

**EXTRACTION, REHABILITATION AND
PROCESSING OF CONSTRUCTION
SANDS,
LOTS 196 AND 29, DP 752025
NORTH MAROOTA, NSW**

**VOLUME 3:
ENVIRONMENTAL IMPACT STATEMENT
For
DIXON SAND (PENRITH) PTY LTD**

**AUTHORITY CONSULTATION
ATTACHMENT TO A3 CONSULTATION**

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New South Wales Government Department of Urban Affairs and Planning

RECEIVED

20 MAY 1998

T. W. Macoun
Lyll & Macoun Consulting Engineers
PO Box 5215
CHATSWOOD 2057

Contact: Meredith McIntyre

Our Reference: S98/00466

Your Reference:

Dear Mr Macoun,

Proposed Environmental Impact Statement for a Continuing Quarry and Processing Operations, Part Portion 196 and Portion 29, Maroota (Dixon Sands (Penrith) Pty Ltd)

Thank you for your letter of 16 April 1997 seeking consultation with the Director-General for the preparation of an environmental impact statement (EIS) for the above development.

Under clause 52 of the Environmental Planning and Assessment Act Regulation 1994 (the Regulation), the Director-General requires that the key issues outlined below are specifically addressed in the EIS.

Key Issues

- Sydney Regional Environmental Plan No. 9 (2) Extractive Industry
- Sydney Regional Environmental Plan No. 20 - Hawkesbury - Nepean River
- State Environmental Planning Policy No. 11 - Traffic Generating Developments
- State Environmental Planning Policy No. 33 - Hazardous and Offensive Development
- Potential impact on Maroota Sands Swamp Forest, an endangered ecological community, and any other species under the *Threatened Species Conservation Act 1995*
- Potential groundwater and other water quality impacts
- Baulkham Hills Development Control Plan No. 500 - Extractive Industry

The EIS shall be prepared in accordance with clauses 50 and 51 of the Regulation. Statutory requirements for the form and content of the EIS are outlined in Attachment No. 1.

You should have regard for the Department's EIS Guideline 'Extractive Industries Quarries'. It contains a guide to the type of information most likely to be relevant to the development you propose. Not all the matters it contains may be appropriate for

Governor Macquarie Tower
1 Farrer Place, Sydney 2000
Box 3927 GPO, Sydney 2001

Telephone: (02) 9391 2000
Facsimile: (02) 9391 2111

consideration in the EIS for your proposal; equally, the guide is not exhaustive. The Guideline is available for purchase from the Department's Information Centre, 1 Farrer Place, Sydney or by calling (02) 9391 2222.

As a result of recent amendments to the *Environmental Planning and Assessment Act 1979*, development applications lodged on or after 1 July 1998, where certain licences or other approvals are required, (as shown on Attachment 2), will be "integrated development". Should your proposal be integrated development, you must consult with the relevant agencies and obtain their requirements when preparing your environmental impact statement.

You should consult with Baulkham Hills Shire Council and take into account any comments Council may have in the preparation of the EIS. Other issues emerging from consultation with relevant local, State and Commonwealth government authorities, service providers and community groups are to be addressed in the EIS.

Should you require any further information regarding the Director-General's requirements for the EIS, please contact Ms Meredith McIntyre on (02) 9391 2384.

Yours sincerely,



David Mutton 18/5/98
Acting Manager

Major Assessments and Hazards Branch
As Delegate for the Director-General

DEPARTMENT OF URBAN AFFAIRS AND PLANNING

Attachment No. 1

STATUTORY REQUIREMENTS FOR THE PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT UNDER PART 4 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

In accordance with the *Environmental Planning and Assessment Act 1979* (the Act), an environmental impact statement (EIS) must meet the following requirements.

Content of EIS

Pursuant to Schedule 2 and clause 51 of the *Environmental Planning and Assessment Regulation 1994* (the Regulation), an EIS must include:

1. A summary of the environmental impact statement.
2. A statement of the objectives of the development or activity.
3. An analysis of any feasible alternatives to the carrying out of the development or activity, having regard to its objectives, including:
 - (a) the consequences of not carrying out the development or activity; and
 - (b) the reasons justifying the carrying out of the development or activity.
4. An analysis of the development or activity, including:
 - (a) a full description of the development or activity; and
 - (b) a general description of the environment likely to be affected by the development or activity, together with a detailed description of those aspects of the environment that are likely to be significantly affected; and
 - (c) the likely impact on the environment of the development or activity, having regard to:
 - (i) the nature and extent of the development or activity; and
 - (ii) the nature and extent of any building or work associated with the development or activity; and
 - (iii) the way in which any such building or work is to be designed, constructed and operated; and
 - (iv) any rehabilitation measures to be undertaken in connection with the development or activity; and
 - (d) a full description of the measures proposed to mitigate any adverse effects of the development or activity on the environment.
5. The reasons justifying the carrying out of the development or activity in the manner proposed, having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.
6. A compilation, (in a single section of the environmental impact statement) of the measures referred to in item 4(d).
7. A list of any approvals that must be obtained under any other Act or law before the development or activity may lawfully be carried out.
8. For the purposes of Schedule 2, the principles of **ecologically sustainable development** are as follows:
 - (a) The precautionary principle - namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
 - (b) Inter-generational equity - namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
 - (c) Conservation of biological diversity and ecological integrity.
 - (d) Improved valuation and pricing of environmental resources.

Note

The matters to be included in item (4)(c) might include such of the following as are relevant to the development or activity:

- (a) the likelihood of soil contamination arising from the development or activity;
- (b) the impact of the development or activity on flora and fauna;

- (c) the likelihood of air, noise or water pollution arising from the development or activity;
- (d) the impact of the development or activity on the health of people in the neighbourhood of the development or activity;
- (e) any hazards arising from the development or activity;
- (f) the impact of the development or activity on traffic in the neighbourhood of the development or activity;
- (g) the effect of the development or activity on local climate;
- (h) the social and economic impact of the development or activity;
- (i) the visual impact of the development or activity on the scenic quality of land in the neighbourhood of the development or activity;
- (j) the effect of the development or activity on soil erosion and the silting up of rivers or lakes;
- (k) the effect of the development or activity on the cultural and heritage significance of the land.

An environmental impact statement referred to in Section 77(3)(d) of the Act shall be prepared in written form and shall be accompanied by a copy of Form 2 of the Regulation signed by the person who has prepared it.

Procedures for public exhibition of the EIS are set down in clauses 55 to 57 of the Regulation.

Attention is also drawn to clause 115 of the Regulation regarding false or misleading statements in EISs.

Note

Should the development application to which the EIS relates not be exhibited within 2 years from the date of issue of the Director-General's requirements, under clause 52(5) of the Regulation the proponent is required to reconsult with the Director-General.

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ATTACHMENT 2

EXTRACT FROM EP&A ACT 1979

(effective from 1 July 1998)

91 What is "integrated development"?

- (1) Integrated development is development (not being complying development) that, in order for it to be carried out, requires development consent and one or more of the following approvals:

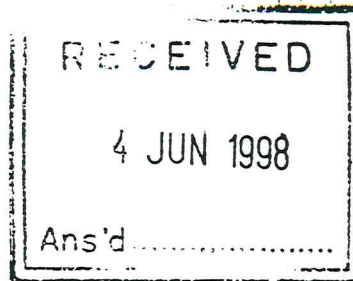
Act	Provision	Approval
<i>Fisheries Management Act 1994</i>	s 144	aquaculture permit
	s 201	permit to carry out dredging or reclamation work in any waters
	s 205	permit to cut, remove, damage or destroy marine vegetation on public water land or an aquaculture lease, or on the foreshore of any such land or lease
<i>Heritage Act 1977</i>	s 58	approval in respect of the doing or carrying out of an act, matter or thing referred to in s 57 (1)
<i>Mine Subsidence Compensation Act 1961</i>	s 15	approval to alter or erect improvements within a mine subsidence district or to subdivide land therein
<i>National Parks and Wildlife Act 1974</i>	s 90	consent to knowingly destroy, deface or damage or knowingly cause or permit the destruction or defacement of or damage to, a relic or Aboriginal place
<i>Pollution Control Act 1970</i>	s 17A (including s 17C) and s 17D	licence in respect of any one or more of the following: <ul style="list-style-type: none"> (a) scheduled premises or scheduled equipment within the meaning of the <i>Clean Air Act 1961</i>, (b) the pollution of waters within the meaning of the <i>Clean Waters Act 1970</i>, (c) a drain which discharges or is likely to be used for discharging any pollutants into any classified waters within the meaning of the <i>Clean Waters Act 1970</i>, (d) scheduled premises within the meaning of the <i>Noise Control Act 1975</i>

Act	Provision	Approval
<i>Pollution Control Act 1970</i>	s 17I	pollution control approval
<i>Rivers and Foreshores Improvement Act 1948</i>	Part 3A	permit under Part 3A
<i>Roads Act 1993</i>	s 138	consent to: (a)erect a structure or carry out a work in, on or over a public road, or (b)dig up or disturb the surface of a public road, or (c)remove or interfere with a structure, work or tree on a public road, or (d)pump water into a public road from any land adjoining the road, or (e)connect a road (whether public or private) to a classified road
<i>Soil Conservation Act 1938</i>	s 21D	authority authorising the ringbarking, cutting down, felling, poisoning or destruction in any other manner or the topping, lopping or removing of any trees on protected land
<i>Waste Minimisation and Management Act 1995</i>	s 44	licence to occupy a controlled waste facility
<i>Water Act 1912</i>	s 10	licence to construct and use a work, and to take and use water, if any, conserved or obtained by the work, and to dispose of the water for the use of occupiers of land
	s 13A	licence to construct a supply work and to take and use water obtained thereby
	s 18F	permit to construct and use a work, and to take and use water, if any, conserved or obtained by the work, and to dispose of the water for the use of occupiers of land for any purpose other than irrigation
	s 20B	authority to take water from a river or lake for the purposes of a joint water supply scheme
	s 20CA	authority to construct a supply work and to take and use water conserved or obtained thereby
	s 20L	group licence
	s 116	licence to commence sinking a bore or to enlarge, deepen or alter a bore
	Part 8	approval to construct a controlled work

- (2) Development is not integrated development in respect of the consent required under section 90 of the *National Parks and Wildlife Act 1974* unless:
 - (a) a relic referred to in that section is known, immediately before the development application is made, to exist on the land to which the development application applies, or
 - (b) the land to which the development application applies is an Aboriginal place within the meaning of that Act immediately before the development application is made.

NB. The above Section 91 of the Act does not come into effect until 1 July 1998. All environmental impact statements (EIS) prepared (but not lodged with a consent authority) before that date **MUST** consider the above section in preparing an EIS.

Date: 28th May, 1998
Our Reference: MN98H126
Contact: Philip Pidgeon
Phone: 02 9895 6260



Lyall & Macoun Consulting Engineers
P.O. Box 5215
West Chatswood, Nsw, 2057

Attention:- Tim Macoun

Dear Sir,

RE: DIXON SANDS PTY LTD - 'AREA A', MAROOTA OPERATIONS

I refer to the focus forum of Wednesday May, 28th at which the various representative agencies discussed the issues relevant to the above operation. To clarify the input of John Filocamo, Dan McKibbin Trevor Flewin and myself please refer to the points below;

Crown Lands Issues

- Setbacks from Crown lands (ie; roads and reserves) are not prescriptive but, in the case of the Maroota operation 10 metres would suffice with batters and drainage set in accordance with Soil Conservation Service requirements.
- Use of Crown land which has not been identified as suitable for extraction will require a land assessment under the Crown Lands Act, 1989 in order that a licence for extraction may be issued. Where that land falls within areas designated for extraction in SREP 9(2) Extractive Industries and the environmental investigation contained in the EIS is favourable, a good case could be made for waiving the land assessment. Nevertheless the Department is obliged by ICAC guidelines to employ a competitive means of disposal (ie; tender) when seeking to have the site occupied by private interests.
- Portions 196 and 29 are held under freehold title and include title restrictions on Portion 196 which limit freehold depth to 15.24 metres. Any operations below this depth would be on Crown land and the issue of land assessment arises again however as the land is already under extraction and within a SREP9 area a good case could be made for waiving the land assessment. DLWC and Dixons Sands need to come to an early agreement on the original topography of the land in order that extractive depths are clearly defined. Apart from royalty issues, Owners consent (DLWC) would be required for lodgement of the Development Application below 15.24 metres and this raises the question of Native Title. If the proposed DA seeks to extend extraction beneath 15.24 metres Dixons will need to lodge a Non-Claimant Application with the Native Title Tribunal through this Office. A Non-Claimant Application is notice of intention to use the land by a non-aboriginal body (Dixons) and is lengthy process so should be commenced as soon as possible.
- Closure of Crown roads is possible where those roads are no longer required for access or where alternative access arrangements can be made. Any application to close a road will be considered on its merits however no guarantee can be given to the success or otherwise of the application. If a road is closed the land would firstly be offered to the adjoining freehold owners for sale at current market value as determined by the State Valuation Office. If you wish to apply to close a road you should fill in the attached CL29-2 form and forward to this Office together with an application fee of \$800.00. Please refer to the

attached form "B" for a breakdown of further costs following a successful road closing. Any queries you have on road related matters should be directed to either Janice McGufficke (9895 6248) or Tony Dahlen (9895 6251) of this Office.

Groundwater issues

In accordance with Baulkham Hills Shire Council DCP for extractive industry, the depth of mining will be limited by the position of the water table associated with the Hawkesbury Sandstone Aquifer. Hence, a schematic representation of the water table configuration (in terms of RL contours) over the proposed mining areas will be needed. This will most probably necessitate groundwater investigation drilling with at least one bore constructed in the central or eastern part of the development site. It would be desirable that any investigation bore(s) be completed as piezometers for ongoing monitoring of water level and quality. A licence under the provisions of Part V of the Water Act will be necessary for all groundwater investigation bores.

Soil Conservation Service

The Department requires development to meet all statutory pollution law and regulatory requirements, including the Soil Conservation Act (1938). To achieve this the Department recommends that an Erosion and Sediment Control Plan (ESCP) be developed.

Implementing erosion and sediment control measures are important before and during any development. It is essential to minimise onsite erosion and to prevent the offsite sedimentation of downslope properties, streams and waterbodies.

In this context, the Department offers the following guidelines for use in the environmental assessment where appropriate for soil and land management issues.

- Investigate site features to ensure that the required environmental outcomes and the proposed quarry expansion are compatible (including landscape, hydrologic and soil limitations).
- Permanent drainage and sediment control works should be immediately vegetated/stabilised.
- Stockpiles should be stored outside hazard areas such as drainage lines and heavily trafficked areas.
- Temporary erosion control measures should be incorporated at all stages of development. The control of erosion as close to the source as possible can reduce the subsequent demand on sediment trapping structures. (Aim to manage stormwater runoff at a non-erosive velocity and protection of disturbed soil surface).
- Stormwater runoff from disturbed areas should be filtered through sediment trapping structures. Where practicable, runoff from undisturbed areas should be controlled separately.
- Disturbed areas should be progressively stabilised and revegetated so that no areas remain exposed to erosion damage for more than 14 days after earthworks cease. Temporary sediment control measures should be removed once sites have an established vegetative surface cover.
- All erosion and sediment control measures should be inspected regularly and maintained in good working condition. Maintenance should ensure that accumulated sediment is removed from filter fences, traps and basins before 60% of the available capacity is lost.

The Department recommends that the ESCP should be an effective and workable document to be understood by all contractors and subcontractors on site. The plan should meet the standards required by Local Council, EPA and DLWC.

The Department recommends the ESCP nominate a responsible person on site with appropriate experience in soil conservation to maintain and monitor the effectiveness of the control measures.

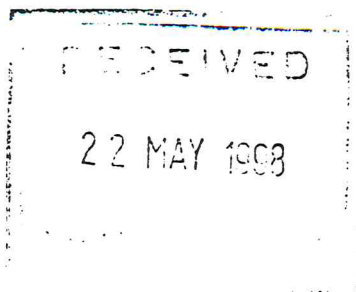
Where considerable earth shaping is to be undertaken there may be a need to develop a progressive ESCP, which is progressively implemented as the landform and erosion and sedimentation risks vary. The erosion and sediment control measures should be in place before any works commence and must be properly monitored and maintained until full stabilisation of the site has been achieved.

If you have any questions in relation to the above please contact the relevant Officer on 98957503 during normal business hours.

Yours faithfully,

A handwritten signature in dark ink, appearing to read 'P. Pidgeon', is written over the closing text.

Philip Pidgeon
for District Manager.



Lyall & Macoun Consulting Engineers
PO Box 5215
CHATSWOOD WEST NSW 2057

Contact: John Ross
Phone: (02) 9895 7441

Attention: Ms Jill Wright

Our Ref: 0059825
[SCFL46.DOC]
Your Ref: OW560

19.5.98

Dear Sir/Madam,

**Re: EIS Requirements, Above Referenced Continuation,
Sand Extraction, Maroota.**

Thank you for your letter of 30 April 1998, seeking this Department's comments and requirements for the above EIS.

Water Resources Matters

In the conduct of the investigations, it is recommended that you make full use of the seven water resources documents sent to your Mr T W Macoun with the Department's letter of 3 March 1997 and listed below. All appropriate matters discussed in these guideline documents should be dealt with in the above EIS, along with any other appropriate matters included in the above letter(attached).

- a) "Amendments to the NSW Rivers and Foreshores Improvement Act";
- b) "The 7-Step Method of controlling Bank Erosion and Sediment Build-up";
- c) "A Guide to Stream Channel Management";
- d) "The Importance of the Riparian Zone in Water Resource Management - A Literature Review";
- e) "NSW State Rivers and Estuaries Policy";
- f) "Minimum Standards for Works in Rivers and Lakes"; and
- g) "General Requirements for Environmental Impact Statements". (This is essentially a checklist of water resources matters to be addressed in the assessment of environmental impacts).

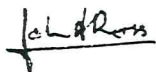
In addition the following Crown Land matters need to be taken into consideration:

- stormwater - overland flows should not be concentrated or diverted from their natural flowline. Roofwater shall not be discharged directly onto Crown land;

- the velocity and volume of stormwater flows to Crown land must be no greater than those before the proposed development;
- any stormwater control structure must be designed and constructed in accordance with the 1992 Urban Erosion and Sediment Control Guidelines;
- buildings in close proximity to or in direct view of Crown land should have an external finish to blend in with the background environment or be adequately screened from view. Furthermore, where the building is close to the common boundary, shadowing of Crown land is to be avoided;
- any excavation or fill is to be contained entirely within the proponent's property and shall not jeopardise the longevity of any vegetation on Crown land. Where fill is proposed adjoining the common boundary it shall be properly drained and retained or battered back and revegetated to prevent the escape of any material onto Crown land;
- access to any part of the proponent's property is not be over Crown land. **Should the proponent wish to construct a Crown road, permission in writing must first be obtained from the State Lands Service before any work commences;** and ;
- any fire reduction zone required by a development that adjoins reserved Crown land is to be completely within that development boundary.

I trust the above comments and information will be helpful.

Yours sincerely,



John A Ross,
Environmental Review Co-ordinator,
for Resource Planning Manager,
Sydney-South Coast Region

(Attach.)



Mr TW Macoun
Lyall and Macoun Consulting Engineers
PO Box 5215
WEST CHATSWOOD NSW 2057

NSW DEPARTMENT OF MINERAL RESOURCES
Minerals and Energy House, 29-57 Christie Street
(P.O. Box 536), St Leonards, NSW 2065, Australia
Phone (02) 9901 8888 · Fax (02) 9901 8777
DX 3324 St Leonards

Our ref: L93/0339
Your ref: OW560

**ENVIRONMENTAL IMPACT STATEMENT
PART PORTION 196 AND PORTION 129 MAROOTA
DIXON SANDS (PENRITH) PTY LTD**

Dear Mr Macoun

I refer to your letter of 28 April, 1998, regarding the Planning Focus meeting and development application for sand quarrying at Maroota by Dixon Sands (Penrith) Pty Ltd. Mr S Lishmund will be available to attend the Planning Focus meeting on 27 May. The following comments relate to the preparation of the Environmental Impact Statement (EIS).

The site of the quarry is within an area considered under Sydney Regional Environmental Plan No 9 Extractive Industry (No 2) to contain resources of regional significance. Although this Department has no statutory role over construction sand under the Mining Act 1992, it is the principal government authority responsible for regional assessments of the State's resources of construction materials and for advising State and Local government on their planning and management. This Department considers the following resource information essential for inclusion in an EIS for a sand extraction operation:

This Department considers the following resource information essential for inclusion EISs:

- The amount of material available for extraction, and the method or methods used to determine this amount (e.g. drilling, trenching). Plans and cross-sections summarising this data, at a standard scale, showing location of drillholes etc. and the area proposed for extraction, should be included in the EIS. Relevant supporting documentation such as drill logs should be appended.
- Characteristics of the material to be produced.
- An assessment of the quality of the material based on the testing and of the suitability of the material for the usual range of applications should be given.
- Anticipated annual production and life of the operation.
- Alternative sources to the proposal and their availability.
- Justification for the proposal in terms of local and, if appropriate, regional context.

The operator must observe all relevant requirements of the Mines Inspection Act, 1901 (as amended). Advice on these requirements should be sought from the Regional Inspector of Mines, Mr P Diamantes - telephone (02) 9869 4763.

If you have any queries on this matter, please contact Ms Helen Ray directly on (02) 9901 8362.

Yours faithfully



SR Lishmund
For Director-General

14/5/98



CATCHMENT MANAGEMENT TRUST

18th May 1998

Lyall & Macoun Consulting Engineers
PO Box 5215
W CHATSWOOD NSW 2057

RECEIVED
22 MAY 1998

Contact: Tony Towers
Our ref: LM/BH/EIS
mar-196-q
Your Ref: ow560

Dear Mr Macoun,

Proposed Extractive Industry, Part Portion 196 and Portion 29, Maroota

Thank you for your letter seeking our requirements for the EIS on the above proposal. The Trust's general requirement is that the EIS address the impact of the proposal upon the Hawkesbury-Nepean River and its catchment. In particular, the Trust recommends that the following issues be assessed:

- 1. Water quality and quantity:** The project should satisfy the Trust's policy on water quality and quantity which states:
Any development must not lead to a deterioration of the ecosystem or compromise its environmental values. Therefore if the quality of water (both surface and groundwater) emanating from an area is satisfactory, then any proposed development should not result in a decrease in this quality; alternatively if the quality is not satisfactory, then any proposed development should result in an improvement to this quality.

Specifically, any proposed development should achieve the following environmental values for water:

- ♦ *Any water flow or changes in flow from the area should not alter the downstream natural hydrology (frequency or peaks) for all events up to the one in two year storm event (30 minute event), and should not alter the downstream peak levels for events up to the 1 in 100 year event.*
- ♦ *All development shall be designed to maintain or enhance water quality to a standard that would not compromise the:*
 - *ANZECC Guidelines standard for healthy waters - protection of aquatic ecosystems; and*
 - *NHMRC Guidelines for visual amenity and primary contact recreational water quality.*
- ♦ *Groundwater, for drinking water supply, should be protected from the impacts of any contaminated surface waters.*

Specifically, the EIS should address the outcomes from the Maroota Groundwater Study Stage 1 and 2 (draft) reports. At this stage, the Trust's preference is that the groundwater study should

be completed and a groundwater management plan in place before any further major developments are approved. If a proposal is to proceed, then the depth of extraction should be defined as being no deeper than 2 metres above the seasonally high watertable. The EIS should determine this level.

2. **Final landform:** The final landform and revegetated landscape should deliver a rainfall recharge rate no less than that which existed prior to any disturbance of the site. Further, the final landform should be geomorphologically stable. The final use should be indicated, with reasons why that use would be suitable.
3. **Protection of fauna and flora:** An objective of the proposal should be to maintain the biodiversity values of the site. This will require active management on the site. It is also critical that the ecological integrity of adjacent creeks is maintained. In this regard, your attention is drawn to wetland no.88 located downstream of the site. This wetland is recognised as regionally significant under Sydney REP No.20 Hawkesbury Nepean River (No.2 - 1997). Any significant effect on threatened species, populations or communities should also be assessed in terms of section 5A of the EP&A Act to determine whether the proposal will require the preparation of a Species Impact Statement.
4. **Measures to maintain air quality:** The EIS should indicate measures for dust suppression from quarry activities and haulage vehicles.
5. **Environmental management and rehabilitation plan:** The Extractive Industries/Quarries Practice Guideline (July 1994) prepared by the DUAP identifies the need for an Environmental Management and Rehabilitation Plan. The Trust strongly supports the preparation of such a plan which could take the form of an Environmental Management System consistent with ISO 14000. An outline of the plan should be indicated in the EIS, including:
 - (a) Water quality management regarding:
 - ♦ the flow regime of receiving waters and the impact upon that regime;
 - ♦ the nature of run-off from the existing activity and the likely impact of the proposal on water quality, the effect of the final land form, the means of collection and disposal of surface water run-off, the proposed management of waste waters, oils and grease, disposal of effluent and rubbish, control measures for the stockpiles, erosion and sediment controls;
 - ♦ the quality of the ground water and any likely infiltration into the ground water, effects on ground water and water bores, in the context of the Maroota Groundwater Study.
 - (b) Vegetation management including, but not limited to:
 - ♦ important vegetation communities;
 - ♦ revegetation of disturbed areas in the long and short term and landscaping.

(c) On-site materials management:

- ♦ usual operating procedures and emergency/contingency plans;
- ♦ monitoring and reporting mechanisms.

The EIS should also address the provisions of Sydney REP 20 (No.2 - 1997). No formal consultation with the Trust is required under the REP.

The above advice does not indicate that the Trust will either support or object to the proposal. We will make that decision only after an assessment of the forthcoming EIS has been made.

Should you wish to discuss any matter raised in this letter, please contact the Trust.

Yours sincerely,

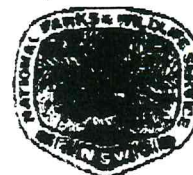
Malcolm

for

Malcolm Hughes
Program Leader - Catchment Planning

cc. Frank Braybrooks - Chairperson
Martin James - Catchment Co-ordinator
Cattai Catchment Management Committee

File



NSW
NATIONAL
PARKS AND
WILDLIFE
SERVICE

Mr Tim Macoun
Lyal and Macoun Consulting Engineers
PO Box 5215
WEST CHATSWOOD NSW 2057

Your Ref.: OW560

Dear Mr Macoun

**RE: Continuing quarrying and processing operations, Part
Portion 196 and Portion 29, Maroota**

I refer to your letters dated 30 April and May 1998, in which you consult with the National Parks and Wildlife Service on the above proposal. As indicated in recent discussions with your office (Ms Jill Wright), unfortunately it will not be possible for a representative of the NPWS to attend the consultation meeting on 27 May. However, the NPWS offers the following advice which should assist in progressing preparation of the EIS.

The NPWS has a statutory responsibility for the protection and care of native flora, native fauna and Aboriginal sites, and for the management of NPWS estate. Accordingly the NPWS has an interest in ensuring that potential impacts to these attributes are appropriately assessed.

To assist you in this regard, it is recommended that the matters referred to in the attached guidelines titled "General Guidelines for Impact Assessment" be addressed in your assessment where appropriate. These guidelines also provide information on any approvals that may be relevant under the National Parks and Wildlife Act and a summary of the NPWS' databases which may be of assistance to you in your assessment.

It is requested that any EIS forwarded to the NPWS for comment during the public exhibition period state the reasons for the referral. The NPWS typically comments on EIS's where there is a statutory concurrence or approval role for the NPWS, or where there is likely to be a threat to NPWS reserves or regionally significant conservation values.

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Tel: (02) 9585 6675

2 2

Please contact me on (02) 9585-6921 if you have any questions concerning this matter.

Yours sincerely,

R. Fowke 18/8/98

Ray Fowke
Environmental Planning Officer
SYDNEY ZONE

OW560
12 May, 1998



Sydney and South Coast

NSW Agriculture

299 George Street Windsor 2756
(Locked Bag 11)

T W Macoun
Lyall & Macoun Consulting Engineers
PO Box 5215
W CHATSWOOD NSW 2057

Telephone: (045) 770 600
Facsimile: (045) 770 650

Dear Mr Macoun

**Continuing Quarrying and Processing Operations
Dixon Sands, Maroota NSW**

I refer to your letter of 1 May 1998 which sought nominations from the Department of a representative to attend a planning focus meeting on 27 May and identification of issues to be addressed in any prospective EIS.

As I advised you over the phone on 8 May 1998 Mr Bill Yiasoumi, Acting / Agricultural Environment Officer Windsor, will be available to attend the planning focus meeting scheduled for the 27 May.

In relation to the issues to be addressed in the prospective EIS, NSW Agriculture considers the following issues of primary importance:

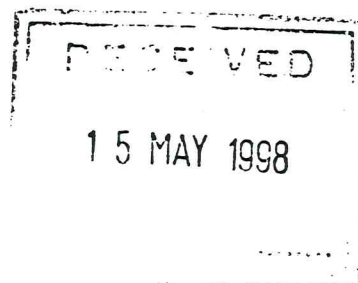
- the direct alienation of agricultural land resources;
- the potential conflict with agricultural activities over issues such as noise, dust, trucks etc...;
- the potential impact on surface and ground water quality, quantity and reliability of supply; and,
- proposed methods of rehabilitation with a view that disturbed sites will be rehabilitated to a level of at least pre-disturbance agricultural suitability.

In addressing these issues I feel it is important that a clear assessment of the significance of the potential impacts of the proposal be made. Further, the future monitoring program and management response to adverse monitoring results needs to be clearly identified.

For further clarification of these comments or to provide further details on the planning focus meeting please contact Bill Yiasoumi at the above address.

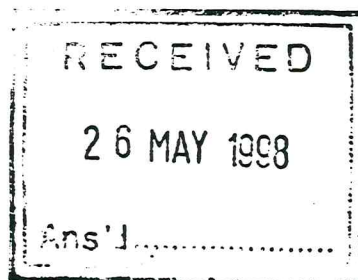
Yours sincerely

Tom Grosskopf
Agricultural Environment Officer
WINDSOR





Mr Macoun
Lyll & Macoun Consulting Engineers
PO Box 5215
W CHATSWOOD NSW 2057



Environment
Protection
Authority
New South Wales

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and Rickard Road
Locked Bag 1502
Bankstown
NSW 2200

Telephone. 02. 9795 5000
Facsimile. 02. 9795 5002
www.epa.nsw.gov.au

Our Reference: 300609/B1

Your Reference: Job No:OW560

Contact: Rod Aubrey

Dear Mr Macoun

Re: Preparation of an Environmental Impact Statement for
Proposed Sand Extraction Operation At Part Portion 196 and Portion 29, Maroota

I refer to your letter dated 30 April 1998 seeking advice from the Environment Protection Authority (EPA) about the scope and content of an Environmental Impact Statement (EIS) for the proposed continuation of sand extraction from part Portion 196 and Portion 29, Maroota. The EPA appreciates the opportunity to provide advice at this early stage of the proposal.

The EPA expects the proponent to address the issues contained in the Department of Urban Affairs and Planning's EIS Practice Guideline for "Extractive Industries Quarries". The following information also provides you with a range of additional issues or more specific expectations for consideration during the environmental impact assessment of the proposed sand extraction activity and outlines the broad principles within which the EPA offers these comments.

The EPA's Role

The EPA recognises the potential environmental and economic benefits that can be derived from considering environment protection and pollution prevention measures at the planning and development stages, and by designing ecologically sustainable systems. The Protection of the Environment Administration Act 1991 charges the EPA with, among other things, responsibility for promoting pollution prevention and having regard for the need to maintain ecologically sustainable development (ESD).

The Protection of the Environment Administration Act maintains that ESD requires the effective integration of environmental and economic considerations in decision-making and also that ESD can be achieved by the implementation of such principles and programs as:

- * the precautionary principle - namely, that if there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environment degradation;
- * intergenerational equity - namely that the present generation should ensure that the health,

- diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- * conservation of biological diversity and ecological integrity; and
- * improved valuation and pricing of environmental resources.

The EPA considers that the planning process and any subsequent development should incorporate objectives and mechanisms for achieving ESD.

Surface Water Management

The proponent should identify, describe and quantitatively assess the impacts that may be caused to surface water quality during both the site establishment and operating stages. In this regard the EIS should include a detailed surface water management plan. The surface water management plan should include catchment areas, basin, spillway and flow diversion design and sizing and detail how the runoff contained on the site will be managed following storm events to return the system to its design capacity. The EPA would prefer the system to be operated as a closed water management system.

The surface water management plan should also include measures for preventing pollution from fuel storage, machinery operation and maintenance areas on the site.

The EPA is currently finalising appropriate design criteria for sizing of water management system, which we expect to be available by the meeting next week. In the mean time you should consider the principles for sediment and erosion control measures as outlined in the Department of Housing's "Soil and Water Management for Urban Development" or the former Department of Conservation and Land Management's "Urban Erosion and Sediment Controls" book.

Groundwater Management

The EIS should include an assessment of the impacts of quarrying on groundwater quality and availability. In particular, the EIS should investigate and quantitatively assess the likely impacts of quarrying on the level of the water table and any associated effects on other groundwater users in the area, adjacent bushland and habitat values.

Air Pollution

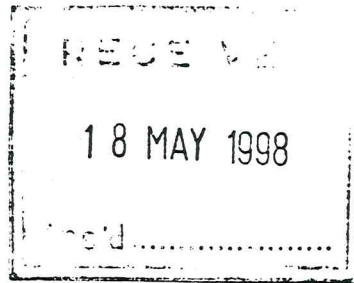
The EPA is concerned with maintaining or improving ambient air quality. From past experience, the EPA generally considers that ambient dust deposition rates should not exceed 4.0g/m²/month. The EIS should therefore investigate existing dust deposition rates, estimate the additional contribution to dust deposition that would result from the proposed quarrying activity and describe management strategies to ensure that dust generation is minimised and that ambient conditions does not exceed an upper limit of 4.0 g/m²/month.

Noise Impact Assessment

The EIS should include a noise impact statement which:

- a) determines the present ambient noise levels (LA90T) at nearby residential dwellings (with the current extraction not operating);
- b) predicts the noise levels (LA10T) at the most affected residential premises or other noise sensitive premises during both site establishment and site operation; and
- c) provides a description of any noise mitigation measure considered necessary for the proposed activities to comply with the guidelines contained in Chapters 19, 20 and 21 of the EPA's Environmental Noise Control Manual.

Our Reference: 31. 5314
Mr Ravi Ravendra
Telephone: 9672 2540
Thursday 14 May 1998



Roads and Traffic
Authority
Sydney Region



Better Roads. Safer Roads.
Saving Lives.

Lyall & Macoun Consulting Engineers
P O Box 5215
Chatswood 2057

Attention: Mr.T.W.Macoun

83 Flushcombe Road
Blacktown NSW 2148
Telephone (02) 9831 0911
Facsimile (02) 9831 0926
PO Box 558
Blacktown NSW 2148
DX 8120

Dear Sir,

**Dixon Sands (Penrith) Pty Ltd, Part Portion 196 and Portion 29
Maroota, NSW. Continuing Quarrying and Processing
Operations**

Further to your letter of 6 May 1998 requesting the RTAs comments on issues for inclusion in an EIS for the abovementioned facility.

The Roads and Traffic Authority would like to see the EIS address the following matters:

1. the proposed means of access to/from the site;
2. likely daily traffic movements generated by the development;
3. an assessment of the likely impact of truck traffic upon nearby residential areas;
4. details of the anticipated route of trucks through the metropolitan road network; and

Please refer further queries to Rave Ravendra on 02 9672 2540.

Yours faithfully


Philip Brogan
Land Use/Transport Manager
Sydney Development Services Branch



Baulkham Hills Shire Council

Administration Centre, 129 Showground Road,
Castle Hill, N.S.W. 2154

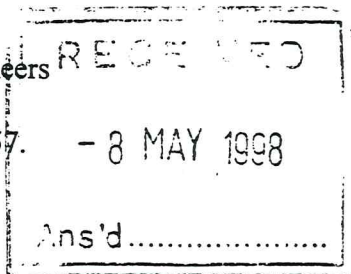
Please address all correspondence to the General Manager
PO Box 75, Castle Hill N.S.W. 2154

Office hours: Monday - Friday 8.30am - 4.30pm

Telephone: (02) 9843 0555
Fax: (02) 9843 0409
Dx 8455 Castle Hill

7 May 1998

Mr T Macoun
Layll & Macoun Consulting Engineers
P O Box 5215
WETS CHATSWOOD, NSW, 2057.



Your Ref: OW560

Our Ref: P 152

Dear Mr Macoun,

Dixon Sands (Maroota Operations)

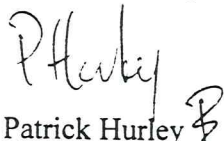
Proposed Application - Request for Director General's Requirements.

I refer to your letter dated 28 April 1998 in regard to the abovementioned matter and wish to provide the following response:-

- Mr Peter Zadeian of Council Planning Services will attend the Pre-focus meeting;
- It is suggested that members from local community groups, such as the Maroota Planning Group also be invited to attend and contribute to discussions;
- It is also suggested that representatives from the RTA, Dept. School Education, HNCMT, Cattai CMC and Hornsby Shire Council be invited to attend;
- The application should include a separate assessment of all requirements of:-
 - Section 90 of the E P & A Act, 1979;
 - Schedules 2 & 3 of the Environmental Planning & Assessment Regulations, 1994;
 - SREP No.9(2)(Amendment No.1 - 1997) - Extractive Industries;
 - SREP No.20(No.2 - 1997) - Hawkesbury Nepean River; and
 - Baulkham Hills LEP 1991.
- The application is expected to include an assessment of all requirements of Council's DCP No.500 - Extractive Industries and in particular the following matters:-
 - Section 2.1 - Community Participation;
 - Section 2.11 - Extraction Program Planning;
 - Section 2.12 - Rehabilitation;
 - Section 2.15 - Post Extraction Land uses;
 - Section 2.16 - Maroota;
 - Section 2.18 - Environmental Management Systems; and
 - Attachment No.1 - How to Prepare a DA.

For any further enquiries please contact Mr Peter Zadeian on telephone 9843 0279.

Yours faithfully


Patrick Hurley

MANAGER - DEVELOPMENT CONTROL.

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