

ASSESSMENT REPORT

Section 75W Modification

Sandvik Machine Manufacturing and Maintenance Project

1. BACKGROUND

On 27 October 2010, the Minister for Planning approved a project application from Sandvik Mining and Construction Australia Pty Ltd (Sandvik) to construct and operate a machine manufacturing and maintenance facility at Heatherbrae, in the Port Stephens local government area (see Figure 1).

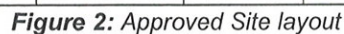


Figure 1: Regional Context

The approval, known as the Sandvik Machine Manufacturing and Maintenance Project (MP 10_0073), would be used to manufacture heavy machinery and cemented carbide tools for the mining and materials handling industries, repair and maintain mining machinery and as a training centre. The facility would also become Sandvik's regional head office.

The project includes industrial scale workshop buildings, office, training and amenities buildings, 569 car parking spaces, concrete hardstand areas and a machinery testing area

To date, vegetation clearing and civil works have commenced at the site.



The approved project requires large areas of the site to be paved and concreted to provide hardstand surfaces for machine manufacturing, maintenance and training activities to occur.

2. PROPOSED MODIFICATION

On 11 January 2011, the Department received a modification application from Sandvik, seeking approval for the construction and operation of a temporary concrete batching plant on-site.

- 1 x cement silo including cement auger;
- 1 x transit mixer loading area;
- 4 x aggregate storage bins with dimensions 8m deep x 5m wide x 2m high;
- admixture storage area (2 x 2,500 litre bunded storage tanks); and
- construction of a temporary access to the batching plant off Masonite Road.

The batching process involves loading aggregates into the aggregate weight hopper, discharging cement into the cement weigh hopper and then measuring the water and admixtures volumetrically through meters. The operator then discharges the materials, cement, water and admixtures at a pre-determined rate into the revolving transit mixer barrel. Additional water is added to the mixer after a final inspection of the concrete at the slump stand before the transit mixer leaves the loading area to deliver the concrete to the designated construction area within the site.

The proposed concrete batching plant would produce around 18,000m³ or 43,200 tonnes of pre-mixed concrete over 9 months to be used exclusively for on-site construction purposes at the Project site.

In the original Environmental Assessment, Sandvik determined that the peak construction traffic of the approved project would occur during campaign concrete pours when concrete trucks would be delivering to the site. With the proposed modification, Sandvik consider that the there would be a significant reduction in traffic movements due to the reduction in external pre-mixed concrete trucks delivering to the site.

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3. STATUTORY CONTEXT

Approval Authority

The Minister was the consent authority for the original application, and is consequently the consent authority for the modification application.

On 25 January 2010, the Minister delegated his powers and functions as an approval authority to modify certain project approvals under section 75W of the EP&A Act to the Director-General. This modification application meets the terms of this delegation, consequently, the Director-General may determine the application under delegated authority.

Exhibition and Notification

Under section 75W of the Act, the Department is not required to notify or exhibit the application. However, following a review of the modification application the Department determined that the proposed modification should be referred to Port Stephens Council (Council), the Office of Environment and Heritage (OEH, formerly Department of Environment, Climate Change and Water or DECCW), Hunter Water Corporation (HWC) and the Roads and Traffic Authority (RTA). The modification was also placed on the Department's website in accordance with Clause 8G of the *Environmental Planning and Assessment Act Regulation 2000*.

OEH raised no objections to the proposed modification and noted that Council would be the appropriate regulatory authority for any environmental matters under the *Protection of the Environmental Operations Act 1997* (POEO Act).

Council originally raised no objections to the proposed modification and noted the need for consideration of section 94 contributions for additional truck movements. However, given an additional opportunity to comment on the proposal, Council raised some concerns regarding the proposed additional access point to the concrete batching plant via Masonite Road.

RTA raised no objections to the proposed modification and noted that Masonite Road was an unclassified local road under Council's authority.

HWC did not object to the proposal and noted that permission for service connection to a HWC main for additional construction water supply would be subject to a separate application and assessment by HWC.

4. ASSESSMENT

The Department has assessed the application on its merits, and considers the key environmental issues of the proposed development to be water and traffic impacts. A summary of all other impacts has been provided in Table 1 below.

4.1 Water

Water would be required for concrete manufacture, truck wash-out and dust suppression.

The maximum weekly water usage of the proposed concrete batching plant would be up to 216,000 litres of water. Although, on average it is estimated that approximately 80,000 litres per week of potable water would be required over the 9 month construction period. Potable water would be stored on-site in 2 above-ground storage tanks (25 kilolitre capacity) and any potable water used to wash-out trucks would be re-used in the concrete manufacture process (see Figure 4).

Sandvik has received approval from HWC for the supply of water during construction of the approved project. Additional construction water required as a result of operation of the proposed concrete batching plant would also be sourced by service connection to a nearby HWC main on Masonite Road. Connection to this service is preferable as it retains

good water pressure needed for fast and efficient supply during the concrete batching process.

HWC has advised the Department that they would have sufficient capacity to cater for the modified facilities construction water requirements and has agreed to consider this request via an application from Sandvik.

As was highlighted in the original assessment of the Sandvik Project, the subject site is located within the Tomago Sandbeds Catchment Area. The Tomago Sandbeds are defined as a 'Special Area' under the *Hunter Water Regulation 2010* due to its importance as a source of drinking water. Therefore, the potential for the proposed modification to contaminate this groundwater resource must be carefully considered.

Sandvik proposes to implement a water management regime to ensure groundwater is managed appropriately. The proposed water-cycle and management regime for the modification is illustrated in Figure 4 below.

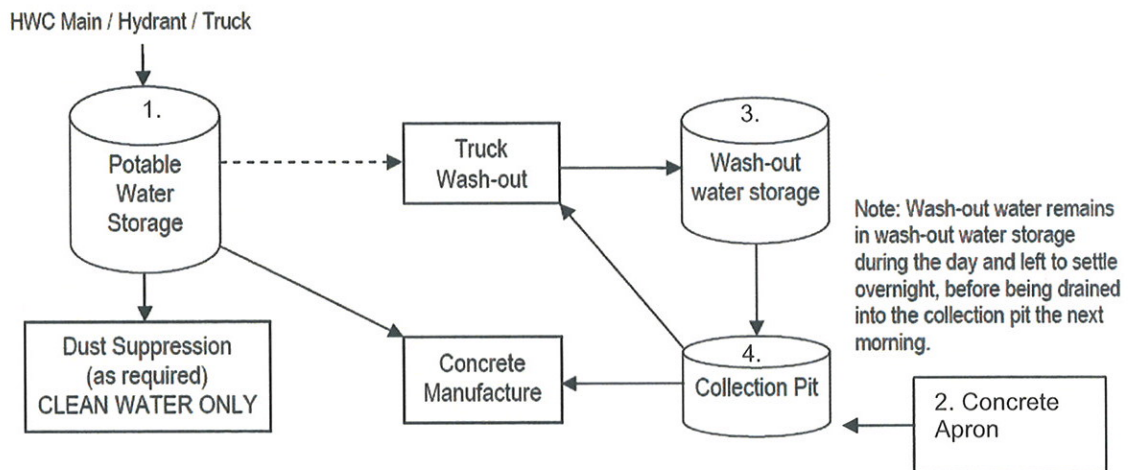


Figure 4: Water-cycle for the proposed concrete batching

Key elements of the proposed water-cycle management regime include:

- the site being sealed with a concrete apron, preventing any infiltration of contaminated material to groundwater;
- all runoff contained within the concrete apron area;
- all process water being captured and re-used in the concrete manufacture process;
- the use of clean water only for dust suppression; and
- all solid material not suitable for re-use in the concrete manufacture process is transported off-site for disposal at a licensed waste facility.

HWC did not raise any issues in relation to groundwater.

The Department is satisfied that any potential impacts of the proposed modification on surface and groundwater can be adequately managed. In addition, the Department is also satisfied that the existing project approval includes a number of conditions which would also ensure any potential surface and groundwater impacts are managed. This includes requirements for Sandvik to:

- implement a Groundwater Monitoring and Management Plan for the project which includes quarterly groundwater monitoring and other management measures to ensure that contamination does not occur; and
- implement a Stormwater Management Plan for the site, prior to the commencement of any civil works on-site, demonstrating measures to minimise potential impacts on stormwater during construction and operation of the approved project.

4.2 Traffic

The original Traffic Impact Assessment (TIA) for the approved project indicated that at full operation the Sandvik facility would generate approximately:

- 201 vehicles (including approximately 40 heavy vehicle movements) during the AM peak hour period; and
- 322 vehicles (including approximately 10 heavy vehicle movements) during the PM peak hour period.

The traffic assessment also concluded that peak construction traffic for the approved project would occur during the pouring of concrete slabs. Construction works for the approved project are estimated to take around 48 to 52 weeks to complete.

The number of vehicles generated by construction activities for the approved project was not predicted as part of the original TIA, however, was expected to remain significantly less than the approved peak hour operational traffic volumes (as above).

Sandvik has indicated that the modification is expected to generate up to 9 additional vehicle trips per hour on the public road network during the AM and PM peak hour periods associated with the delivery of raw materials and construction workers accessing the site.

Further, the modification has determined that (through the on-site batching of concrete), up to 12 internal vehicle trips per hour (concrete deliveries) would be generated during construction of the approved project. These internal movements represent a reduction in vehicle trips on the public road network predicted in the original Environmental Assessment (EA).

It is therefore expected that traffic generated by the modification would be less than the construction traffic under the approved project. This is primarily due to the elimination of the need for external concrete deliveries to the site from heavy vehicles during the construction stage of the approved project, which were identified as a major construction traffic generator.

Council raised no issues with the proposed modification, but noted that section 94 contributions should be considered for any additional truck movements generated. Given the proposed modification is expected to result in a reduction in heavy vehicular traffic on the public road network (as above) and that Sandvik has already paid section 94 contributions for the approved project, the Department does not consider that any further contribution are warranted.

In terms of access, the approved project allows for three separate vehicular access points to the site off Masonite Road to separate heavy and light vehicle movements (see Figure 5 below). With the addition of the proposed temporary access point for the concrete batching plant, Sandvik originally proposed to operate a total of 4 access points during construction of the approved project.

The Department sought advice from Council regarding the proposed location of the additional temporary access point off Masonite Road and asked Council to provide the Department with confirmation that the proposed access point was safe given existing traffic conditions.

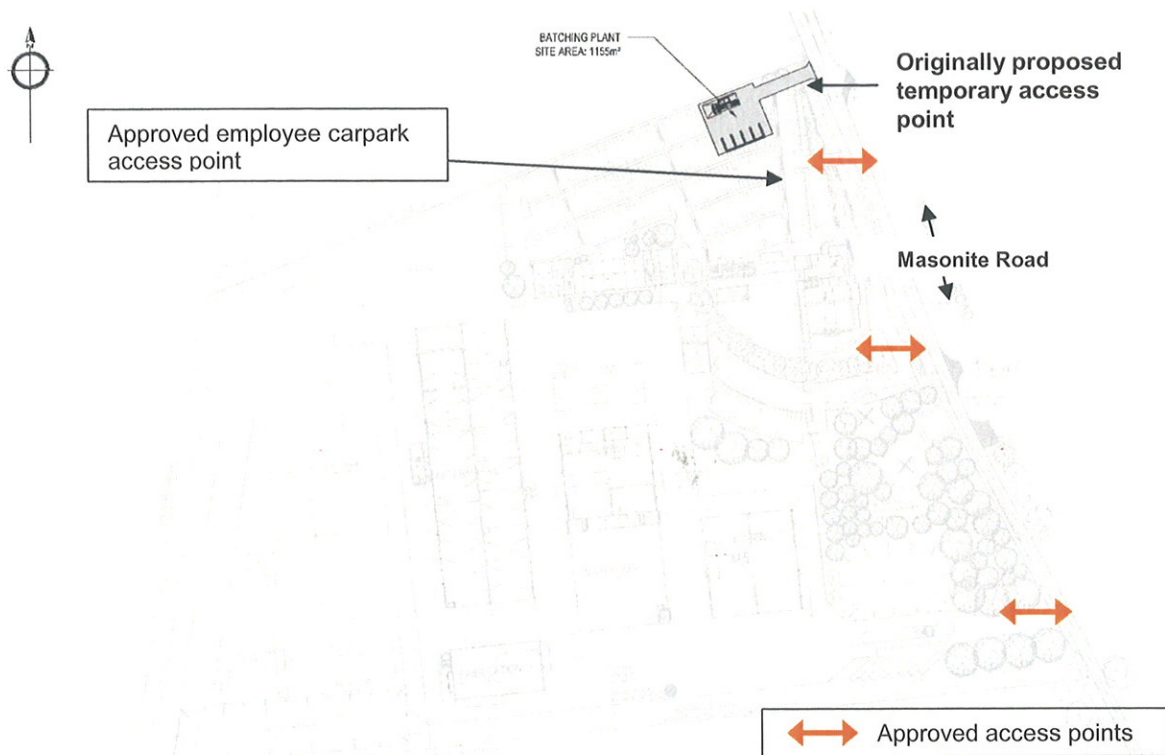


Figure 5: Originally proposed temporary access point

Council subsequently advised that the proposed temporary access point would interfere with the access of another industrial premise and a deceleration lane located directly opposite the site on Masonite Road. Council recommended that the temporary access be relocated further to the south, to the access point for the employee carpark of the approved project (see Figure 5 above).

Sandvik has amended the location of the proposed temporary access point, consistent with the above (see Figures 6). Council and the Department are now satisfied that the proposed access is safely and suitably located for integration with existing traffic conditions.

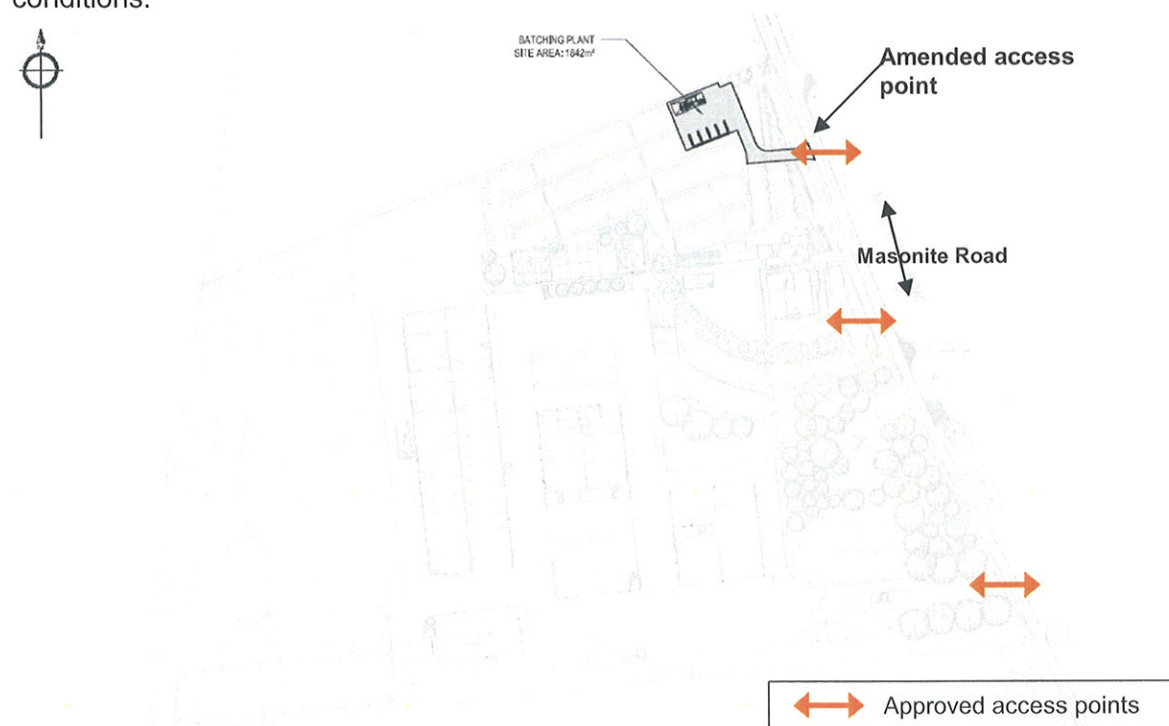


Figure 6: Amended temporary access point

A total of 3 access points would now be used during construction, consistent with the approved project.

The RTA raised no objections to the proposed modification.

Finally, in order to manage additional internal traffic generated by the modified facility, the Department has also recommended a condition which requires Sandvik to prepare a revised Construction Traffic Management Plan for the site, to the satisfaction of Council, to manage traffic generated by the temporary concrete batching plant

The Department is therefore satisfied that traffic impacts can be appropriately managed and that the proposed modification would have a positive impact on the public road network by reducing heavy vehicular traffic during the construction phase of the approved project.

4.3 Other Impacts

Table 4 - Summary of other impacts

Issue	Consideration	Recommended conditions of approval
Noise	<ul style="list-style-type: none"> Construction and operation of the proposed concrete batching plant has the potential to increase noise. Loading and slumping of transit mixer trucks is likely to generate the greatest noise levels. The site is located within an existing industrial area and is surrounded by industrial units. The closest residence is located approximately 350m north of the site in Adelaide Street on the opposite side of the Pacific Highway. Sandvik's noise assessment indicates that unmitigated cumulative construction noise impacts would comply with the DECCW's (now OEH's) <i>NSW Interim Construction Noise Guideline</i> criteria at all sensitive receivers. Despite this, noise barriers are proposed, to further reduce any potential construction noise impacts. This is expected to further reduce noise impacts at the site boundary by approximately 4 dB(A). The Department has incorporated this requirement into the recommended conditions. OEH and Council did not raise any issues with noise. The Department is therefore satisfied that construction noise impacts would be negligible. 	<ul style="list-style-type: none"> Recommended condition that requires Sandvik to: <ul style="list-style-type: none"> revise the Statement of Commitments for the approved facility to include the provision of localised noise barriers around transit mixer slumping and loading areas of the concrete batching plant to minimize construction noise.
Air Quality (including dust)	<ul style="list-style-type: none"> The proposed modification has the potential to increase air quality impacts primarily through the deposition of dust during the construction phase of the approved project. Water would be utilised where appropriate in dust suppression at the site. Under the Construction Environmental Management Plan (CEMP) for the approved project a water cart would be used to adequately suppress dust on unpaved grounds. Sandvik's Construction Air Quality Impact Assessment concludes that subject to the implementation of the abovementioned dust suppression measures, no off-site dust impacts would be experienced during the construction period of the approved project. OEH and Council did not raise any issues regarding air quality including dust. Under the existing consent, Sandvik is also required to carry out all reasonable and feasible measures to minimise dust generated by the Project. The Department is therefore satisfied that air quality impacts from dust would be negligible. 	<ul style="list-style-type: none"> N/A
Waste	<ul style="list-style-type: none"> The proposed modification would generate both solid and liquid waste streams. Solid wastes from the operation of the proposed concrete batching plant such as aggregates, cement and small amounts of concrete would be generated from truck washout activities and cleaning of concrete agitators. Solid waste materials not suitable for re-use in the concrete manufacture process would be transported to a licensed recycling facility for disposal. Spillages of aggregates would be washed into the in-ground collection pit or if suitable, returned to the aggregate storage area/bins. 	<ul style="list-style-type: none"> N/A

Issue	Consideration	Recommended conditions of approval
	<ul style="list-style-type: none"> Wastewater produced as a result of truck wash-out activities and cement manufacture would be collected in the concrete wash-out storage tank for re-use in the concrete manufacture process (see Figure 4). Overall, construction wastes would be minimal, and any waste would be re-used or disposed of at a licensed facility. The Department is satisfied that potential waste impacts would be adequately managed on-site. 	
<i>Visual Amenity</i>	<ul style="list-style-type: none"> The proposed modification involves the construction of a temporary concrete batching plant including a 12.7m high cement silo. The closest residence is located approximately 350m north of the site in Adelaide Street on the opposite side of the Pacific Highway (as above). The concrete batching plant is not likely to be visible from key public viewing points or residences. The site adjoins an established industrial area to the north, east and west. The height of the batching plant is in keeping with the bulk and scale of the sites industrial context and the approved project. The proposed batching plant would be a temporary structure for a maximum period of up to 9 months. After this period the Proponent is required to dismantle the plant and remove it from the site. This requirement has been incorporated into the recommended conditions of consent. The Department is therefore satisfied that visual impacts would be negligible and would not increase relative to the approved project. 	<ul style="list-style-type: none"> Recommended condition that requires Sandvik to: <ul style="list-style-type: none"> operate the proposed concrete batching plant for a maximum of up to 9 months; and dismantle the plant and remove it from the site once construction has ceased.
<i>Hazards and Risk</i>	<ul style="list-style-type: none"> The proposed modification involves storage and transport of admixture, cement and other raw materials. Admixture would be stored in 2 X 2,500 litre bunded storage tanks. Cement would be stored in a water tight elevated silo with a storage capacity of 65 tonnes (as above). No diesel would be stored on-site. The Department's has reviewed the proposed modification in terms of quantities and storage of hazardous materials and considers that the modified facility would not be hazardous. 	<ul style="list-style-type: none"> N/A

5. CONCLUSION

The Department has assessed the proposed modification in accordance with the requirements of clause 8B of the Regulations. This assessment has found that the proposed modification is unlikely to have any additional environmental impacts beyond the approved project.

Sandvik has also accepted the draft recommended conditions.

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

6. RECOMMENDATION

It is RECOMMENDED that the Director-General:

- consider the findings and recommendations of this report;
- determine that the proposed modification is within the scope of section 75W of the EP&A Act;
- approve the proposed modification under section 75W of the EP&A Act; and
- sign the attached notice of modification.



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Executive Director

S. S. 11



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13/5/11



Sam Haddad
Director-General

13/5/2011