

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

DETERMINATION OF THE DEVELOPMENT APPLICATION

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INTEGRATED STATE SIGNIFICANT DEVELOPMENT

**DETERMINATION OF DEVELOPMENT APPLICATION
PURSUANT TO SECTIONS 76(A)9 & 80**

I, the Minister for Planning, pursuant to Sections 76(A)9 & 80 of the Environmental Planning and Assessment Act, 1979 ("the Act") determine the development application ("the application") referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedule 2.

The reasons for the imposition of the conditions are to:

- (i) minimise the adverse impact the development may cause on the environment;
- (ii) provide environmental criteria which define acceptable levels of performance; and
- (iii) require environmental monitoring and reporting.

**Andrew Refshauge MP
Minister for Planning**

Sydney, 2002

SCHEDULE 1

Application made by:	Roche Group Pty Limited
To:	Minister for Planning
In respect of land being:	Bed of the Manning River, spanning a river length of approximately 1250 metres between Mangrove Island to the west and Pelican Point to the east, and as generally described as the "Proposed Dredge Area" in Figure 1.2 of the EIS, as may be modified by this consent.
For the following development:	Extraction of up to 1,000,000 m ³ of material from the bed of the Manning River, transportation of this material to onshore

processing facilities and subsequent use as fill material for the Harrington Waters Estate residential development.

Development Application:

Development application was lodged on 22 April 2002 accompanied by an Environmental Impact Statement entitled *Manning River – Proposed Dredging for the Harrington Waters Estate* prepared by WBM Oceanics dated February 2002.

DA number	122-5-2002
Exhibited	8 May 2002 – 11 June 2002

State Significant Development:

In September 1999, the Minister for Urban Affairs and Planning declared that extractive industry proposals with an extraction rate of more than 200,000 tonnes per annum or total resource of more than 5 million tonnes to be State Significant Development in pursuance of section 76A(7) of the Environmental Planning and Assessment Act 1979. As a result, the consent authority for the proposed development is the Minister for Planning.

BCA Classification:

Not applicable

NOTE:

- 1) To ascertain the date upon which the consent becomes effective, refer to section 83 of the Act.
- 2) To ascertain the date upon which the consent is liable to lapse, refer to section 95 of the Act.
- 3) Section 97 of the Act confers on an Applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.

SCHEDULE 2

Conditions of Consent for the Dredging of the Manning River for the Harrington Waters Estate

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ABBREVIATIONS

BoM	Bureau of Meteorology
DA	Development Application
DLWC	Department of Land and Water Conservation
ECP	Environmental Control Protocols
EIS	Environmental Impact Statement
EMP	Environment Management Plan
EMR	Environmental Management Reporting
EMS	Environment Management Strategy
EPA	Environment Protection Authority
ESO	Environmental Site Officer
ExMP	Extraction Management Plan
ExP	Expert Panel
GTCC	Greater Taree City Council
NPWS	National Parks and Wildlife Service

1. General

1.1 Obligation on the Applicant for the Environment

- (a) The Applicant must ensure that all practicable measures are taken to prevent and minimise harm to the environment that may result from site establishment, operation and disestablishment activities.
- (b) If, at any time, the Director-General becomes aware of the occurrence of any environmental impacts from the proposal, the Director-General may order the Applicant to cease the activities causing those impacts until they have been addressed to the satisfaction of the Director-General.

1.2 Adherence to Terms of DA, EIS etc.

The Applicant shall carry out the development generally in accordance with DA 122-5-2002 and:

- (i) EIS entitled *Manning River – Proposed Dredging for the Harrington Waters Estate* prepared by WBM Oceanics dated February 2002 and certified in accordance with Section 78A of the Environmental Planning and Assessment Act 1979;
- (ii) the response to submissions provided by WBM Oceanics Australia and dated 29 July 2002;
- (iii) the supplementary “Aquatic Ecological Aspects” report prepared by Marine Pollution Research Pty Limited;
- (iv) the additional report “Proposed Dredging Operations in the Manning River – Maritime Archeological Assessment” prepared by Cosmos Archeology Pty Ltd, dated August 2002;
- (v) the report prepared by Douglas Partners titled “Acid Sulphate Soil Management Plan - proposed dredging Manning River, Harrington Waters Estate - Stages 3 and 4,” dated May 2002; and
- (vi) the report titled, “Assessment of Impacts on Threatened Species - Manning River Dredge Proposal – Harrington Waters Estate”, prepared by Knight Consulting, dated July 2002.

as may be modified by the Conditions set out herein.

1.3 Appointment of Environmental Site Officer

- (a) The Applicant shall engage an Environmental Site Officer, with qualifications acceptable to the Director-General and the Expert Panel (ExP), throughout the life of the project. The Environmental Site Officer shall:
 - (i) be the primary contact person for all matters related to the conditions of consent;
 - (ii) certify the adequacy of all documents submitted to the Director-General for approval;
 - (iii) be responsible for receiving and responding to complaints;
 - (iv) ensure induction and training programs are conducted for all persons involved with the project; and,
 - (v) have the authority to require reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts and failing the effectiveness of such steps, to order that work be stopped immediately if an adverse impact on the environment is likely to occur.

- (b) The Applicant shall notify the Director-General, ExP, GTCC, EPA and DLWC of the name and contact details of the Environmental Site Officer upon appointment.

1.4. Appointment of Independent Expert Panel

(a) Appointment

Appointment to the ExP shall be made in consultation with the DLWC and to the satisfaction of the Director-General. Membership and tenure of the panel may be altered at anytime by the DLWC with the concurrence of the Director-General.

(b) Members

Members currently appointed to the panel are:

- (i) Dr. Justin Meleo, Terra Consulting (Aust.) Pty. Ltd (ExP Leader); and
- (ii) Mr. Mike Geary, Coast and River Environmental Engineering Pty Ltd (ExP Member).

(c) Role of panel

The role of the panel shall be to:

- (i) Review the Environmental Management Strategy (EMS);
- (ii) Review monitoring data and where necessary, recommend alterations to the EMS; and
- (iii) Provide advice where necessary to relevant State agencies on the performance of the EMS.

(d) Reporting

The panel must report in writing as necessary to DLWC initially on the draft EMS and its contents and subsequently on a monthly basis following review of monitoring data supplied by the proponent. Reports must be signed by the ExP Leader and then forwarded to the Regional Director - Hunter (DLWC) and with a copy to the Applicant.

(e) Costs

All costs associated with the work of the panel must be borne by the Applicant.

1.5 Dispute Resolution

- (a) The ExP leader has final determination responsibility regarding ExP roles and outputs.
- (b) In the event that the Applicant, GTCC or a NSW State Government agency, other than the Department of Planning, cannot agree on the requirements applicable under this consent, the matter shall be referred by either party to the Director-General whose determination of the disagreement shall be binding on all parties.

1.6 Bank Guarantee

In line with the granting of a Licence under the *Crown Lands Act 1989*, the Applicant will be required to provide DLWC with a bank guarantee which will be held for the duration of the Licence. The bank guarantee will only be called upon in the event that the Applicant fails to undertake monitoring and remediation works to the required standard or within a designated time frame, and for the recoup of any outstanding Royalty payments.

1.7 Period of Approval

The approval for the proposal is for ten (10) years from the date of the commencement of the dredging operations at the site broadly identified in the EIS.

2. Operations Management

2.1. Limit on production, area of extraction and use of fill

- (a) The Applicant shall not extract more than 1 000 000 m³ of material (measured in-situ) from the bed of the Manning River at the location generally described in the EIS, as may be modified by the ExMP prepared in accordance with Condition 3.2.
- (b). The Applicant shall ensure that the footprint of the area of extraction does not encroach within:
 - (i). Fifty (50) metres of any active oyster leases;
 - (ii). Fifty (50) metres of any seagrass beds; and
 - (iii). One hundred (100) metres of the shore frontage of Newton's Shipyard site.
- (c). The extracted material may only be used for the purpose specified in the EIS and be deposited at the location defined as Stages 3 and 4 of the Harrington Waters Estate as depicted in Figure 1.2 of the EIS.
- (d). No extracted material from this dredging operation is to be used for any other stage of the Harrington Waters Estate, or on sold for any other development or purpose.
- (e). The extent of the extraction points are to be identified with marker buoys. Consultation with the Waterways' Boating Services Officer is required to ensure that appropriate buoys are utilised, giving consideration to navigation.

2.2. Hours of Operation

The Applicant shall comply with the following hours of operation in Table 1.

Table 1. Hours of Operation for activities associated with the Proposal

	Monday – Friday	Saturday	Sunday & public holidays
¹ Operation of the dredge	7am – 6pm	8am – 1pm	Nil
Maintenance activity	7am-7pm	8am-2pm	Nil

2.3 Security and Lighting

The Applicant shall:

- (a) ensure that any lighting is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding land uses.
- (b) ensure that all vehicles used in association with work comply with the provisions of the *Commercial Vessels Act 1979*. The dredge must display appropriate lighting and day shapes in accordance with Rule 27 of the *Navigation (Collisions) Regulations 1983*.

¹ EPA General Terms of Approval

- (c) clearly mark and light all pipelines and/ or other materials or structures used that obstruct or present a danger to navigation in accordance with the *Management of Waters and Waterside Lands Regulations*, under the *Maritime Services Act 1935*.

3. Environmental Management

3.1. Environmental Management Strategy

- (a) The Applicant shall prepare an Environmental Management Strategy (EMS) to manage environmental impacts associated with the extraction area and transport of material to the onshore facilities.
- (b) The EMS shall include the following:
 - (i) Extraction Management Plan (Condition 3.2);
 - (ii) Water Management Plan (Condition 3.4.1);
 - (ii) Acid Sulfate Soils Management Plan (Condition 3.6);
 - (iv) Noise Management Plan (Condition 3.7.4);
 - (v) Flora and Fauna Management Plan (Condition 3.8); and
 - (vi) Flood Management Plan (Condition 3.11).
- (c) The EMS shall include but not be limited to the following:
 - (i) identification of the statutory and other obligations which the Applicant is required to fulfil during establishment and operation of the dredge, including all approvals and consultation required from other authorities and stakeholders;
 - (ii) definition of the roles and responsibilities of all personnel responsible for compliance with the conditions of consent during the establishment works, operation of the dredge and site disestablishment works;
 - (iii) environmental management procedures for all activities including measures to avoid and/or control the occurrence of environmental impacts;
 - (iv) identification of environmental criteria and monitoring requirements (ie. parameters, frequency, duration, location and method); and
 - (v) documentation of the results of consultation when developing the EMS.
- (d) The Applicant shall consult with ExP, EPA, DLWC, and GTCC in preparing the EMS;
- (e) The EMS shall be approved by the Director-General prior to the commencement of extraction; and
- (f) The Applicant shall make copies of the EMS available to EPA, DLWC and GTCC. The Applicant shall ensure that the EMS is available for viewing by the public at any time during the establishment and operation of the project.

3.2 Extraction Management Plan

The Applicant shall prepare an Extraction Management Plan (ExMP) to the satisfaction of DLWC, the Director-General and the ExP prior to commencement of extraction activities. The ExMP may be altered by the ExP, with the concurrence of DLWC and the Director-General, at any time during the project to ensure that the document can respond to any unforeseen situations.

The Extraction Management Plan shall include:

- (i) a description of the extraction method and machinery to be employed at the site;
- (ii) details of the remodelling of the area of extraction and a review of the footprint for the extraction in accordance with recommendations from DLWC and the ExP. Justification and clear delineation should be provided for any revised extraction footprint to that proposed in the EIS;

- (iii) staging of the dredging works and progression of the dredge;
- (iv) outline of monitoring proposals and testing procedures to be implemented during and post extraction, including parameters, frequency, duration, location and methods for monitoring;
- (v) protocols for ensuring that the dredge operator will not remove material beyond the proposed dredge area, or below maximum depths specified in the ExMP;
- (vi) identification of indicators and thresholds for implementation of contingency action; and
- (vii) details of mitigation methods to be introduced where monitoring/ testing indicate such requirements are necessary.

3.3. River processes and bank erosion

3.3.1. Monitoring of river processes and bank erosion

The Applicant shall formulate and implement a River Processes and Bank Erosion monitoring program, to the satisfaction of ExP, DLWC and the Director-General. The monitoring program must include the following:

- (a) a survey of the quantity of dredge material including measurement of both the dredge hole and the deposition site. The survey is to be undertaken on a monthly basis by a NSW registered surveyor.

Note: Should deposition occur within the extraction area during dredging, any material deposited in the area of extraction is to be included as part of the amount extracted.

- (b) a survey of the river in accordance with the following requirements:
 - (i) The survey shall cover:
 - (1) the area from 1 kilometre upstream of the dredge area and 1 kilometre downstream of the proposed dredge area; and
 - (2) the top of the left high bank to the top of the right high bank.
 - (ii) Survey cross sections shall be at least at 100 metre intervals. Additional cross sections at 20 metre intervals shall be undertaken for a distance of 100 metres each side of the upstream and downstream transition. The first survey shall be undertaken immediately prior to the commencement of dredging operations and thence at 3 monthly intervals during the license period and immediately following any flood event with an Average Exceedance Probability (AEP) less frequent than 50% (1 in 2 Year Average Recurrence Interval (ARI));
 - (iii) Additional survey cross sections shall be taken within the area of immediate dredging at intervals of no more than 20 metres. These additional cross sections will be carried out on a monthly basis;
 - (iv) The results shall be linked to a recoverable datum;
 - (v) Determine the current rate of riverbank and bed erosion at the points detailed in subclause (ii) and (iii) above, using a method approved by the ExP and DLWC. This information is to be used to establish a base for determining the extent of bed and bank erosion as a result of this extraction;
 - (vi) Under circumstances whereby the dredging activities have induced erosion, suitable erosion mitigation measures are to be applied by the Applicant. The mitigation measures are to be developed in conjunction with the ExP and DLWC; and
 - (vii) Following the cessation of dredging, an application may be submitted to the Director-General to reduce the frequency of monitoring to 6 monthly periods for the duration of the consent.

- (c). The Applicant shall take vertical aerial photographs immediately prior to the commencement of dredging, and thereafter every 6 months for the duration of the consent. The images shall be scaled at 1:6,000, and consecutively overlaid to show variations in the banks and aquatic plant communities relative to the baseline photography. Coverage will include the proposed dredge site and adjacent riverbanks, as well as a control site located a sufficient distance upstream of the site not to be influenced by the works. The location of the control site is to be confirmed by the ExP.

3.3.2. Management and remediation

- (a). The Applicant shall ensure that all impacts resulting from the dredging operation, including the recession of the riverbank, are remediated to the satisfaction of DLWC.
- (b). Should the Applicant not undertake remediation works to the satisfaction of DLWC or within the designated time frame, DLWC may draw upon the bank guarantee in accordance with Condition 1.6 of this consent.

3.4. Water quality

3.4.1. Water Quality Management

- (a). The Applicant shall prepare a Water Management Plan prior to the commencement of extraction in consultation with the ExP and relevant agencies and to the satisfaction of the Director-General.

The Water Management Plan shall address both discharge waters and marine waters, including the following matters:

(i). Marine waters

1. a review of water quality impacts that need to be managed in relation to the extraction of the material;
2. compliance limits for turbidity and including thresholds at which mitigation measures will be introduced;
3. methods for management of water quality impacts;
4. contingency measures should the mitigation measures prove ineffective in preventing impacts on water quality; and
5. details of a water quality monitoring program.

(ii). Discharge waters

1. Specification of compliance standards for discharge waters to ensure compliance with acceptable discharge levels prior to discharge to the Manning River;
2. Details of the testing program of discharge waters (minimum of weekly samples);
3. Outline of the method of treatment for discharge waters to meet the water quality discharge criterion; and
4. Specification of contingency measures to be undertaken to ensure compliance with allowable limits.

(b) ²In the event that a plume of turbid water develops in the water adjacent to the discharge point(s), or that the pH fall below 6.5, operations are to be immediately cease. Dredging activities may recommence once the source of the problem has been established and corrective measures have been effectively implemented.

3.4.2. Concentration limits for discharge waters

(a). ³The Applicant shall ensure that the concentration of the pollutants discharged from the dewatering ponds do not exceed the concentration limits specified for that pollutant in Table 2.

(b). Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges. This condition does not authorise the pollution of waters by any other pollutant other than those specified in the table.

Table 2. Concentration limits for discharge waters from dewatering pond(s)

Pollutant	Units of measure	100 percentile concentration limit
Oil and Grease	Mg/L	10
Total Suspended Solids	Mg/L	50
pH	pH	6.5-8.5

3.4.3. Water Quality monitoring

a. Pollutant monitoring

The Applicant shall ensure that monitoring for each of the pollutants is undertaken in accordance with Table 3, unless otherwise directed or approved in writing by the EPA.

Table 3. Monitoring requirements for the discharge waters from the dewatering pond(s)

Pollutant	Unit of Measure	Frequency	Sampling method
Oil and grease	Mg/L	Weekly	Grab sample
Total suspend solids	Mg/L	Weekly	Grab sample
pH	pH units	Weekly	Grab sample
Iron	ug/L	Weekly	Grab sample
Aluminium	ug/L	Weekly	Grab sample

b. Water quality samples

(i). The Applicant shall:

- (1). Undertake continuous water quality monitoring for turbidity and pH using in-situ water quality probes, located at a number of locations in the vicinity of the proposed works as well as at control sites;
- (2). If water quality conditions at the probes exceed allowable thresholds, then contingency protocols should be initiated; and

(ii). The location of probes, thresholds for action and contingency protocols are to be outlined in the Water Management Plan prior to commencement of works.

² EPA General Terms of Approval

³ EPA General Terms of Approval

3.5. Pipeline Management

- (a) The Applicant shall ensure that adequate procedures are implemented to address the potential for leakage of the pipeline. These measures shall include:
- i. regular inspection of the pipeline to identify any points of leakage or damage;
 - ii. monitoring of the discharge point of the pipeline to determine material quality and quantity;
 - iii. ensuring that operation of the pipeline is in compliance with limits specified in the EMS; and
 - iv. should leakage, or any other malfunction associated with the pipeline be detected, pumping shall cease and the pipeline repaired.
- (b) The pipeline shall be placed away from seagrass beds so as to avoid the removal of vegetation and inadvertent impacts caused by breakage or leakage of the pipeline.

3.6. Acid sulfate Material

The Applicant shall formulate an Acid Sulfate Management Plan for the management of acid sulfate soils within the proposed dredge area. The Plan shall be prepared in accordance with the Acid Sulfate Soils Assessment Guidelines in the 1998 New South Wales Acid Sulfate Soils Management Advisory Committee Acid Sulfate Soils Manual.

3.7. Noise

3.7.1 Equipment

⁴The Applicant shall ensure that the dredging is undertaken by a sound-conditioned dredge.

3.7.2 Noise limits

The Applicant shall ensure that the noise generated by the Project does not exceed the following noise limits specified in Table 4. These noise limits apply after commencement of extraction activities for all residences not the subject of a private agreement between the Applicant and the owner of the residence as to an alternative noise limit.

Table 4. Noise limits

Period of extraction	Noise limit L_{Aeq} 15 minute
Commencement of extraction activities to Week 26 of extraction	54
Week 26 of extraction to 2 years after commencement of extraction	44

3.7.3. Landowner agreement for alternative noise criteria

The Applicant shall enter into an agreement as to an alternative noise limit with all landowners identified in the EIS at which the noise limits in Table 4 are predicted to be exceeded, within six (6) months of the commencement of extraction activities and to the satisfaction of the Director-General.

Should the Applicant be unable to enter into such an agreement, the Applicant shall:

- i. advise the Department that such an agreement has not been reached and the reasons that such negotiations have been unsuccessful;
- ii. consult with the landowner or occupants affected to determine their concerns;
- iii. modify the activity where possible in accordance with the noise reduction protocols proposed as part of the Noise Management Plan. This shall include:
 - introduction of additional controls, or modification of operations, to ensure that the noise limits are met;
 - seeking agreement of the landowner to undertake noise mitigation measures at the dwelling to achieve the noise limits;
 - seeking agreement of the landowner to provide other forms of benefit to compensate for the noise levels experienced.
- iv. conduct follow up investigations to the satisfaction of the Director-General, where necessary.

3.7.4. Noise Management Plan

- (a) ⁵The Applicant shall prior to commencement of extraction activities prepare a Noise Management Plan for the Project, to the satisfaction of the ExP and the Director-General. The Noise Management Plan shall include:
 - i) compliance standards;
 - ii) outline of a monitoring program to be implemented where noise complaints are received, including frequency, duration, location and methods for monitoring;
 - iii) outline of mitigation measures to be employed where the noise limits are predicted to be exceeded or are exceeded during operation of the dredge;

⁴ EPA General Terms of Approval

⁵ EPA General Terms of Approval

- iv) outline the procedure to notify property owners and occupiers likely to be affected by noise from the operations; and
- v) maintain a protocol for handling noise complaints that includes recording, reporting and acting on complaints.

3.8. Flora and Fauna Management Plan

- (a). The Applicant shall prepare and implement a Flora and Fauna Management Plan for the DA area to manage any flora and fauna impacts associated with the Project.

The Flora and Fauna Management Plan shall:

- (i). be prepared by an appropriately qualified and/or experienced ecologist prior to the commencement of site establishment works in consultation with National Parks and Wildlife Service (NPWS) and to the satisfaction of the ExP and the Director-General; and,
 - (ii). specify methods for mitigating the impact of the project.
- (b). The Applicant shall install the pipeline in such a manner that minimises damage to seagrass, as outlined in the EIS.

3.9. Heritage Assessment and Monitoring

- (a). Prior to commencement of site establishment works, the Applicant shall implement induction procedures and provide guidance to all relevant personnel about the management of cultural heritage/ archaeological values within the extraction area and locations potentially impacted by activities associated with this DA, both for known sites and sites that may be encountered during the course of extraction activities.
- (b). In the event that dredged fill is to be applied to PAD 1 (as identified in the EIS) the Applicant shall obtain a Section 90 consent to destroy from NPWS prior to any activity being undertaken which may potentially impact on the integrity of this site.
- (c). If, during the course of the establishment of any surface facilities or extraction activities the Applicant becomes aware of any heritage or archaeological material not previously identified or covered by a Consent to Destroy or Excavation Permit, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include NPWS, the NSW Heritage Office, and the relevant local Aboriginal community. Any necessary permits or consents shall be obtained prior to commencement of work.

Note: Any proposed works that will affect non-indigenous heritage items will require an approval under section 139 of the Heritage Act 1977 and an application for an excavation permit to disturb the relics. This may also require additional approvals from GTCC if the items are listed on the Heritage Schedule of the Local Environmental Plan.

3.10. Air quality

(a). Dust Control

⁶Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

(b). Odour control

⁷The Applicant shall ensure that no offensive odour, as defined under Section 129 of the *Protection of the Environment Operations Act*, is emitted from the premises.

Note: Section 129 of the *Protection of the Environment Operations Act 1997*, provides that the licensee must not cause or permit the emission of any adverse odour from the premises but provides a defence if the emission is identified in the relevant environment protection license as a potentially offensive odour and the odour is emitted in accordance with the conditions of a license directed at minimising odour.

3.11. Flood Management Plan

Prior to site establishment works the Applicant shall prepare a Flood Management Plan to the satisfaction of the Director-General. The plan shall include the following:

- (i) specification of trigger levels for undertaking evasive action at the onset of a flood;
- (ii) details of monitoring carried out by the Bureau of Meteorology (BoM) and on-site to determine the threat of flooding;
- (iii) details relating to any actions to be taken to minimise the threat to people, plant machinery, the environment, or property at the onset of a flood; and
- (iv) identification of potential locations for mooring the dredge during times of flood, including the need to ensure that oyster leases and seagrass beds are not impacted.

⁶ EPA General Terms of Approval

⁷ EPA General Terms of Approval

4. Waste Management and Hazards

4.1. Waste management

(a) ⁸The Applicant must not cause, permit or allow waste to be stored, treated, processed, reprocessed or disposed of at the site except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997* including:

- (i) waste generated outside the premises; or
- (ii) any waste generated at the premises,

Note: This Condition only applies to the storage, treatment, processing, reprocessing or disposal of waste if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

(b) ⁹The Applicant must ensure that any liquid/ and or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA Environmental Guidelines : Assessment and Classification and Management of Liquid and Non- Liquid Waste, in force as at 1 July 1999.

(c) ¹⁰All sewage generated on the premise must be either discharged to sewer or tanked to a premises appropriately licensed to receive such wastes.

4.2. Storage and handling of chemicals, fuels and oils

¹¹The Applicant shall ensure that storage and handling of chemicals is undertaken in the following manner:

- (a). all liquid chemicals, fuels and oils must be stored in containers inside a suitable bund; and
- (b). the bunds are designed, constructed and maintained in accordance with the EPA Technical Guideline "Bunding and Spill Management".

⁸ EPA General Terms of Approval

⁹ EPA General Terms of Approval

¹⁰ EPA General Terms of Approval

¹¹ EPA General Terms of Approval

5. Monitoring, Reporting and Auditing

5.1. Monitoring Records

- a. The results of any monitoring required by this consent must be recorded and retained in the following manner:
- (i) records of the dates, times and the place where the sample was collected and the name of the person who collected the sample;
 - (ii) records kept in a legible form, or in a form which can readily be reduced to a legible form and can be readily produced for inspection; and
 - (iii) records kept for at least four (4) years after the monitoring took place.

5.2. Recording and reporting

- (a). The Applicant shall ensure that a daily log is maintained during the extraction period to record the following parameters:

- sediment plumes generated by the extraction activity;
- fish kills within the dredge area;
- oil/ fuel spills; and
- dredge discharge pipe leaking to the river.

This information shall be compiled and provided to DLWC on a 6 monthly basis, or as otherwise requested.

- (b). The Applicant shall provide DLWC with the results of the:
- quantity surveys required in accordance with Condition 3.3.1(a) within 2 weeks of the monthly survey being undertaken;
 - river survey required in accordance with Condition 3.3.1(b) within 2 weeks of the monthly survey being undertaken, or immediately following any flood event with an ARI less frequent than 50%.; and
 - water quality sampling required in accordance with Condition 3.4.3(b) on a 6 monthly basis.
- (c). The data collected during the surveys must be interpreted and provided in both electronic and hardcopy formats acceptable to DLWC. This shall include aggregated comparative cross sections showing the relationship with previous surveys and the variation quantities, identifying the extraction footprint and other erosion and sedimentation features. Where relevant, the isopac plots of the current survey to the baseline survey shall also be provided.

5.3. Adaptive monitoring requirements

- (a) The Director-General may in consultation with the relevant government authorities and the Applicant, require the monitoring programs established in the Conditions of Consent and implemented through the protocols in the EMS, to be revised or updated at any time to reflect changing environmental requirements or changes in technology or operational practices related to the quarrying operations. All changes to the monitoring programs shall be incorporated in the appropriate protocol in the EMS and shall also be made publicly available.
- (b) All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/quality control plan and shall require approval from the relevant regulatory agencies to ensure the effectiveness and quality of the monitoring program.

5.4. Environmental Management Report (EMR)

- (a) The Applicant shall, throughout the life of extraction in the DA area and for the duration of the consent after the cessation of extraction, prepare and submit an Environmental Management Report (EMR), to the satisfaction of the Director-General and DLWC. The report shall be submitted at six (6) monthly intervals following the commencement of extraction, and at one (1) year intervals following the cessation of the extraction until the expiration of the consent, or as otherwise agreed by the Director-General.
- (b) The EMR shall review the performance of the operations against the EMS and the conditions of this consent, and other licences and approvals relating to the extraction. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report shall include where appropriate, but not be limited to, the following matters:
 - (i) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals;
 - (ii) a review of the effectiveness of the environmental management of the operation in terms of EPA and DLWC requirements;
 - (iii) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person;
 - (iv) identification of trends in monitoring results over the life of the consent;
 - (v) a listing of any variations obtained to approvals applicable to the DA area during the previous year;
 - (vi) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.
- (c) In preparing the EMR, the Applicant shall:
 - (i) consult with the Director-General during preparation of each report for any additional requirements;
 - (ii) comply with any reasonable requirements of the Director-General or other relevant government agency; and
 - (iii) ensure that the first report is completed and submitted within six (6) months of the commencement of extraction, or at a date determined by the Director-General in consultation with DLWC, EPA and ExP.
- (d) The Applicant shall ensure that copies of each EMR are submitted to the Director-General, EPA, DLWC, GTCC, ExP and made available for public information at GTCC within fourteen days of submission to these authorities.

6. Community Consultation

6.1. Landholder notification

The Applicant shall inform residents potentially affected by the dredge operations in advance of the proposed activities. This information shall involve details of the duration of the dredging activities and the predicted impacts at these properties.

6.2. Complaints Management and Reporting Protocol

- (a) The Applicant shall establish a Complaints Management and Reporting Protocol in consultation with the GTCC, ExP and the EPA, and to the satisfaction of the Director-General prior to the commencement of extraction activities. The Complaints Management and Reporting Protocol shall be made publicly available.
- (b) The Complaints Management and Reporting Protocol shall include:
- (1) Details of a toll-free telephone complaints line;
 - (2) Details of a 24 hour emergency contact number;
 - (3) Measures to record all complaints received, including:
 - (i) The complaint;
 - (ii) The complainants details;
 - (iii) The time and date the complaint was originally lodged;
 - (iv) The means by which the complaint was lodged;
 - (v) The individual who recorded the complaint in the register;
 - (vi) The time and date the complaint was officially entered into the register;
 - (vii) The actions taken to address the complaint;
 - (viii) The outcomes of the actions; and,
 - (ix) Any feedback relating to the complaint, the actions taken to address the complaint, or any other information that may assist with determining the history and/or status of the complaint.
 - (4) Measures to ensure that an initial response to complaints are provided within one working day and a detailed written response within 10 days;
 - (5) The Applicant shall ensure that the toll-free telephone complaints line is clearly marked on the dredge vessel at all times, and on the site billboard on the Harrington-Cooperook Road; and,
- (c) The Applicant shall ensure that information on all complaints received shall be made available on request to the ExP, DLWC, EPA, GTCC, and the Director-General, and shall be reported in the 6-monthly EMR. The ExP shall review the patterns of complaints and may make recommendations to the Director-General regarding the need for additional monitoring or the provisions of Condition 1.1(c).

7. Further Approvals and Agreements

7.1 Statutory Requirements

- (a) The Applicant shall ensure that all statutory requirements including but not restricted to those set down by the Environmental Planning and Assessment Act 1979, the Local Government Act 1993, Protection of the Environment Administration Act 1991, Protection of the Environment Operations Act 1997, Crowns Lands Act 1981, Rivers and Foreshores Improvement Act 1948, Water Act 1912, National Parks and Wildlife Act 1974, Heritage Act 1977, Commercial Vessels Act, and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by the GTCC, EPA, NPWS, DLWC, NSW Heritage, Waterways and NSW Fisheries are fully met.