environmental planning instruments (EPIs) apply to the development:

- *State Environmental Planning Policy (State and Regional Development) 2011*;
- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*;

- *State Environmental Planning Policy No.33 (Hazardous and Offensive Development);*
- *State Environmental Planning Policy No.44 (Koala Habitat Protection);*
- *State Environmental Planning Policy No.55 (Remediation of Land);*
- *State Environmental Planning Policy (Coastal Management) 2018;*
- *State Environmental Planning Policy (Infrastructure) 2007; and*
- *Port Stephens Local Environmental Plan 2013.*

The Department has considered the modification against the relevant provisions of these EPLs. The Department is satisfied that the modification is permissible and can be undertaken in a manner that is generally consistent with the aims, objectives and provisions of these EPLs.

3.4 Objects of the EP&A Act

The Minister or delegate must consider the objects of the EP&A Act when making decisions under the Act. The objects of the EP&A Act changed on 1 March 2018. The Department has assessed the proposed modification against the current objects of the EP&A Act. The objects of most relevance to the decision of whether or not to approve the proposed modification are found in section 1.3, which are:

- Object 1.3(a): *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;*
- Object 1.3(b): *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;*
- Object 1.3(c): *to promote the orderly and economic use and development of land;*
- Object 1.3(e): *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;*
- Object 1.3(f): *to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);*
- Object 1.3(i): *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State; and*
- Object 1.3(j): *to provide increased opportunity for community participation in environmental planning and assessment.*

The Department is satisfied that the proposed modification encourages the proper management and development of resources (Object 1.3(a)) and the promotion of the orderly and economic use of land (Object 1.3(c)), since the:

- modification involves a permissible land use on the subject land;
- targeted sand resource has been determined by the Division of Resources and Geoscience within the Department (DRG) to be a significant contributor to affordable housing and infrastructure development in the State and region;
- targeted sand resource is located entirely within the current quarry footprint;
- modification would utilise the existing quarry site and transport infrastructure; and
- modification would provide ongoing socio-economic benefits to the community of NSW.

The Department has considered the principles of ecologically sustainable development (ESD) (Object 1.3(b)) in its assessment of the proposed modification. The Department has also noted ATB Morton's consideration of these matters in the EA for the initial application and considers that quarrying operations would remain consistent with

the principles of ESD under the proposed modification. The Department's assessment has sought to integrate all significant environmental, social and economic considerations.

Consideration of the protection of the environment (Object 1.3(e)) is provided in **Section 5** of this report. The Department considers that the modification, as proposed, would cause negligible additional environmental impacts as the approved disturbance area would remain unchanged.

The Department notes that consideration of Aboriginal cultural heritage required by Object 1.3(f) occurred as part of the initial application. The Department considers that the quarrying operations would remain consistent with Object 1.3(f) as no additional site disturbance is proposed.

The Department exhibited the modification application and made the accompanying EA publicly available (Object 1.3(j)), which resulted in nine public submissions being received.

3.5 Other Licences

Quarrying activities at Salt Ash Quarry are also regulated under an Environmental Protection Licence (EPL 13406) granted under the *Protection of the Environment Operations Act 1997*. The Environment Protection Authority (EPA) has stated that the proposal would require amendments to the this EPL.



4. Engagement

Clause 118 of the *Environmental Planning & Assessment Regulation 2000* (EPA Regulation) requires the Secretary to make the modification application publicly available. Therefore, the Department placed a public exhibition notice in the **Port Stephens Examiner** on **7 December 2017** and publicly exhibited the application and supporting documents from **Thursday 7 December 2017** until **Monday 15 January 2018**:

- on the Department's website;
- at Port Stephens Council's office in Raymond Terrace; and
- at the Nature Conservation Council's office in Sydney.

The Department directly notified 24 adjoining property owners residing along Janet Parade and Nelson Bay Road. Individual letters were sent on 6 December 2017 inviting residents to review the project's details and advising how to lodge a submission.

The Department invited comment from the EPA, the Department of Industry – Crown Lands and Water Division (DoI – Water), Hunter Local Land Services (LLS), the Office of Environment and Heritage (OEH), the Division of Resources and Geoscience within the Department (DRG), the Roads and Maritime Services (RMS) and Port Stephens Council (Council).

The Department is satisfied that the notification process met the requirements of the EP&A Act and the EP&A Regulation.

4.1 Agency Advice

The Department received comments from eight agencies (see **Appendix B**).

DoI – Water, DRG, LLS and **OEH** did not object to the proposal and were satisfied that the existing conditions of approval are suitable for managing impacts resulting from the modification.

RMS did not object to the proposal subject to recommended conditions being included in the project approval.

RMS recommended further upgrades of the intersection of Janet Parade and Nelson Bay in accordance with *Austrroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings*. These included a channelised right-turn (CHR) treatment for right-turning vehicles into Janet Parade from Nelson Bay Road. A channelised left turn (CHL) treatment was also recommended for vehicles entering Nelson Bay Road from Janet Parade. ATB Morton contested RMS' recommended road upgrades on the basis that road widening of the Janet Parade/Nelson Bay Road intersection had already occurred and there had been no reported vehicle accidents at the intersection since the upgrades were completed.

The Department subsequently requested ATB Morton provide additional traffic impact assessment to justify its position. Without this additional assessment, RMS' recommendations would be supported by the Department.

Following its consideration of the Department's position, ATB Morton agreed to RMS' recommendations, including upgrading the Nelson Bay Road/Janet Parade intersection to include a CHR treatment. After reviewing the response to submissions (RTS), RMS did not pursue its recommendation for the intersection upgrade to include a CHL treatment.

The **EPA** did not object to the proposal but raised concerns with the adequacy of the EA and the justification for extending the approved operating hours. The EPA did not raise concerns with the noise aspects of the proposal but questioned why there was no assessment against the *NSW Road Noise Policy* (RNP). The EPA advised that should the Department approve the modification, an additional maximum noise level criterion of 35 dB(A) for the shoulder period between 6:00 am and 7:00 am should be included. The EPA requested further information on the air quality impact assessment methodology including clarification on the approach to dispersion modelling and the emissions estimates. ATB Morton provided the requested information in its RTS and, following its review, the EPA was satisfied with ATB Morton's assessment of noise and air quality impacts. The EPA recommended several conditions to manage and mitigate noise and air quality impacts including limiting the dispatch of laden trucks to 42 per weekday and 18 on Saturday.

Council did not object to the proposal but raised concerns that the EA had not addressed changes in the area's ecology since the time of the original approval (2010). Council also identified that a social impact assessment had not been prepared and requested additional information on potential social impacts. ATB Morton in its RTS noted that at the time of preparing the EA, social impact assessment was only required for State Significant Development applications. While the Department acknowledged that a comprehensive social impact assessment was not required for this Part 3A modification, it also acknowledged that ATB Morton had sufficiently considered the social impacts of the modification, and how these would be mitigated. The Department also carefully considered the social impacts of the modification through its own assessment and consideration of agency comments. As a result, a range of additional conditions have been recommended including, limiting peak hourly truck movements and imposing additional noise impact assessment criteria between 6:00 am and 7:00 am. Following review of the RTS, Council did not object to the modification, if the Department was satisfied that Council's matters had been addressed. Council also took the opportunity to review the current condition regarding Council contributions. Council stated that the current project approval condition remained suitable and did not require amendment.

NSW Health, Hunter New England Local Health District (NSW Health) recommended ATB Morton prepare a suite of management plans for water and air quality, which are currently required by the project approval. NSW Health also recommended that ATB Morton prepare and implement a Mosquito Management Plan, which must include a risk assessment and identification of breeding sites. ATB Morton stated in its RTS that it would undertake further investigations and, if necessary, would undertake appropriate risk assessment, which has been reflected in its Statement of Commitments. The Department considers that the potential for mosquito breeding is low as the depth of extraction is restricted to 1 m above the maximum groundwater level. Additionally, as Salt Ash Quarry is

a sand quarry, there is limited capacity for prolonged pooling of rain water due to its high permeability and propensity for rapid drainage. The Department also considers that there is low potential for mosquito breeding within the onsite collection pond because there would be high turnover of water due to evaporation and water loss as part of washing sand product. Nevertheless, ATB Morton has included in its Statement of Commitments to undertake risk assessment of mosquitos and undertake appropriate action as necessary. NSW Health also recommended that community consultation measures be maintained for the duration of quarrying operations. ATB Morton accepted NSW Health's recommendations.

4.2 Public Submissions

Nine public submissions were received during the exhibition period, all in the form of objection (see **Appendix B**). These submissions raised a variety of concerns mostly regarding increased traffic and associated road noise. They also raised concerns about traffic safety and efficiency, adverse environmental and health impacts and administrative matters including exhibition occurring over to the Christmas/ New Year holiday period.

Environmental concerns raised related to vegetation clearance, groundwater quality impacts and deterioration of sand dune systems. The Department has carefully reviewed the existing conditions and requirements for preparing management plans for ground and surface water and biodiversity and is satisfied that the existing conditions suitably attenuate and manage the predicted impacts.

Traffic safety and efficiency matters raised included congestion of the road network, inadequate infrastructure, road safety, road damage and pedestrian conflicts. The Department considers that traffic safety and efficiency are key issues to this proposal and has provided further consideration in **Section 5.1**.

Submissions received concerning health referred predominantly to noise and air quality. The Department considers noise and air quality to be key issues with regards to this modification. The Department's consideration of noise and air quality is included in **Section 5.2** and **Section 5.3**, respectively.

As part of the Department's assessment of the modification, a careful review of the existing conditions was conducted. Where appropriate, conditions have been recommended to be amended and/or updated to be more consistent with contemporary drafting standards. Conditions associated with peak truck movement rates and hours of operations are further discussed in **Section 5**.

The Department was mindful that the community's perception that an exhibition occurring close to, or over, a holiday period could be procedurally unfair. Consequently, the exhibition period was extended to 40 days rather than the required period of 14 days. The Department also wrote directly to 24 adjoining private property owners who were informed of the proposal and the extended timeframe in which to lodge a submission. The Department is satisfied that appropriate steps were taken to ensure that residents were informed and able to comment on the proposal.

4.3 Response to Submissions

On 15 May 2018, ATB Morton submitted its RTS in which it provided additional information to respond to the EPA's concerns (see **Appendix C**). It also acknowledged the recommendations provided by Health and provided responses to public submissions and to RMS' recommendations regarding intersection upgrade works and peak hourly laden truck movements.



5. Assessment

In assessing the merits of the proposal, the Department has considered the:

- EA and RTS;
- agency and public submissions;
- existing conditions of approval;
- relevant EPIs, policies and guidelines; and
- requirements of the EP&A Act, including the objects of the Act.

The Department considers that the key assessment issues are traffic and transport (including safety and cumulative impacts), noise and air quality.

5.1 Traffic and Transport

Access to Salt Ash Quarry for all traffic, including heavy vehicles, is via Janet Parade which intersects with Nelson Bay Road as shown in **Figure 4** and detailed in **Figure 5**. Nelson Bay Road is a sub-arterial road providing linkage from Nelson Bay and Shoal Bay to the east and Newcastle and Sydney metropolitan areas to the west. Due to its request to increase heavy vehicle movements, coupled with proposing an increase in operational hours, ATB Morton included a Traffic Impact Assessment (TIA) in its EA.

The TIA included an assessment of:

- predicted traffic generation of the proposal;
- impacts on the local road network;
- available access arrangements; and
- indirect traffic impacts including road safety.

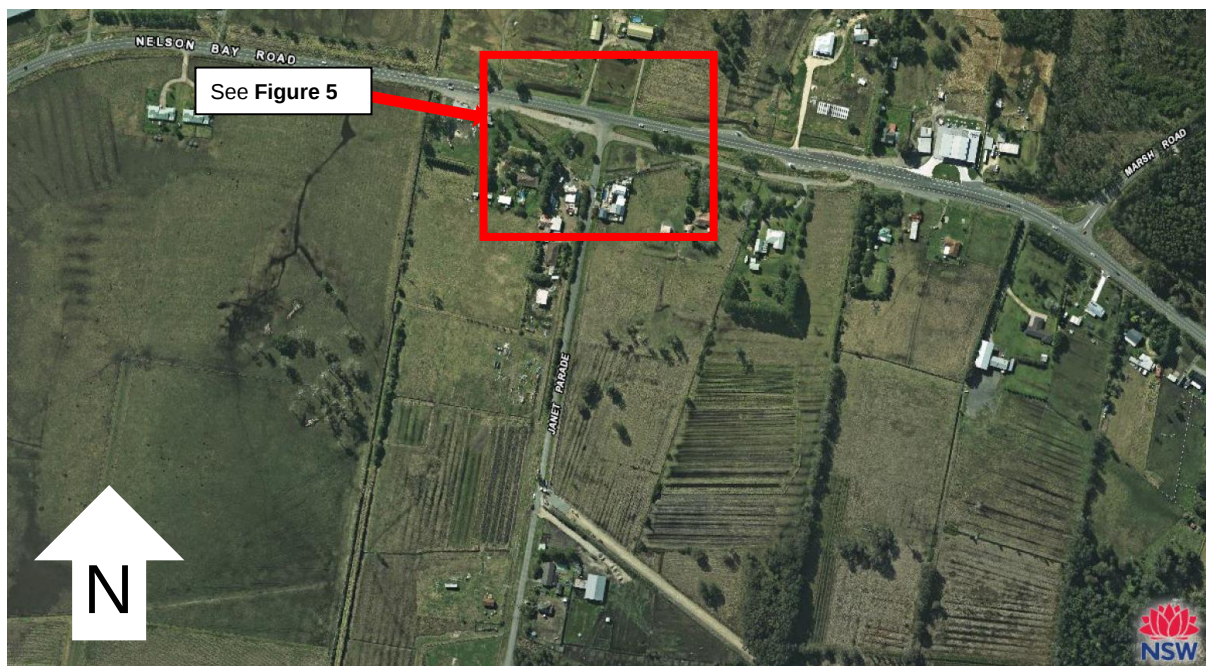


Figure 4 | Location of Nelson Bay Road/ Janet Parade intersection



Figure 5 | Detail of Nelson Bay Road/ Janet Parade intersection

The TIA stated that the increase from 3 to 3.5 vehicle movements per hour (averaged over the working day) would have a negligible effect on the current road network and concluded that no further road upgrades were required.

ATB Morton previously upgraded the Nelson Bay Road/Janet Parade intersection in 2012 to include an auxiliary right turn lane to allow vehicles heading east to pass by trucks waiting to turn right into Janet Parade. These upgrade works were the subject of the March 2011 modification and were required under condition 29 of Schedule 3. ATB Morton assumed that these previous upgrade works would adequately support the additional truck movements. ATB Morton also understood that RMS would be upgrading Nelson Bay Road to a full dual carriage in the near future.

RMS recommended that a CHR treatment (turning into Janet Parade from Nelson Bay Road) and a CHL treatment (turning into Nelson Bay Road from Janet Parade) be constructed, based on the information contained in the TIA. The TIA identified that the daily traffic flow was greater than 12,000 vehicles per day. Further, it was predicted that by 2027, daily traffic flows could reach 16,200 vehicles per day. RMS' advised that these daily traffic flows on a road with a design speed of 90 km/h would result in queues of greater than 160 m for vehicles turning into Janet Parade. These factors as identified in the TIA warrant additional upgrading of the Nelson Bay Road/ Janet Parade intersection. RMS stated that it had no plans or funding to undertake road upgrades in the short-term.

Both RMS and the EPA raised concerns that the calculations of proposed truck movements based on an hourly average over a working day could result in a much higher peak hourly rate. The EPA recommended restricting the total number of laden trucks dispatched from Salt Ash Quarry to 42 per weekday and 18 on Saturdays. These numbers were recommended to control traffic noise impacts for surrounding private residences. The Department's consideration of traffic noise is included in **Section 5.2**.

In its RTS, ATB Morton did not object to the EPA's recommendation to restrict daily truck movements. However, ATB Morton reiterated that the minor increase of 0.5 truck movements per hour (averaged over the working day) did not warrant upgrading the intersection. Nevertheless, RMS' consistently maintained that a CHR treatment for the current modification would be necessary, based on current and future traffic volumes and the proposed increased truck movements. The Department agrees with RMS' recommendation. The Department considers that while other sections of Nelson Bay Road have been upgraded to dual carriage by RMS, there is no certainty that any upgrade works to this section would occur in the short-term. The Department has consistently required other

quarries in the area to construct intersection upgrades with Nelson Bay Road, when warranted, for the purpose of improving and maintaining traffic safety and efficiency, and this situation is no different.

ATB Morton was provided an opportunity to undertake further assessment to justify not upgrading the intersection; however, ATB Morton later agreed to undertake the upgrade works.

The Department has therefore recommended a revised condition 29 (see **Appendices D and E**) requiring ATB Morton to upgrade the Nelson Bay Road/Janet Parade intersection to a CHR treatment to the satisfaction of RMS. Once constructed, the Department is satisfied that ATB Morton’s operations would not adversely impact road safety or efficiency. The Department has also retained the condition of approval requiring ATB Morton to prepare a Traffic Management Plan which includes a drivers code of conduct.

RMS also recommended limiting the dispatch of laden trucks from Salt Ash Quarry to 4 per hour. The Department supports this approach as it provides greater certainty than a rate that is averaged over the working day. The Department has therefore recommended a revised condition 7 to reflect this maximum hourly rate and the day rate suggested by the EPA.

5.2 Noise

The EA was supported by an updated Noise Impact Assessment (NIA), revised from the construction and operational NIA prepared in 2009. The revised NIA assessed the predicted noise impacts against the noise impact assessment criteria, approved in the project approval (see **Table 1**). With no proposed changes to operating plant or equipment on the site, the revised NIA focused on the potential increased trucking noise along the haul road.

Table 1 | Existing noise impact assessment criteria

Receiver	Criteria L _{Aeq} 15min dB(A)
JP1	40
JP2	43
JP3	39
JP4	37
NB1	36
All other receivers	35

The 2009 NIA and the results of recent quarterly attended noise monitoring demonstrate that noise from Salt Ash Quarry is generally inaudible at most receivers, except for JP3 and JP4 which are located closest to the haul road and Janet Parade (see **Figure 6**). The proposed modification has the potential to further impact these receivers due to the increased dispatch rates. The revised NIA quantified the maximum number of truck pass by events (per 15 minute interval) that could occur at these receivers to remain below the criteria in **Table 1**. The results indicated that haul trucks should be limited to five pass by events during the day time period and two pass by events during the morning shoulder period (6:00 am and 7:00 am). This analysis shows that the nominated dispatch limit of 4 laden trucks per hour would continue to comply with the existing operational noise criteria.

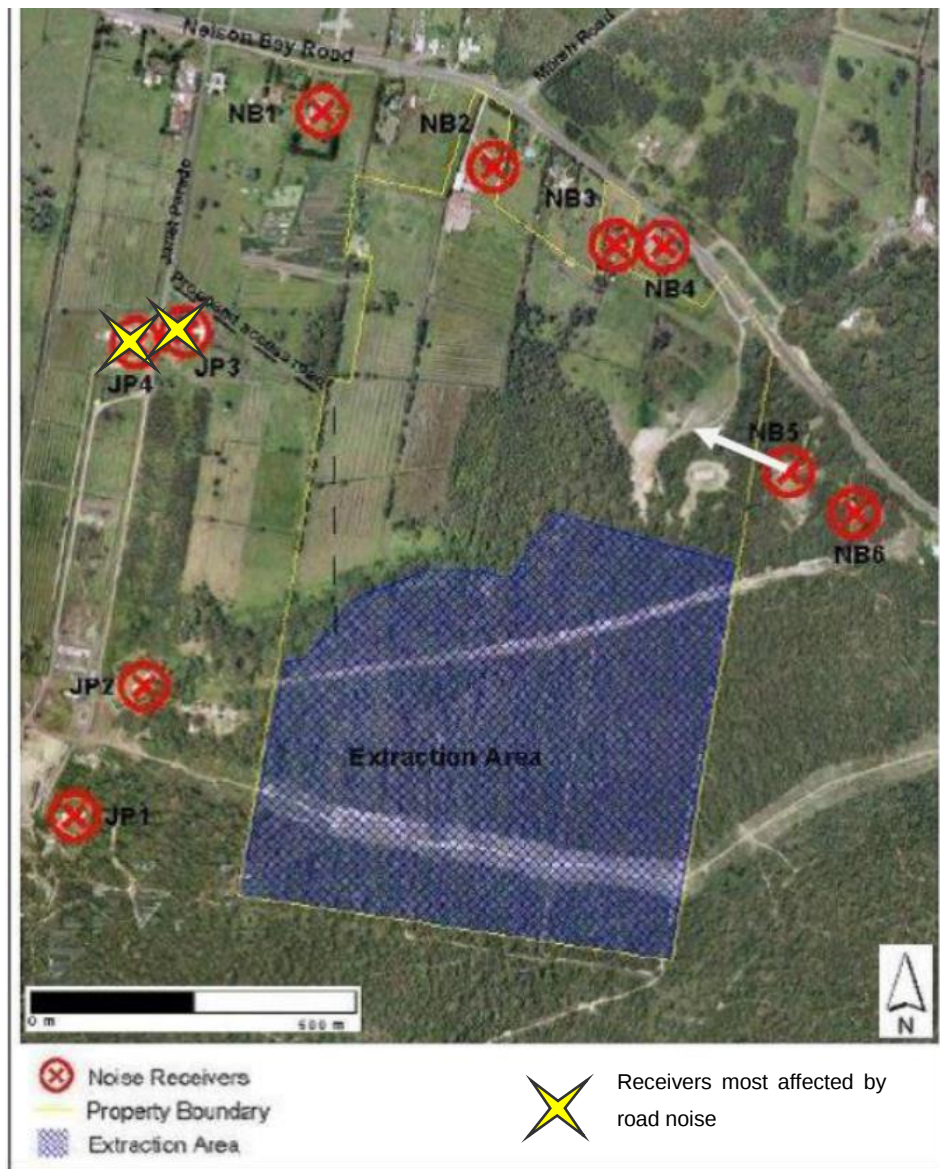


Figure 6 | Sensitive noise receivers surrounding Salt Ash Quarry

As discussed in **Section 4.1** and having regard to the proposed extended operating hours and the ongoing community concerns about road traffic noise, the EPA recommended a noise criterion of 35 dB(A) be imposed for all receivers during the morning shoulder period. The Department agrees that this additional, more stringent criterion is appropriate for the early morning and has accordingly recommended revisions to Table 1 of the project approval.

As discussed in **Section 5.1**, ATB Morton has also agreed to the EPA's recommendation to include a daily limit of laden truck dispatches. The Department considers that restricting laden truck movements would also alleviate concerns about noise and air quality.

In response to the EPA, an assessment of road noise in accordance with the RNP was provided in the RTS. The results of this assessment found that existing and predicted traffic noise levels for quarry traffic along Janet Parade would be lower than the rural road assessment criterion, with the exception of one receiver who is predicted to exceed the morning shoulder criterion by 1.7 dB(A). This increase is considered negligible.

The Department is satisfied that the assessment of the predicted noise impacts has been appropriately undertaken and has identified that Salt Ash Quarry, as modified, could operate within the existing impact assessment criteria with the addition of a more stringent morning shoulder criterion.

5.3 Air Quality

The EA was supported by an Air Quality Impact Assessment (AQIA) that assessed increased dust resulting from the proposed extension to operational hours, increased transportation rate and the variation to the extraction stages. The AQIA assessed the project's potential impacts on air quality through the emission of particulate matter PM_{2.5}, PM₁₀, Total Suspended Particulates (TSP) and deposited dust.

The AQIA assessed the following current dust-generating activities which would continue as part of the operations as modified:

- sand processing using vibrating screens;
- operation of front-end loaders within the extraction area;
- loading by front-end loaders to the sand processing plant, trucks or stockpiles;
- dust generated by haul truck movements within the excavation area; and
- wind-blown dust from raw and product stockpiles.

The AQIA assumed that these activities would be identical across all mine sequence areas and as such, proposed extraction stages 1 and 3 would have the greater air quality impact, being located closer to sensitive receivers. Therefore, air quality modelling was undertaken for those proposed stages which presented the worst-case air quality impacts over the life of the quarry.

Stage 1

The AQIA predicted that while the air quality impact would incrementally increase at most receiver locations, the worst-case location would receive an increase in:

- PM_{2.5} annual average of 6.0 to 6.6 µg/m³ (criterion of 8 µg/m³);
- PM₁₀ annual average of 16.6 to 18.5 µg/m³ (criterion of 25 µg/m³); and
- TSP annual average of 33.2 to 38.0 µg/m³ (criterion of 90 µg/m³).

The deposited average annual dust levels would increase by a maximum increment of 0.31 g/m²/month, which is below the criterion of 2 g/m²/month.

Assessment of the 24 hour average PM_{2.5} and PM₁₀ predicted exceedances of the impact assessment criterion of 25 µg/m³ and 50 µg/m³, respectively, due to elevated background levels. Further Level 2 contemporaneous assessments confirmed that these exceedances are not significantly attributable to Salt Ash Quarry.

Stage 3

The AQIA predicted that the air quality impact would incrementally increase at most receiver locations. The worst-case location would receive an increase in:

- PM_{2.5} annual average of 6.0 to 6.7 µg/m³ (criterion of 8 µg/m³);
- PM₁₀ annual average of 16.6 to 18.5 µg/m³ (criterion of 25 µg/m³); and
- TSP annual average of 33.2 to 37.30 µg/m³ (criterion of 90 µg/m³).

The deposited average annual dust levels would increase by a maximum increment of 0.48 g/m²/month, which is below the criterion of 2 g/m²/month.

Assessment of the 24 hour average PM_{2.5} and PM₁₀ predicted exceedances of the impact assessment criterion of 25 µg/m³ and 50 µg/m³, respectively, due to elevated background levels. Further Level 2 contemporaneous assessments confirmed that these exceedances are not significantly attributable to Salt Ash Quarry.

All stage 1 and stage 3 levels remain compliant with the criteria under the *Approved Methods for the Assessment of Air Pollutants in NSW, 2016* (Approved Methods).

The EPA reviewed the AQIA and raised several concerns with the assessment methodology including the approach to dispersion modelling and the emissions estimates. ATB Morton responded to the EPA's concerns in its RTS and supplementary information. The EPA advised that the supplied additional information and assessment of the predicted air quality impacts was satisfactory. The EPA also advised that while there were no predicted exceedances of PM_{2.5}, PM₁₀, TSP and deposited dust, this would not diminish the EPA's monitoring of the quarry to ensure it remains in compliance of its Environmental Protection Licence (EPL 13406).

The Department is satisfied that the assessment of the predicted air quality impacts has been appropriately undertaken and has identified that Salt Ash Quarry, as modified, could operate within the existing impact assessment criteria. Although the modification would result in only minimal changes to air quality in because of the modification, the Department requires emissions from the quarry to be reduced or avoided as far as is reasonable and feasible. Therefore, the Department has reviewed and revised the existing conditions that would require ATB Morton to:

- comply with contemporary air quality criteria in accordance with the Approved Methods;
- implement all reasonable and feasible mitigation and management measures to minimise air quality impacts; and
- prepare and implement a comprehensive Air Quality Management Plan in place of the current dust monitoring program.

5.4 Other matters

Other impacts associated with the modification are considered to be minor or negligible. **Table 2** summarises the Department's assessment of these impacts.

Table 2 | Other issues

Issue	Impact and consideration	Recommendation
Aboriginal cultural heritage	• Public submissions raised concerns about potential impacts on Aboriginal cultural heritage. • The modification proposes a minor change to the sequence of extraction. There are no changes proposed to the approved quarry disturbance area. • Existing conditions require the preparation and implementation of an Aboriginal Cultural Heritage Management Plan which would need to be reviewed and updated following approval of this modification.	• Current Aboriginal cultural heritage conditions in place. • No changes considered necessary to existing conditions.
Council contributions	• Council considered that the increased transport rate would require recalculation of its S 7.11 levy and Voluntary Planning Agreement.	• No changes required to existing conditions.

	• Conditions reviewed and considered acceptable as is by Council.	
Environmental assessment	• Public submissions raised concerns about: ○ this approval would set a precedent for other sand quarries to expand; ○ removal of old growth vegetation; and ○ impacts on sand dune systems. • The Department considers each quarry individually and on merit. • The Department considers that the proposal would not create additional impacts on vegetation as no additional clearance is proposed.	• No changes considered necessary to existing conditions.
Groundwater	• Public submissions raised concern about potential groundwater impacts of the proposal. • The Department does not anticipate additional groundwater impacts as there is no proposed change to extraction limits and extraction would continue to be restricted to 1 m above the maximum groundwater level. • Existing conditions require ATB Morton to review, and if necessary, amend its Water Management Plan, which includes a Groundwater Monitoring Program, following determination of this modification to ensure they remain suitable for the project.	• No changes considered necessary to existing conditions.
Surface Water	• Public submissions raised concern about potential surface water impacts of the proposal. • Existing conditions require ATB Morton to review and if necessary, amend its WMP for the site following the modification. • The WMP must include an Erosion and Sedimentation Control Plan and Surface Water Management Plan.	• No changes considered necessary to existing conditions.
Visual	• Public submissions raised concern about potential visual impacts of the proposal. • Existing visual vegetation screening remains in place and is not proposed to change. • The staging sequence of sand extraction is proposed to improve the efficiency of rehabilitation. The Department considers that this approach would further mitigate visual impacts.	• No changes considered necessary to existing conditions.



6. Evaluation

The Department has assessed the merits of the proposed modification in accordance with the requirements of the EP&A Act. The modification application and accompanying information demonstrate that the increased hours of operation, increased product transportation limit, increased laden truck movements and revised extraction sequences would result in minimal increased impacts on the environment and community.

The Department considers that the environmental impacts of the project can be appropriately managed through the proposed amended conditions of approval. The predicted impacts on traffic safety and traffic efficiency would be mitigated by way of proposed conditions of approval requiring ATB Morton to upgrade the intersection of Nelson Bay Road and Janet Parade. ATB Morton would also be required to comply with a lower noise impact assessment criterion during the morning shoulder period to ensure that nearby sensitive receivers are not further affected by the early morning truck movements.

The Department considers that Salt Ash Quarry, as modified, would continue to provide benefits to the region by supplying construction materials, namely construction sand, to the region's and State's construction projects. The Department is therefore satisfied that the proposed modification is in the public interest and should be approved.

6.1 Recommended conditions

A notice of modification (see **Appendix D**) and a consolidated version of the Salt Ash Quarry project approval (see **Appendix E**), as amended, have been prepared.

The primary changes are to the transportation limits in conditions 7 and 8 of Schedule 2, the noise impact assessment criteria and hours of operations in conditions 2 and 3 of Schedule 3, and the revised air quality impact assessment criteria in condition 8 of Schedule 3. The Department has also taken the opportunity to update existing administrative conditions to reflect current drafting standards.

ATB Morton has also updated its Statement of Commitments in Appendix 3 to reflect its revised commitments made under this modification.

ATB Morton has accepted the proposed modified conditions of approval.



7. Recommendation

It is recommended that the Executive Director, Resource Assessments & Compliance, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the modification falls within the scope of section 75W of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application;
- **modifies** the approval MP 07_0094;
- **signs** the attached approval of the modification (**Appendix D**).

Recommended by:

 9/10/18

Anthony Barnes

Senior Environmental Assessment Officer
Resource Assessments

Recommended by:

 9/10/18

Megan Dawson

A/Director
Resource Assessments



8. Determination

The recommendation is: **Adopted by:**

10.10.18

Ben Harrison

A/Executive Director

Resource Assessment & Compliance



Appendices

Appendix A – Environmental Assessment

http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8930

Appendix B – Submissions

http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8930

Appendix C – Response to Submissions

http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8930

Appendix D – Notice of Modification

http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8930

Appendix E – Consolidated Approval

http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8930