



NSW GOVERNMENT
Department of Planning

MAJOR PROJECT ASSESSMENT: Sandvik Factory Project



Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

November 2008

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EXECUTIVE SUMMARY

ATB Morton Pty Ltd proposes to establish a new factory and associated infrastructure at Tomago in the Port Stephens local government area.

The factory would be used by Sandvik to manufacture mining machinery and cement carbide tools, and repair and maintain mining machinery.

The project has a capital value of \$33 million, and would generate up to 80 jobs during construction and 400 jobs during operation.

The project is classified as a major project under Part 3A under the *Environmental Planning and Assessment Act 1979* and consequently requires the Minister's approval.

During the exhibition period, the Department received six submissions on the project, all from public authorities. These public authorities generally support the project subject to conditions. However, both DECC and Council have raised concerns about the proposed vegetation offset.

The Department has assessed the merits of the project in detail, and has sought the advice of an independent ecologist to review the flora and fauna impacts associated with the project.

Following this assessment, the Department is satisfied that the environmental impacts of the project can be mitigated, managed, offset and/or compensated to ensure an acceptable level of environmental performance.

With regard to flora and fauna, the Department has recommended a number of conditions that would require ATB Morton to avoid the endangered Swamp Sclerophyll Forest community on the site, provide a 20 metre vegetated corridor to enable fauna movement (including Koalas) across the site, and provide suitable offsets for the vegetation clearing on the site. With the implementation of these measures, the Department is satisfied that the project would maintain or improve flora and fauna values of the locality over the medium to long term.

Importantly, the Department recognises that the project would assist with the delivery of the State Plan and the *Lower Hunter Regional Strategy*, as the site is located within the strategy's designated employment lands and would employ 80 workers during construction and 400 workers during operation. The Project would also support and contribute to growth within the Lower Hunter's significant mining and industrial manufacturing industries.

On balance, the Department is satisfied that the project's benefits outweigh its residual costs, and that it is in the public interest and should be approved, subject to strict conditions.

1. PROPOSED PROJECT

1.1 Project Background

Sandvik is a multinational company which manufactures specialist materials and equipment used in the mining industry such as stainless and high alloy steels, cemented carbide tools and machines for rock excavation. Sandvik currently operates 3 facilities in the Lower Hunter, including:

- facilities at Mayfield and Hexham which produce cemented carbide products; and
- a facility at Old Punt Road, Tomago, that assembles motorised vehicles from parts and also services mining equipment and vehicles.

Sandvik is proposing to consolidate these facilities and to establish its national headquarters for South-East Asia, on a site 500 metres west of Sandvik's current Tomago facility.

1.2 Project Description

ATB Morton Pty Ltd (the Proponent), a Newcastle based building company, has submitted a project application on behalf of Sandvik Ltd (Sandvik) to establish a new factory and associated infrastructure at 606-608 Tomago Road, Tomago, in the Port Stephens Local Government Area (see Figure 1).

The facility would become Sandvik's national headquarters, and would also be used to manufacture and maintain mining equipment, manufacture cement carbide tool products and also to store plant and machinery.

The major components of the project are summarised in Table 1, depicted in Figures 2 and 3 and described in full in ATB Morton's Environmental Assessment (EA) of the project (see Appendix D).

Table 1: Major components of the project

Aspect	Description
Project Summary	Construction and operation of Sandvik's national headquarters including a factory for the manufacturing and maintenance of mining equipment and general office and training facilities. The total building footprint is 27,080 m².
<i>Site preparation works</i>	Demolition of the existing chemical plant on site and clearing of 4.14 ha of Apple-Blackbutt Forest and 0.48 ha of Swamp Sclerophyll Forest.
<i>Production and Manufacturing Factory</i>	A factory to assemble and maintain motorised mining vehicles and manufacture cemented carbide tool products. The process for manufacturing cemented carbide products includes: <ul style="list-style-type: none">• passing tungsten carbide, cobalt binder and other alloys through a hot drying gas to create a granulate;• applying pressure to the granulate powder to convert it to a 'blank' which is machined into various shapes/products; and• heating (sintering) the blank below its melting point to produce an extremely hard product.
<i>Maintenance and Repair Workshop</i>	Maintenance and fabrication workshops for the maintenance and repair of underground mining equipment.
<i>Material and Equipment Storage</i>	A store building to hold materials and surplus equipment required for the manufacturing and maintenance of mining equipment.
<i>Office, training and amenities</i>	An office building containing a general office, boardrooms and training facilities.
<i>Output</i>	Approximately 100 motorised mining vehicles and 1.1 million pieces of cemented carbide tool products annually.
<i>Waste management</i>	An onsite waste treatment plant processing up to 150 kilolitres of 'domestic' waste water per day.
<i>Stormwater management</i>	Rainwater tanks, gross pollutant traps, oil and grit separators, vegetated swales and bioretention systems.
<i>Construction</i>	Approximately 52 weeks.
<i>Hours of Operation</i>	6am to 12am, 7 days per week on a two shifts per day roster.
<i>Traffic</i>	Up to 1000 movements daily, including 20 semi trailer movements and 40 rigid vehicle movements; also a further 5-6 over-mass vehicles per annum.
<i>Capital Value</i>	\$33 million.
<i>Employment</i>	80 construction jobs and up to 400 operational jobs (300 of these jobs would come from the three existing Sandvik facilities in the Lower Hunter which would be closed down if this Project is approved).

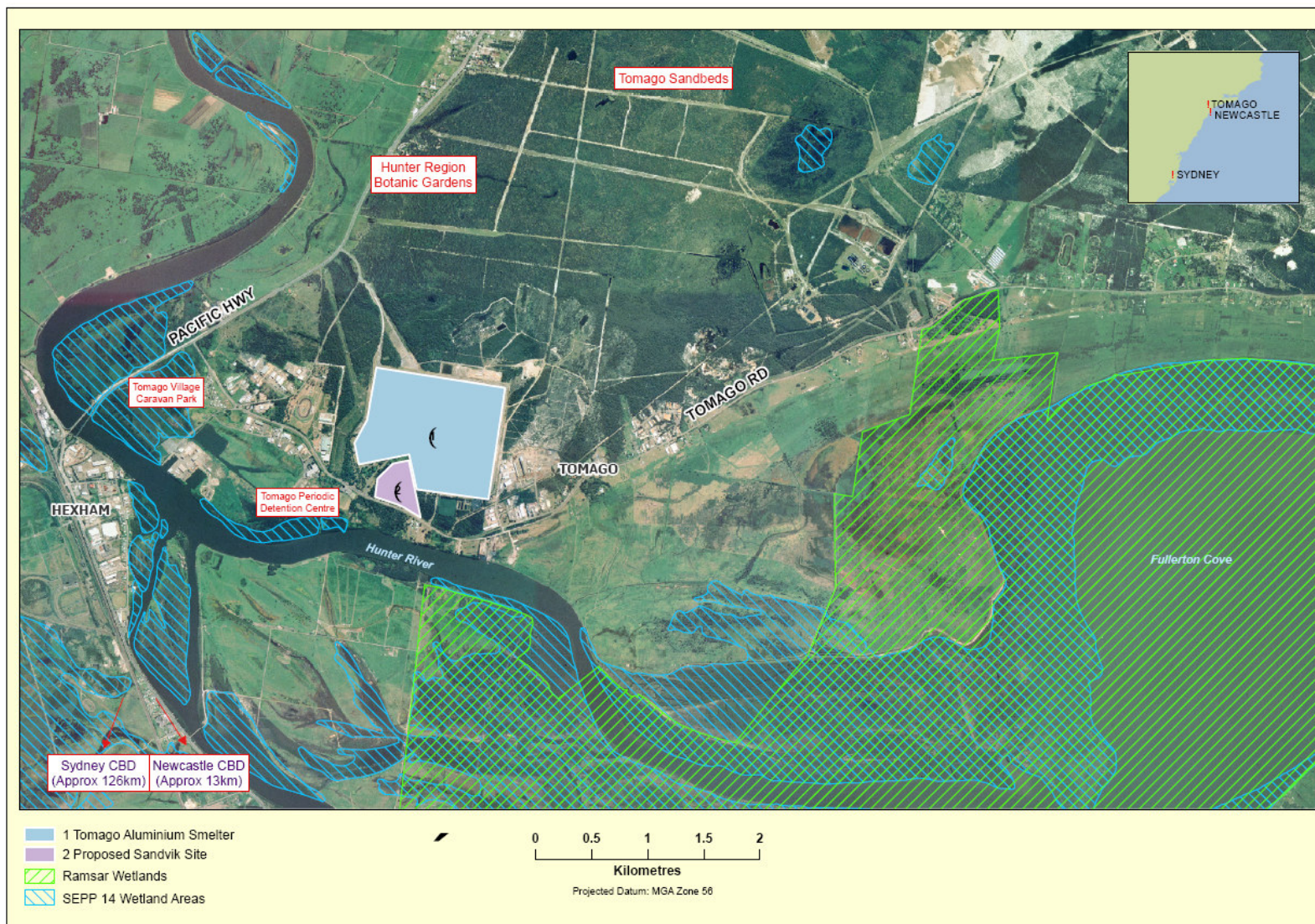


Figure 1: Regional Context



Figure 2: Site layout of the proposed Sandvik factory



Figure 3: Materials and equipment manufactured and serviced at the current and proposed Sandvik Factory's.

1.3 Project Setting

The site is located on the northern side Tomago Road, approximately 4km east of the Pacific Highway and approximately 13km directly to the north-west of Newcastle (see Figure 1). The Hunter River is located 200m to the south of the site.

The Tomago Weekend Detention Centre (Detention Centre) is located on the opposite side of Tomago road (approximately 100m away) and a bowling club is located approximately 200m to the west of the site. The closest residents are approximately 1.2km to the east of the site.

The site is located within an industrial zone. The Tomago Aluminium Smelter borders the site on its northern, eastern and north-western boundaries. Other industry nearby includes the Tropic asphalt batching plant and the recently proposed WesTrac mining equipment facility.

Other key land uses in the locality include (see Figure 1):

- the Tomago Village Caravan Park;
- grazing lands;
- wetlands, including a Ramsar wetland; and
- rural dwellings.

The site itself has been used for chemical manufacturing since the 1950's. Most recently, the site has been used by AustralChem for the manufacture of Epsom Salts. Existing facilities would be demolished for the project.

1.4 Project Need

NSW relies heavily on coal for its energy generation and there are three major coalfields (the Newcastle, Hunter and Gloucester Basin) within reasonable proximity to Tomago. The coal mining companies are Sandvik's main customers. Furthermore, the resources boom in Australia and emerging economies such as China, South Korea and India has created additional demand for Sandvik products and services. As a result, Sandvik's facilities in the lower Hunter are now operating beyond their capabilities.

Sandvik has identified the Hunter Region as of strategic importance to its ongoing expansion in Australia, and the strong regional skills base in mining technology is critical in developing new machinery, staff training and education.

Sandvik assessed several sites within the Hunter/Newcastle areas for suitability, including sites at Kurri Kurri, Beresfield, Thornton and Steel River. The proposed Tomago site was selected as it enables Sandvik to consolidate its existing operations in the Hunter without core staff having to relocate. Additionally, the site is close to key infrastructure including the National Highway Network, Williamstown Airport and Newcastle Port and would be able to draw on a highly skilled and growing workforce within the populations of Newcastle, Lake Macquarie, Maitland, Raymond Terrace, Cessnock and Singleton.

1.5 State Plan and Lower Hunter Regional Strategy 2006

The project is consistent with the goals and priorities of the State Plan, and in particular priorities P1 (increased business investment), P6 (increased business investment in rural and regional NSW) and E5 (jobs closer to home).

The project is also consistent with the goals and priorities of the *Lower Hunter Regional Strategy* as the site is located within the strategy's designated employment lands which aim to maximise community access to services and employment opportunities.

2. STATUTORY CONTEXT

2.1 Major Project

The proposal is classified as a major project under Part 3A of the EP&A Act because it is development that would employ more than 100 people, has a capital investment value of more than \$30 million, and

is for the purpose of machinery and or equipment manufacturing, and therefore triggers the criteria in Clause 11 of Schedule 1 of *State Environmental Planning Policy (Major Projects) 2005*.

Consequently, the Minister for Planning is the approval authority for the project.

2.2 Permissibility

The project is located on land zoned *4(a) Industrial General Zone* under the *Port Stephens Local Environment Plan* (LEP), 2000, and the project is permissible with consent in this zone.

Consequently, the Minister may approve the project.

2.3 Exhibition and Notification

Under Section 75H(3) of the *Environmental Planning and Assessment Act, 1979* (EP&A Act), the Director General is required to make the EA of a project available for at least 30 days.

After accepting the EA for this project, the Department:

- made it publicly available from 11 April 2008 until 12 May 2008;
 - on the Department's website, and
 - at the Department's Information Centre, Port Stephens Council and the Nature Conservation Council;
- notified landowners in the vicinity of the site about the exhibition period by letter;
- notified relevant State and local government authorities by letter; and
- advertised the exhibition of the EA in the local newspapers.

This satisfies the requirements of Section 75H(3) of the EP&A Act.

During the assessment process the Department also made a number of documents available for download on the Department's website. These documents included the:

- project application;
- Director General's requirements for the environmental assessment of the project; and
- EA.

2.4 Environmental Planning Instruments

Under Section 75I of the EP&A Act, the Director General's report is to include a copy of or reference to the provisions of any:

- State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project; and
- environmental planning instruments that would (but for Part 3A) substantially govern the carrying out of the project and that have been taken into consideration on the environmental assessment of the project.

The Department has assessed the project against the relevant provisions of several environmental planning instruments and is satisfied that none of these SEPPs substantially govern the carrying out of this project (see Appendix G).

2.5 Objects of the Environmental Planning and Assessment Act 1979

The Minister's consideration and determination of the application must be consistent with the relevant provisions of the EP&A Act, including the objects set out in the Act's section 5. The objects of most relevance to the Minister's decision on whether or not to approve the proposed project are found in section 5(a)(i), (ii), (iv), (vi) and (vii). They are:

The objects of this Act are:

(a) *to encourage:*

- (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
- (iv) *the provision of land for public purposes,*

- (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) *ecologically sustainable development”.*

The Department has fully considered the objects of the EP&A Act, including the encouragement of ESD, in its assessment of the application. The assessment integrates all significant economic and environmental considerations and seeks to avoid any potential serious or irreversible damage to the environment.

ATB Morton has also considered a number of alternatives to the proposed project (including the alternative of not proceeding), and considered the project in the light of the principles of ESD.

2.6 Statement of Compliance

Under Section 75I of the EP&A Act, the Director-General's report is required to include a statement relating to compliance with the environmental assessment requirements with respect to the project.

The Department is satisfied that the environmental assessment requirements have been complied with.

3. ISSUES RAISED IN SUBMISSIONS

3.1 Submissions

During the exhibition period for the EA, the Department received six submissions on the project, all from public authorities (DECC, DWE, RTA, NSW Rural Fire Service, NSW Fire Brigade and Port Stephens Council (Council)). No submissions were received from the general public.

DECC raised concerns about vegetation and threatened species assessment, the impacts of stormwater and irrigation water on the Swamp Sclerophyll Forest and the process undertaken by ATB Morton in the assessment of Aboriginal cultural heritage. The DECC remains concerned about the vegetation offset area proposed by ATB Morton. This is discussed further in Section 4.

DWE does not object to the project but raised a concern that the on-site waste water treatment may release high nutrient discharges into the Swamp Sclerophyll Forest.

The RTA, the NSW Fire Brigade and Rural Fire Service do not object to the project, and provided recommended conditions of approval.

Council raised concerns about the flora and fauna impacts including the impacts of clearing and the size of the proposed vegetation offset area.

3.2 Response to Submissions

ATB Morton has provided responses to the issues raised in submissions (see Appendix D) for the project. These have been made publicly available on the Department's website.

ATB Morton has made some changes to the proposed vegetation offsets to reduce impacts and has also responded to some of the other issues raised in the Submissions Report.

The Department has considered the issues raised in submissions and ATB Morton's response in Section 4 of this report.

4. ASSESSMENT

4.1 Flora and Fauna

The site is heavily vegetated with two vegetation communities (see Figure 4):

- Dry Sclerophyll Coastal Dune Open Forest/Woodland (Apple-Blackbutt Forest); and
- Swamp Mahogany Paperbark Forest (Swamp Sclerophyll Forest), an endangered ecological community (EEC).

The Swamp Sclerophyll Forest is located in the south eastern corner of the site (see Figure 4) and is a wetland community which supports many species and contains primary Koala habitat. Koalas currently move freely between the site and the land adjoining the site on the eastern boundary, which also contains remnant Swamp Sclerophyll Forest and preferred Koala feed trees.

Vegetation throughout the site is described in the EA as degraded from stormwater discharges, foliage Chlorosis and Necrosis (diseases caused by toxic levels of fluoride emissions from neighbouring industry) and contains a high proportion of weeds.

Fauna surveys for the site yielded a total of 32 birds and 12 mammals. Of these, seven are threatened species listed under the *NSW Threatened Species Conservation Act 1995*, including several bats, the Grey-headed Flying Fox and the Koala.

The project initially involved the clearing of approximately 5 hectares of Apple-Blackbutt Forest and 0.5 ha of Swamp Sclerophyll Forest (see Figure 4). To offset this, ATB Morton initially proposed a suite of mitigation measures including the retention of some vegetation on site (0.62ha of the Swamp Sclerophyll Forest and 2.86ha of Apple-Blackbutt Forest) and the retention of hollow bearing trees and the provision of artificial hollows to enhance the remaining habitat.

DECC, Council and the Department all raised concerns about the accuracy of the flora and fauna surveys and the adequacy of the proposed mitigation measures, particularly the minimal offsets proposed.

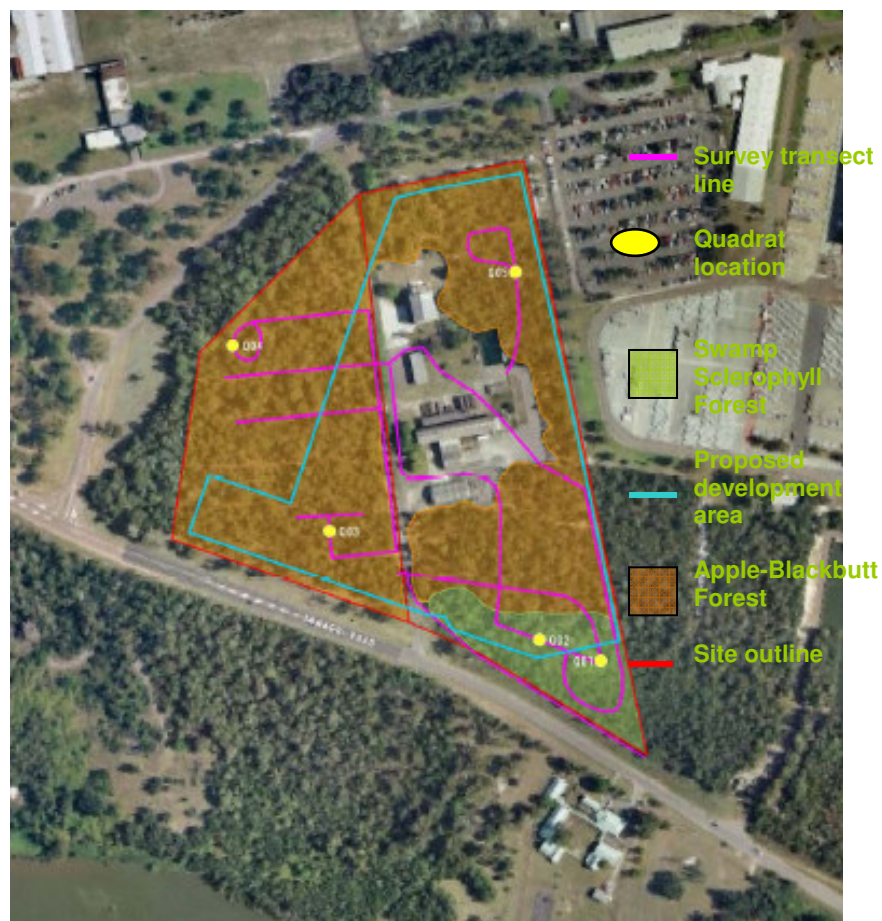


Figure 4: Vegetation Communities and Umwelt survey effort

As a result of these concerns, the Department commissioned an independent consultant (Umwelt) to review the flora and fauna impacts associated with the project and to determine if the previous field work had been adequate and whether a biodiversity offset would be required. In its report, Umwelt considered the DECC's new biobanking system, which is designed to calculate credits which can be purchased by developers to counterbalance (or offset) any impacts on biodiversity values.

The independent assessment is attached as Appendix E and recommended the following:

- the proposed on site vegetation retention and mitigation measures were considered to be inadequate as an offset;
- at least 2ha should be protected and appropriately managed for every hectare cleared on site (i.e. an offset ratio of 2:1);
- there should be full retention (at least +95%) of the Swamp Sclerophyll Forest EEC on site;
- prior to the commencement of earthworks for the site, ATB Morton should undertake accurate mapping of the development footprint area and vegetation communities on site; and
- surveys for the two donkey (*Diuris*) orchids should be undertaken in late winter. If these species are located on site, a review of the agreed offset figures should be undertaken.

ATB Morton subsequently conducted the orchid survey in late winter 2008, which confirmed that there are not any rare or threatened orchids on site.

Based on the findings of the EA and the independent ecological assessment, and the issues raised in submissions, the Department believes there are 3 main flora and fauna issues associated with the project, namely:

- protection and conservation of the Swamp Sclerophyll Forest EEC on the site;
- provision of suitable offsets for the clearing required for the project; and
- maintaining suitable vegetation corridors to enable continued fauna movement across the site, including Koalas.

These issues are discussed below.

Swamp Sclerophyll Forest EEC

The Department considers that all efforts should be made to avoid impacts on the EEC, due to its high conservation status.

In this regard, and in accordance with the recommendations of the independent ecological assessment, the Department has recommended conditions that would require ATB Morton to undertake a detailed survey of the vegetation communities on site to clearly identify the location of the EEC, and then revise the site plans to ensure that no part of the Swamp Sclerophyll Forest EEC is cleared as part of the project.

Vegetation Offsets

ATB Morton has responded to Umwelt's key recommendations and subsequently revised its statement of commitments to undertake detailed surveying to correctly determine the exact amount of vegetation to be cleared (estimated to be around 5.2 hectares of Apple-Blackbutt Forest). Furthermore, ATB Morton has agreed to acquire an offset site(s) for any vegetation cleared at a ratio of 2:1.

Neither Council nor the DECC support the Umwelt recommendations for offsets. Both argue that the proposed offset (at a ratio of 2:1) is not appropriate for the loss of vegetation and that an offset package based on the biobanking ratio (of approximately 4:1) would better represent the impacts resulting from the project.

The Department acknowledges the issues raised by DECC and Council in relation to the provision of an appropriate offset for the clearing of vegetation. However, the Department considers that the biobanking calculator is not designed specifically to calculate offset ratios, and therefore the application of a 4:1 ratio for offsets based on this approach is not supported. Furthermore, the Department considers that a 2:1 offset is appropriate for this site considering that:

- the Department has recommended conditions requiring the full retention of the important Swamp Sclerophyll Forest EEC on the site;
- sufficient evidence has been provided that the project would involve the clearing of degraded vegetation;
- the threatened fauna species on site are mobile species which can relocate into adjacent vegetation provided there is an adequate on-site vegetation corridor; and
- the site is zoned industrial and therefore is not intended to be retained strategically for the purposes of biodiversity conservation.

Notwithstanding, the Department has recommended a number of stringent conditions to minimise vegetation clearing impacts, to provide suitable offsets, and to ensure important regional linkages are maintained for threatened species such as the Koala, that are known to occur in the area. These recommendations require ATB Morton to avoid and minimise impacts on flora and fauna by:

- developing a Vegetation Clearance Protocol prior to commencing construction;
- provision of suitable offsets at a ratio of 2:1; and
- developing a long-term vegetation management plan for the project; and
- providing for the conservation of the offset areas in perpetuity.

On-site vegetation corridor

Council recommended that a vegetation corridor of at least 50 metres be provided along the front of the site (rather than the proposed 5-10 metre corridor) to allow for connectivity with the surrounding vegetation, and to allow for the movement of fauna (particularly Koala's) across the site and that any fencing should be designed to allow for this.

Umwelt subsequently considered that the provision of a 20 metre wide vegetation corridor along the southern boundary of the site would sufficiently enable Koala's to move safely from feeding areas to the east, across the site and on to the breeding areas to the northwest (within the Tomago Sandbeds, see Figure 1). Umwelt has also recommended that a bush regeneration program be undertaken within the proposed corridor to remove the dense lantana which would inhibit Koala movement.

The Department agrees with the independent ecologist, and has recommended a condition requiring ATB Morton to revise the site plans to accommodate a 20 metre wide vegetation corridor across the front of the site, and to further improve the quality of the vegetation within the corridor through the implementation of a bush regeneration program (as part of a broader vegetation management plan).

Through the imposition of the recommended conditions, the Department is satisfied that the impacts of the project can be adequately avoided, mitigated, managed and/or compensated such that the project would not result in an unacceptable impact on flora and fauna values of the locality.

4.2 Traffic and Access

The site is located on Tomago Road approximately 5 kilometres east of the Pacific Highway. Traffic would enter the site via a direct site access road off Tomago Road, with 90% of the traffic associated with the development travelling to and from the site via the Pacific Highway.

ATB Morton's Traffic Impact Assessment has been modelled on traffic increasing by 33% from the current facility in Tomago, that is, up to 800 car movements daily, including 20 semi trailer movements and 40 rigid vehicle movements. There would also be a further 5-6 over-mass vehicles per annum.

The assessment found that the project would generate approximately 90 additional trips (above the current Sandvik traffic) on Tomago Road per hour during the 2 peak hours and that the existing road network has adequate capacity to accommodate the additional vehicle movements associated with operation. Outside of the peak hours the traffic flows associated with the project would be relatively low.

The plans for the site indicate that there would be 455 car spaces and additional hard standing areas for delivery vehicles, couriers and trucks. The Department and the RTA are satisfied that sufficient parking has been provided for both light and heavy vehicles.

The site is currently accessed by a 'give way' controlled T-intersection which is situated on a relatively straight section of road which has good visibility in both directions. There are no deceleration or turning lanes at the current intersection. To accommodate the additional traffic using the site intersection, ATB Morton initially proposed to upgrade the intersection to a seagull type intersection, prior to commencement of operations, in accordance with RTA's guidelines.

Following closer examination of the proposed intersection, the RTA raised concerns that:

- the current site access intersection would be unsafe for the proposed construction traffic because there are no deceleration or turning lanes; and
- the proposed seagull type intersection would not fit within the physical constraints of the site in the existing site access location.

Subsequently, the Department, ATB Morton and the RTA considered various options to improve the site access including moving it further towards the south-eastern corner of the site or joining the access with Tomago Aluminium. It was agreed, however, that traffic signals at the existing access location would ensure that the EEC would not be disturbed as part of the intersection upgrade and furthermore, traffic signals would allow ATB Morton to expand their operations in the future should the need arise.

The RTA has advised that the signalised intersection may be upgraded prior to operations, pending approval of a construction traffic management plan.

The Department considers that traffic impacts from the project would be acceptable provided the intersection is upgraded with traffic signals according to the RTA's requirements and that a Construction Traffic Management Plan is prepared for the project. The Department has incorporated these requirements into the recommended conditions of approval.

4.3 Soil and Water

Erosion and Sediment Control

Construction of buildings and associated infrastructure on site has the potential to impact on the Swamp Sclerophyll Forest EEC and nearby watercourses and wetlands within close proximity to the site, through erosion and sedimentation. To minimise any potential impacts, the Department has recommended a condition that would require ATB Morton to prepare an erosion and sediment control plan, prior to the construction of the project in accordance with relevant guidelines.

Wastewater Management

The site is not serviced by sewer, and does not form part of the Hunter Water capital works program at present or in the near future. As such ATB Morton proposes to establish an on-site sewage management system for the treatment and reuse of the site's kitchen and bathroom water as well as water used in internal wash bay facilities, estimated to be approximately 50kL/day.

The proposed system is capable of treating 4ML of wastewater per day. All wastewater would be collected, treated to a Class A+ standard and disposed of or re-used on site for non-potable uses such as toilet flushing and vehicle wash down. Any surplus wastewater would be irrigated on site to a landscaped area which is approximately 3.8 hectares in size.

ATB Morton has demonstrated that the proposed 3.8 hectares of irrigation area would adequately accommodate the treated wastewater produced daily and the site. This on-site sewage management system would require a separate approval from Port Stephens Council.

Stormwater Management

As part of the proposed stormwater management scheme, the site would be divided into three sub catchments, each discharging into separate stormwater management systems prior to flowing into the Swamp Sclerophyll Forest EEC. The sub catchments and treatment methods are as follows:

1. *workshop carpark and amenities* – where stormwater would be treated by small GPT's and discharged to grass swale and infiltration basin with overflows to wetlands;
2. *office buildings and office carpark* – where stormwater would be treated by small GPT's followed by discharge to infiltration trenches; and
3. *workshops and external hardstand areas* – where stormwater would be treated by a large capacity GPT and water quality control pond and infiltration basin prior to discharge to wetlands.

Under the proposed stormwater management scheme, rainwater would also be harvested from the roofs of the 2 main buildings for re-use on site for such purposes as irrigation, dust suppression, toilet flushing and vehicle washing.

ATB Morton's stormwater assessment indicated that the proposed stormwater management scheme for the site would not result in any increase in stormwater discharges to the Swamp Sclerophyll Forest EEC, under all modelled rainwater events. The assessment also indicated that there would be no impacts on groundwater in a manner that could adversely affect the hydrology and the floristic composition of the Swamp Sclerophyll Forest EEC.

The DECC, DWE and Council raised concerns about the cumulative impacts of irrigated wastewater/stormwater from the project on the Swamp Sclerophyll Forest EEC. Being on the lowest part of the site, the Swamp Sclerophyll Forest would receive any excess stormwater run-off and also any excess irrigation water if irrigation is not managed appropriately.

The Department considers that ATB Morton has demonstrated through its preliminary investigations that there would be no adverse impacts on the soils in the irrigation area, the groundwater aquifers and the Swamp Sclerophyll Forest EEC. However, the Department has recommended conditions that would require ATB Morton to verify their predictions and manage any potential impacts from irrigating wastewater combined with the discharge of stormwater from the site.

In this regard, the Department has recommended that ATB Morton be required to develop and implement a comprehensive Soil and Water Management Plan outlining stringent wastewater, soil and groundwater management and monitoring, and to develop contingency measures to address potential exceedances, pollutant triggers and problems with wastewater or stormwater systems, should they occur.

4.4 Summary of Other Issues

Other issues raised during the assessment process and the Department's consideration of each are summarised in Table 2 below.

Table 2: Summary of Other Issues

Issue	Consideration	Recommendation
<i>Construction Noise</i>	<ul style="list-style-type: none"> Construction noise would exceed the noise criteria at all sensitive receivers (residents, inmates and the Bowling Club). Noise is predicted to exceed criteria by more than 30 dBA at the Detention Centre and by 6 dBA at the closest residents and 22 dBA at the Bowling Club. It is noted that the Detention Centre is only occupied on weekends. 	<ul style="list-style-type: none"> To minimise impacts on receivers, the Department has recommended conditions that would require ATB Morton to: <ul style="list-style-type: none"> - comply with strict construction hours (ie. daytime only, with only inaudible works on Saturdays and no work on Sundays); and - develop a Construction Noise Management Plan for the project.
<i>Operational Noise</i>	<ul style="list-style-type: none"> The operational noise assessment predicted that with all proposed equipment operating simultaneously (an unlikely scenario), the project would meet the Project Specific Noise Criteria during all proposed periods of operations at all locations. However, the Department notes that the commercial noise criterion of 65dBA adopted for the Detention Centre may not be appropriate for preventing disturbance to sleep at the centre. 	<ul style="list-style-type: none"> To prevent disturbance to inmates sleeping at the Detention Centre, the Department has recommended a more conservative noise criteria for this receiver (ie. 50dBA $L_{Aeq}(noisiest\ 1\ hour)$, equivalent to the amenity criteria measured externally from a hospital ward). The Department has also recommended conditions requiring ATB Morton to: <ul style="list-style-type: none"> - comply with operational noise limits; and - undertake a noise audit once operational, including strategies to reduce noise if noise levels are found to exceed the criteria.
<i>Air Quality</i>	<ul style="list-style-type: none"> The main emissions associated with the project would include movement of on-site equipment such as bulldozers, fork-lifts and vehicles (SO_2 and NO_2); the construction and manufacturing of alloys and steels (fine particulate matter (PM_{10})); and restoration of equipment including spray painting (PM_{10}). Emissions would, however, be negligible as activities resulting in PM_{10} emissions would be conducted indoors with air quality controls built in accordance with Australian Standards. 	<ul style="list-style-type: none"> The Department has recommended conditions requiring ATB Morton to carry out all reasonable and feasible measures to minimise dust generated by the project, and also ensure that public roads nearby are kept clean.

Issue	Consideration	Recommendation
<i>Hazards</i>	<ul style="list-style-type: none"> The Department has reviewed the project in terms of quantities and storage of hazardous materials (LPG, acetylene) and has found that the proposed project would not be hazardous to the surrounding land use. 	<ul style="list-style-type: none"> To ensure the safety of workers on site and those working at the adjacent Tomago Aluminium site, the Department has recommended a condition requiring ATB Morton to prepare a Construction Safety Study in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper (HIPAP) No. 7, 'Construction Safety Study Guidelines'</i>.
<i>Site Contamination</i>	<ul style="list-style-type: none"> A groundwater analysis commissioned by AustralChem (the former owners of the site) found that the existing conditions of groundwater (elevated metals and sulphate) are within the human health risk based guideline values for industrial development. However, AustralChem has previously identified areas where asbestos sheeting is known or may be buried on the site. 	<ul style="list-style-type: none"> The Department has recommended conditions requiring ATB Morton to commission a site auditor to assess, if necessary remediate, and verify that the site is suitable for the intended purpose.
<i>Bushfire Hazard</i>	<ul style="list-style-type: none"> The NSW Rural Fire Service has recommended that an asset protection zone (APZ) of 10 metres from the buildings to the boundary be provided to prevent direct flame contact with buildings in the event of a fire. ATB Morton has proposed a setback area of between 6 and 10 metres for the site with use of appropriately fire rated pre-cast concrete panels for those walls less than 10m from the boundary. The NSW Rural Fire Service supports this approach provided an emergency and evacuation plan is prepared in accordance with the appropriate NSW Rural Fire Service Guidelines. 	<ul style="list-style-type: none"> The Department has recommended a condition requiring ATB Morton to prepare an emergency and evacuation plan in accordance with NSW Rural Fire Service Guidelines.
<i>Greenhouse Gases</i>	<ul style="list-style-type: none"> Electricity use would generate approximately 88% of the greenhouse gas emissions for the project. In total, the project would generate direct and indirect greenhouse gas (GHG) emissions totalling 8,050 tonnes of carbon dioxide equivalent per annum. This represents less than 0.0015% of Australia's total GHG emissions. The assessment indicates that Sandvik's GHG emissions would be reduced as a result of the consolidation of three operations into one, but also suggests mitigation strategies to reduce energy consumption such as using energy efficient appliances and equipment. 	<ul style="list-style-type: none"> The Department has recommended a condition requiring ATB Morton to prepare and implement an Energy Savings Action Plan for the project.
<i>Aboriginal Heritage</i>	<ul style="list-style-type: none"> The site is considered to have low-medium and medium-high archaeological potential, however, test excavations did not reveal any Aboriginal artefacts within the buried topsoil. This is thought to be a result of the fact that large portions of the site were waterlogged in the past and the site was unsuitable for occupation and use by Aboriginals. The DECC raised some concerns about the indigenous heritage consultation process for the project. Copies of the 'test excavation' report were subsequently sent out to the relevant stakeholders, however no comments were received. 	<ul style="list-style-type: none"> The Department has recommended a condition requiring ATB Morton to develop a Construction Aboriginal Heritage Management Plan, in consultation with Aboriginal stakeholders and DECC, to ensure that the project would not impact on potential Aboriginal heritage items during construction.

Issue	Consideration	Recommendation
	<ul style="list-style-type: none"> ATB Morton has committed to initial earthworks being monitored by the Local Aboriginal Land Council. DECC supports this approach. 	

5. RECOMMENDED CONDITIONS

The Department has prepared recommended conditions of approval for the project which are summarised in Appendix A and included in Appendix B.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

ATB Morton does not object to the imposition of the recommended conditions.

6. CONCLUSION

The Department has assessed the EA, submissions, and ATB Morton's responses to submissions, in accordance with the requirements under the EP&A Act.

This assessment has found that the environmental impacts of the project can be mitigated, managed, offset and/or compensated to ensure an acceptable level of environmental performance.

It has also found that that the project would provide a range of economic, social and environmental benefits, including the provision of 80 construction jobs and 400 operational jobs for the Hunter region.

Consequently, the Department believes that the project is in the public interest and should be approved, subject to conditions.

7. RECOMMENDATION

It is RECOMMENDED that the Minister:

- consider the findings and recommendations of this report;
- approve the project application, subject to conditions, under section 75J of the *Environmental Planning and Assessment Act 1979*; and
- sign the attached project approval (see Appendix B).

David Kitto
Director
Major Development Assessment

Chris Wilson
Executive Director
Major Project Assessment

Sam Haddad
Director-General

APPENDIX A: SUMMARY OF CONDITIONS OF APPROVAL

Aspect	Condition	Requirement
Schedule 2: Administrative Conditions		
<i>Section 94</i>	10	Contributions in accordance with the <i>Port Stephens Council Section 94A Development Contributions Plan, 2006</i> .
Schedule 3: Specific Environmental Conditions		
<i>Flora and Fauna</i>	1-2	Requires further accurate surveys of the on-site vegetation communities, the establishment of a 20m vegetation corridor, and revised site plans, prior to construction.
	3-4	Requires the provision of a vegetation offset, and the long term security of the conservation area
	5-6	Requires a comprehensive Vegetation Management Plan.
<i>Traffic and Transport</i>	7-10	Requires the upgrade of the site access intersection with Tomago Road to include traffic lights along with a Construction Traffic Management Plan, prior to construction.
<i>Noise</i>	11-14	Provides working hours for construction and noise limits for operation. Requires a Construction Noise Management Plan prior to the commencement of construction. Requires a Noise Audit within 3 months of operations.
<i>Soil and Water Management</i>	15-22	Requires an Erosion and Sediment Control Plan and Soil and Water Management Plan (including a Stormwater Management Plan and a Wastewater, Recycled Water Re-Use and Irrigation Management Plan), prior to construction. Also requires a site audit statement confirming the site is suitable for its intended purpose.
<i>Air Quality</i>	23-24	Requires the Proponent to minimise dust generated by the Project.
<i>Hazards and Risk</i>	25	Requires a Construction Safety Study, prior to construction.
	26	Requires an Emergency and Evacuation Plan prior to construction.
<i>Energy</i>	27	Requires an Energy Savings Action Plan prior to operation and monitoring and reporting on greenhouse gas emissions.
<i>Aboriginal Heritage</i>	28	Requires a Construction Aboriginal Heritage Management Plan, prior to construction.
<i>Waste Management</i>	31	Requires a Waste Management Plan prior to construction.
Schedule 4: Environmental Management		
<i>Environmental Management Strategy</i>	1	Environmental Management Strategy
<i>Environmental Reporting</i>	2-3	Provides incident and annual reporting requirements.
<i>Auditing</i>	4	Provides pre-operations compliance audit requirement.

APPENDIX B: CONDITIONS OF APPROVAL

APPENDIX C: SITE PLANS

APPENDIX D: RESPONSE TO SUBMISSIONS

APPENDIX E: SUBMISSION FROM AN INDEPENDENT ECOLOGY EXPERT

APPENDIX F: SUBMISSIONS

APPENDIX G: ENVIRONMENTAL ASSESSMENT

APPENDIX H: CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENTS

Section 75I(2) of the *Environmental Planning and Assessment Act 1979* requires that reference be made to the provisions of any environmental planning instrument that would (but for Part 3A of the Act) substantially govern the carrying out of the project. Consideration of the proposed development in the context of the objectives and provisions of the relevant environmental planning instruments is provided below.

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) commenced in January 2008, consolidating and updating a number of State planning instruments, including the SEPP 11 – Traffic Generating Developments. The Infrastructure SEPP details planning provision and development controls for infrastructure works and development located adjacent to particular types of infrastructure development. However, the Infrastructure SEPP does not apply to project applications which were lodged but not determined before the commencement of the policy. As the project application was lodged prior to the commencement of the Infrastructure SEPP, the provisions of this SEPP do not apply to the project. Notwithstanding this, the project was referred to the RTA for comment in accordance with the Infrastructure SEPP.

State Environmental Planning Policy No. 14 – Coastal Wetlands

SEPP 14 aims to protect coastal wetlands within NSW outside of the Sydney Metropolitan Area. While there are no SEPP 14 wetlands on site, wetlands do occur within close proximity to the site and have been considered as part of the project. The assessment found that the project would not impact on SEPP 14 wetlands.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

SEPP 33 aims to identify proposed developments with the potential for significant off-site impacts, in terms of risk and/ or offence (odour, noise etc). A development is defined as potentially hazardous and/ or potentially offensive if, without mitigating measures in place, the development would have a significant risk and/ or offence impact, on off-site receptors. SEPP 33 was considered as part of the project.

State Environmental Planning Policy No. 44 – Koala Habitat Protection

SEPP 44 aims to manage and conserve koala habitat to prevent declines in current populations. Under clause 9 of the SEPP, the consent authority is not to grant consent unless it is satisfied that any “potential koala habitat” is not “core koala habitat” as defined under the SEPP. A survey of the site has identified the presence of koalas on the site, and has identified the Swamp Sclerophyll Forest EEC as primary Koala habitat. The EEC is to be fully retained as part of the project. Furthermore, the Department is requiring a 20m vegetation corridor along the front of the site to allow for the movement of Koala’s into adjoining areas, including ‘core koala habitat’ to the NW of the site and primary koala habitat to the east. The Department is satisfied with the consideration of SEPP 44 contained in the Environmental Assessment.

State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 deals with the remediation of contaminated land. Whilst SEPP 55 applies to all projects, investigations indicate that the existing conditions of groundwater and soil contamination on site are within the human health risk based guideline values for industrial development, and therefore no remediation is required to be undertaken at this stage.

Hunter Regional Environmental Plan (REP)

The REP applies to the site. Specifically Part 7 (Division 1 and 4) requires air, noise and water pollution to be minimised; and buildings over 14m in height to be considered in the context of local impact and regional significance. The highest structure on the site is 12.95 metres. The EA has adequately assessed the project against the provisions of the REP. The Department is satisfied that the project is consistent with the objectives of the REP.

Port Stephens Local Environmental Plan 2000

The *Port Stephens Local Environmental Plan 2000* is applicable to the site and provides development controls for development in the Port Stephens Area. The proposed development is located in the 4(a) *Industrial General Zone* and is defined as industry, therefore the project is permissible and the Department is satisfied that the proposed facility is consistent with the objectives of the zone.