



Department of
Infrastructure, Planning and Natural Resources

MINISTERIAL SUBMISSION

**PROPOSAL BY MAC'SCON PTY LIMITED
TO OPERATE A SAND AND GRAVEL EXTRACTION OPERATION
ON LOT 42, DP 788702, GRACES RD, VIA BOWRAVILLE,
NAMBUCCA LOCAL GOVERNMENT AREA**

1. SUMMARY

On 2 May 2002, Mac'scon Pty Limited (the Applicant) lodged a development application (DA 2002/311) and accompanying environmental impact statement (EIS) with Nambucca Shire Council to establish a sand and gravel extraction industry.

The proposed sand and gravel extraction industry would be located 6 kilometres (km) north-west of Bowraville and 14 north-west of Macksville, in the Nambucca Shire. The location of the proposed development is shown in Figure 1.

The DA and EIS were publicly exhibited between 17 May 2002 and 21 June 2002 and 61 submissions were received by Nambucca Shire Council from organisations and individuals, including:

- government bodies and public authorities: 7 submissions
- special interest and environment groups: 6 submissions
- private persons: 49 submissions.

The key issues raised in the submissions were:

- traffic impacts
- school bus safety
- impact on ratepayers for road maintenance
- noise impacts
- water pollution
- dust impacts
- Aboriginal cultural significance
- devaluation of property values.

On 24 October 2002 the Minister for Planning called in the DA for his determination under section 88A of the *Environmental Planning and Assessment Act 1979* (the Act) to ensure that the public keeps its faith in the integrity of the environmental planning and assessment process, given that Nambucca Shire Council had been previously investigated by both ICAC and the Ombudsman in relation to Mac'scon Pty Limited and extractive industries in general. The Minister is therefore the consent authority for the proposed development.

On 13 November 2002, the Minister for Planning directed that a Commission of Inquiry (Col) be held into all environmental aspects of the proposed development, under section 119 of the Act. The Minister for Planning appointed Commissioner Dr Mark Carleton to constitute the Col.

The Primary Session and Session in Reply of the Col were held on 24 February 2003 and 8 April 2003, respectively. Key issues of concern considered at the Col related to noise, water, air quality, traffic, visual, socio-economic and Aboriginal heritage impacts. Commissioner Dr Mark Carleton released the Col report on 19 June 2003.

The Col recommended refusal of the proposed development due to a number of significant matters that could lead to unacceptable environmental impacts. These include the significant potential for:

- noise and air quality impacts on residents located near the proposed extraction area and/or near the proposed haul route;
- ground water impacts and/or risk to the aquifer supplying drinking water to Bowraville; and
- river instability impacts in a sensitive reach of the Nambucca River.

Matters considered to be key issues by the Department include:

- unacceptable noise impacts are likely to occur at the Gallagher and Wellington residences during soil stripping and acoustic bund construction;
- unacceptable air quality impacts associated with short term exposure to fine particulate matter are likely to occur at a number of residential locations during soil stripping operations;
- the EIS did not include a visual impact assessment that satisfied the Director – General’s Requirements; and
- the Department agrees with the Commissioner’s findings about the significant potential for unacceptable ground water impacts and river instability impacts in a sensitive reach of the Nambucca River.

The Col concluded that the Applicant had not adequately demonstrated that the significant potential for unacceptable impacts could be overcome by the implementation of mitigation measures. The Department agrees with the Col’s recommendations.

When the significance of the resource and the residual environmental impacts are considered on balance, it is the Department’s view that the development application should be refused.

2. PROPOSED DEVELOPMENT

The Applicant currently operates a processing plant, involving washing, crushing and screening of sand and gravel, at Cedar Vale, Wia Ora Crossing, Missabotti, via Bowraville, in the Nambucca Shire. The company trades as Wia Ora Sand & Gravel Supplies.

The Mac’scon group of companies employs 24 permanent employees and 3 to 5 casual employees, paying approximately \$1 million in salaries and \$1.2 million for the purchase of local products and services.

The raw sand and gravel feed for the processing plant is presently obtained from a number of floodplain deposits on adjacent properties. The products supply local, regional, NSW and interstate markets.

The Applicant considers that these floodplain deposits are now limited and additional sources of sand and gravel are required to ensure the ongoing viability of the company

In order to obtain additional supplies of sand and gravel the Applicant lodged a development application, D.A. 2002/311, and accompanying EIS with Nambucca Shire Council on 2 May 2002, for an extractive industry.

The proposed extractive industry site is approximately 6 km north-west of Bowraville, and 14 km north-west of Macksville, in the Nambucca Shire. The area of proposed extraction comprises 6.85 hectares of the Riebel property, adjacent to the North arm of the Nambucca River. Sand and gravel would be extracted to a maximum depth of 14 metres(m) below existing surface levels. The resultant void would be partially backfilled to leave a 3.4 hectare lagoon with a rehabilitated buffer zone of greater than 100m between the lagoon rim and the river bank. The location of the proposed development is shown in Figure 1.

3. STATUTORY PLANNING FRAMEWORK

The Applicant lodged DA 2002/311 and accompanying EIS with Nambucca Shire Council on 2 May 2002.

On 24 October 2002 the Minister for Planning called in DA 2202/311 as State significant development under section 88A of the EP&A Act, to ensure that the public keeps its faith in the integrity of the environmental planning and assessment process, given that the Council had been previously investigated by both ICAC and the Ombudsman in relation to Mac'scon Pty Limited and extractive industries in general.

On 13 November 2002, the Minister for Planning directed, under section 119 of the EP&A Act that a Commission of Inquiry be held. Commissioner Dr Mark Carleton released the Inquiry Report on 19 June 2003.

The Minister for Infrastructure and Planning is the consent authority for the development application.

4. COMMISSION OF INQUIRY

The Primary Session of the Col and site inspection were held on 24, and 25 February 2003 respectively. Key issues of concern considered by the Col related to noise, water, air quality, traffic, visual, socio-economic and Aboriginal heritage impacts. The Session in Reply was held on 7 April 2003. Commissioner Dr Mark Carleton released his report on 19 June 2003. The Col recommended refusal of the development application due to a number of significant matters that could lead to unacceptable environmental impacts. These include the significant potential for:

- noise and air quality impacts on residents located near the proposed extraction area and/or near the proposed haul route;
- ground water impacts and/or risk to the aquifer supplying drinking water to Bowraville; and
- river instability impacts in a sensitive reach of the Nambucca River.

The Department agrees with the Col's recommendations.

Matters considered to be key issues by the Department include:

- unacceptable noise impacts are likely to occur at the Gallagher and Wellington residences during soil stripping and acoustic bund construction;
- unacceptable air quality impacts associated with short term exposure to fine particulate matter are likely to occur at a number of residential locations during soil stripping operations;
- the EIS did not include a visual impact assessment that satisfied the Director – General's Requirements; and
- the Department agrees with the Commissioner's findings about the significant potential for unacceptable ground water impacts and river instability impacts in a sensitive reach of the Nambucca River.

5. CONSIDERATION OF ISSUES

The key issues considered by the Col in the assessment of the proposed sand and gravel extraction operation are detailed below. The Department's assessment is contained in the following documents:

- Primary Submission to Commission of Inquiry - February 2003
- Submission in Reply to the Commission of Inquiry – April 2003
- letter of response to the Col's invitation to review and reply to noise, air quality, visual and archaeology and cultural heritage information provided in the Applicant's Submission in Reply – 12 May 2003
- letter to the Col containing the Department's finalised assessment – 28 May 2003.

Noise Impacts

The Col found that noise impacts would exceed the EPA's noise limits at the nearest residences and the adequacy and acceptability of mitigation measures were of concern.

Although the Applicant has significantly modified the proposal by redesigning the acoustic bunds and committed to the use of best practice noise controls on extraction and processing equipment, the proposed development would be unable to meet the EPA's construction and/or operation noise limits at the Gallagher, Wellington and Cagney residences. Significant and major concerns were raised by individuals, community groups and government agencies including PlanningNSW and the EPA. The Applicant's acoustic consultant acknowledges that the predicted noise impacts would exceed the EPA's limits.

It is the Department's view that:

- the assessment has determined that noise impacts from the proposal cannot comply with the project specific noise limits at the Gallagher and Wellington residences;
- there are limited additional onsite noise mitigation measures available to reduce impacts. It could be extremely difficult to initially achieve, and then maintain, the proposed sound power levels throughout the life of the project; and
- noise impacts and mitigation options for the proposed sand and gravel operation are well defined and therefore the proposal should be required to meet operational noise limits (although this will be difficult to achieve) and acquisition limits are not appropriate in this case.

Air Quality Impacts

The Col found that significant dust would be generated during the stripping of topsoil, overburden removal and during rehabilitation. Additional dust would be generated by haulage of material along unsealed haul roads and during the sand and gravel extraction/loading process. Dust generation is not capable of being controlled in all instances. The Col found that the Applicant had not adequately demonstrated that nearby residences would not be unacceptably impacted by project-related dust and that the adequacy of mitigation measures had not been demonstrated.

The Department conducted a detailed review of the air quality impact assessment prepared by the Applicant and concluded that unacceptable air quality impacts associated with short term exposure to fine particulate matter could occur at a number of residential locations during soil stripping operations.

The dispersion model predictions produced by the Applicant's consultant indicate that the air quality impacts of the proposed sand and gravel operation are likely to meet the EPA's amenity-based impact assessment criteria for total suspended particulate matter and dust deposition at nearby residences. However, it is stressed that the air quality impacts for 24 hour average PM₁₀ and PM_{2.5} are likely to have been underestimated for two reasons as follows:

- the application of a calibration factor to the dispersion model predictions derived from studies at the Warkworth coal mine; and
 - the assumption that topsoil stripping occurs continuously throughout the year, rather than on a campaign basis for a period of 4 weeks,
- resulting in the potential for significant exceedances of the EPA's health-based impact assessment criteria for 24 hour average PM₁₀ and PM_{2.5}.

Visual Impacts

Concerns about visual impacts were raised in a number of private submissions. These concerns included the following:

- scarring of the environment; and
- loss of scenic amenity, resulting in reduced property values in the surrounding area.

The Col found that, whilst visual impact concerns might be satisfactorily resolved, the failure of the applicant to supply further details, as requested, did not enable finalisation of the visual impact assessment.

The Applicant has not responded fully to the Department's requests for additional information on this matter so the visual impact of the proposal and any mitigation measures that may be required cannot be fully assessed by the Department.

The Department considers that any concerns about visual impact may be satisfactorily resolved if the Applicant were to provide an appropriately detailed visual analysis and details of proposed mitigation measures, such as landscaping and vegetation work.

Archaeology and Cultural Heritage Impacts

Concerns were expressed during the Col that there was inadequate consultation with the Aboriginal community and inadequate assessment of the indigenous cultural heritage of the sand and gravel extraction site. After consideration of the submissions from the Aboriginal community and the National Parks and Wildlife Service (NPWS), the Col is satisfied that the Aboriginal heritage and cultural significance of the site do not preclude the proposed extraction of sand and gravel.

The Department is of the view that there has been adequate opportunity for any relevant matters relating to indigenous cultural heritage to be identified. It is appreciated that sensitivities exist, as demonstrated by the submissions received, and there is some possibility that items or relics of indigenous cultural significance might be identified if the proposed sand and gravel quarry were allowed to proceed.

Consistent with NPWS advice, the Department is of the view that there are clear legal requirements for protecting Aboriginal relics, sites and places. If the proposed sand and gravel operation were approved, and in the event that Aboriginal cultural material is exposed, then work should cease and the NPWS should be notified immediately. This process appears to provide adequate safeguards and therefore it is considered that concerns about indigenous cultural heritage matters can be satisfactorily resolved.

Water Impacts

The Col considered that increased flood velocities, river and river bank instability and groundwater quality as the key water-related issues. Significant and major concerns were raised by individuals, community groups and government agencies, including the Department. The applicant modified the proposed acoustic bunds to minimise flood effects based on the concerns raised.

Uncertainty exists with respect to the flood impedance effect of the proposed bund, the stability river and erosion problems downstream. Maintenance and protection of a stable and robust river and/or river bank is not assured.

The evidence is that water quality, particularly groundwater quality, may be compromised by the proposal. There are potential water quality impacts to the aquifer supplying drinking water to Bowraville.

The Col noted that the Applicant's late supply of information, certain erroneous predictions and modifications to already modified bunds made assessment for parties and agencies difficult. Repeated changes to the detail of the proposed operation do not instill confidence in this aspect of the proposal, where stringent monitoring and high levels of performance would be required.

The Department shared the Col's frustration with the late supply of information, erroneous predictions and repeated changes to the information presented for assessment. The Department supports the assessment of the Col in terms of concerns to river bank stability in a sensitive reach of the Nambucca River and the potential for impact on the drinking water supply for Bowraville, which is sourced from ground water aquifers.

Traffic Impacts

The Applicant proposes to mitigate traffic impacts by not using certain roads for the transport of materials and the construction of a private haul road to provide a link between the extraction area and the processing plant.

The Col noted that, in the overall assessment of environmental impacts, transport activities may further aggravate unacceptable noise and dust impacts during adverse meteorological conditions.

The Department is agrees with the Col's findings.

Impacts can be managed in regard to the proposed private haul route and transport of material from the proposal to market or the processing plant. Certain measures are proposed by the Company to mitigate impacts or improve road safety, including road improvements and widening and sealing for certain sections of roads.

Socio-Economic Impacts

The Col accepted that the development would ensure the maintenance of employment for a company with a long history of involvement in the extraction of sand and gravel in the area. The project involves significant expenditure locally; with a continued injection of nearly \$1 million in salaries and around \$1.2 million in local products and services. There are currently 24 permanent employees and 3 to 5 casual workers employed by the Applicant's group of companies.

The Col found that socio-economic benefits are not such as to outweigh the likely environmental impacts.

The Department is of the view that the environmental impacts associated with the proposed sand and gravel operation, particularly in relation to noise, air quality and water, outweigh the benefits of the development on the local economy.

6. CONCLUSION

The Department is generally satisfied that, based on its technical assessment, the proposed sand and gravel operation should be refused development consent. There are likely to be unacceptable noise and air quality impacts for residents near the proposed extraction area and/or near the proposed haul route and unacceptable ground water impacts and/or risk to the aquifer supplying drinking water to Bowraville.

When the significance of the resource and the residual environmental impacts are considered on balance, it is the Department's view that the development application should be refused.

7. RECOMMENDATION

It is RECOMMENDED that the Minister:

- (1) Consider the findings and recommendations of this briefing for DA 2002/311;
- (2) Consider the findings and recommendations from the Commission of Inquiry into all environmental aspects of DA 2002/311 (Tag A);
- (3) Refuse the DA 2002/311 as submitted by Mac'scon Pty Limited; and
- (4) Sign the instrument of refusal (Tag B).

Sam Haddad
Executive Director

Craig Knowles MP
Minister for Infrastructure and Planning



Figure 1 – Aerial View of the Site and Local Residences.