# REPORT TO HUNTER & CENTRAL COAST JOINT REGIONAL PLANNING PANEL

TITLE DEVELOPMENT APPLICATION NO. 42409/2012 PART 1

**APPLICANT: COASTPLAN CONSULTING - ERINA** 

PROPOSED: EXTRACTIVE INDUSTRY 5 STAGES DESIGNATED / INTEGRATED DEVELOPMENT ON LOT: 2 DP: 362339, 620 WISEMANS

**FERRY ROAD SOMERSBY** 

Directorate: Environment and Planning

Business Unit: Development

The following item is defined as a planning matter pursuant to the Local Government Act, 1993 & Environmental Planning & Assessment Act, 1979.

#### **EXECUTIVE SUMMARY**

## Reason for Referral to Joint Regional Planning Panel (JRPP)

Designated Development / Extractive Industry – 75,000 tonnes to 150,000 tonnes p.a.

## **Assessing Officer**

R A Eyre

## **Reviewing By**

Independent Development & Environment Panel (IDEP) Director Environment and Planning General Manager

#### **Date Application Received**

25/06/2012. Additional information submitted 6 and 21 December 2012.

## **Proposal**

Extractive Industry 5 Staged Designated/Integrated Development (JRPP)

#### **Zone**

1(a) Rural (Agriculture) -IDO122

## Area

15.76ha

#### **Permissible Development**

Development permissible with consent on land zoned 1(a) Rural (Agriculture) -IDO122

#### **Section 94 Contributions**

The land zoned 1(a) Rural (Agriculture) -IDO122 is not subject to a Contribution Plan.

## **Public Submissions**

Seventy-four (74), plus three (3) late submisions

#### **Pre-DA Meeting**

Not Held

#### **Political Donations**

None declared.

## **Relevant Statutory Provisions**

- 1 Environmental Planning & Assessment Act, 1979 Section 79C
- 2 Local Government Act 1993 Section 89
- 3 IDO No 122 Clauses 5 and 101C
- 4 DCP 89 Scenic Quality
- 5 DCP 106 Controls for Site Waste Management
- 6 DCP 111 Car Parking
- 7 DCP 128 Public Notification of Development Applications
- 8 DCP 159 Character
- 9 DCP 163 Geotechnical Requirements
- 10 DCP 165 Water Cycle Management
- 11 Sydney REP 8 Central Coast Plateau Areas
- 12 Sydney REP 9 Extractive Industry
- 13 Sydney REP 20 Hawkesbury/Nepean River
- 14 SEPP (Infrastructure) 2007
- 15 SEPP 55 Remediation of Land
- 16 Rural Fires Act 1997
- 17 SEPP (Mining Petroleum Production and Extractive Industries) 2007

## **Key Issues**

- 1 IDO No 122
- 2 Draft LEP 2009
- 3 Climate Change and Sea Level Rise
- 4 Environmental Impact Statement (EIS)
- 5 SEPP (Mining, Petroleum and Extractive Industries) 2007
- 6 Sydney Regional Environmental Plans
- 7 Government Authority Responses
- 8 Engineering Assessment
- 9 Environmental Assessment
- 10 OSSM
- 11 Public Submissions

#### Recommendation

Refusal

#### **REPORT**

#### The Site

The site is located on the eastern side of Wisemans Ferry Road near the intersection of Lackersteens Road and about 6km north-west of Gosford.

The F3 Freeway is located about 300m from the rear (eastern) boundary of the site.

The site has a frontage to Wisemans Ferry Road of 237.7m, a southern (side) boundary of 643.2m, an eastern (rear) boundary of 281.8m, and a northern (side) boundary of 113.4m, 80.4m with adjoining lots (628 and 630 Wisemans Ferry Road) and 376.9m with an adjoining road reserve.

The previous extractive operations are generally located on the eastern half of the site, with an access driveway from Wisemans Ferry Road to the past excavations.

The western side of the site currently contains tree cover/vegetation adjoining Wisemans Ferry Road, with some trees/vegetation on the south-west and north-west corners.

A number of old sheds and a dwelling-house exist on the site, mainly on the western edge of the excavation.

The site varies in elevation from about RL 263m AHD at Wisemans Ferry Road to about RL 211m - 216m AHD on the excavated areas to about RL 204 at the eastern boundary.



Aerial Photograph



Site/Zoning Map

#### The Locality

The land to the east is owned by the Department of Industry and Investment, zoned 7(b) Scenic Protection.

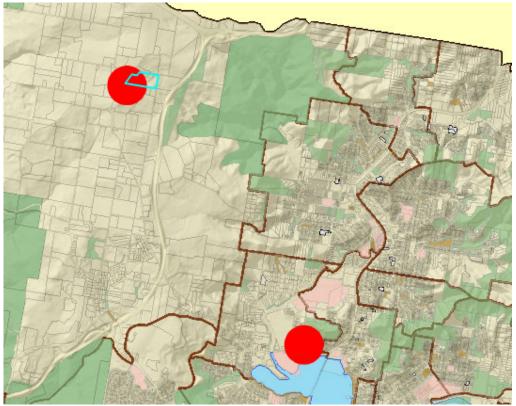
Land to the north and north-west includes rural dwelling houses and a 20m wide road reserve.

Land to the west on the opposite side of Wisemans Ferry Road includes dwelling-houses and a reception centre.

Land to the south contains a number of rural dwelling-houses, some of which are accessed by a driveway adjoining the southern boundary of the quarry site.

The site is generally located in a rural area with surrounding and nearby development ranging from dwelling-houses on small rural lots to agricultural use.

The Somersby Public School is located about 1.7km to the north-west of the site.



Locality Map - Quarry site north on the map, Gosford south of the map.

## **Background**

- a. Development Consent 15525 granted approval on 9 February 1979 for an extractive industry subject to thirteen (13) conditions, being:
  - (a) access to be located approximately 25m south of the existing driveway location and subject to the requirements of the Shire Engineer with regard to construction of the access, sealing of the apron of Wiseman's Ferry Road, the removal of trees to improve sight distance:
  - (b) submission of a plan, to be approved by the Chief Town Planner, showing the method of working of the site;
  - (c) no disturbance is to take place within 20 metres of any boundary fence nor within 20 metres of either bank of any watercourse;
  - (d) all timber is to be removed or stockpiled and burnt subject to approval by relevant authorities:
  - (e) no area larger than 0.5ha is to be worked at any one time, consequently the procedure should be 0.5ha being prepared for extraction, 0.5ha being worked and 0.5ha being rehabilitated;
  - (f) all extraction should commence at the highest point and moved [sic] in a downhill direction;
  - (g) graded banks (maximum channel gradient 0.2%) to be constructed immediately above the working site and thereafter every 60m downslope as work progresses; all banks to outlet into the undisturbed watercourses;
  - (h) all batters are not to be steeper than 20% in gradient;
  - (i) all topsoil is to be stockpiled and respread over disturbed areas including graded banks, no topsoil to be stockpiled longer than 6 months, nor is it to be stockpiled in watercourses or graded banks;
  - (j) all disturbed areas are to be re-shaped such that no waterponding occurs on the extraction site:

(k) after topsoil respreading, all disturbed areas, banks and batters are to be sown and fertilized with the following mixtures:

(i) seed – autumn/winter sowing:
white clover (inoculated and lime pelleted) – 3kg/ha
rhodes grass – 6kg/ha
perennial ryegrass – 6kg/ha
cereal rye/barley (cover crop) – 10kg/ha

(ii) seed – spring/summer sowing:
 white clover (inoculated and lime pelleted) – 3kg/ha
 red clover (inoculated and lime pelleted) – 3kg/ha
 couch grass – 5kg/ha
 kikuyu grass – 3kh/ha
 rhodes grass – 6kg/ha
 Japanese millet – 10kg/ha

- (iii) fertilizer "Starter 18" (18:18:0) twice yearly (autumn and spring) at a rate of 200kg/ha
- (I) maintenance is to consist of fertilizer dressings twice yearly for 5 years after completion of work, resowing of unstable areas and planning of tree species to return the disturbed areas to that presently existing;
- (m) a bank guarantee to the sum of \$3,000 being lodged with Council prior to commencement of operations. This security is to be applied consecutively to each 1ha portion of the operation as outlined in condition (e) above and is to be released upon completion of restoration and revegetation to the satisfaction of Council and the Soil Conservation service of New South Wales.

In response to a complaint from a local resident concerning quarrying within a buffer zone, Council issued a "Notice of Intention to Give an Order" under Section 121B of the Environmental *Planning and Assessment Act 1979*, on 2 October 2001 due to noncompliance with conditions of consent, in particular Conditions c, e and h. As a result of the Notice, operations within the buffer area ceased and a rehabilitation plan was prepared and implemented to remove earthen bunds within the buffer and restore the area to natural ground level and revegetate with endemic native species.

A Section 96(2) application to modify the development consent was refused by Council's Development Assessment Unit on 21 October 2002 for the following reasons;

- The proposed modification will result in a development which is not substantially the same development previously approved by Council on 9 February 1979 under Development Application No 4475.
- Approval of the proposal is not considered to be in the public interest having regard to the extent of the modification proposed and the number of public submissions received.

The applicant lodged an appeal in the Land and Environment Court. The Court on the 23 September 2003 dismissed the appeal and refused DA 15525/2002 to modify the Consent of 9 February 1979 for an extractive industry.

A new application (DA26467/2004) was lodged which proposed to redevelop and operate the existing guarry over a period of twenty years in four (4) stages.

Council considered this application at its meeting on 13 June 2006 and granted deferred commencement consent subject to conditions.

The applicant lodged a Section 96 application to amend conditions of the consent. The amendment was advertised and thirteen (13) submissions received.

The applicant had lodged an Appeal with the Land and Environment Court for deemed refusal of the Section 96 application. At the Court, the applicant sought to further modify the application. The Court agreed to the amendment of the Section 96 application. Previous objectors were notified of the amendment and eight (8) objections received.

The consent dated 20 June 2006 was modified by Council on 17 September 2007 and the Court matter was discontinued.

The consent expired on 20 June 2011 as conditions of deferred commencement had not been complied with by this date.

The current application is essentially the same as that previously approved.

- b. Council at its meeting on 2 October 2012, resolved that:
  - "A Council oppose *all current* coal seam gas exploration and mining *practices* anywhere in the Gosford Local Area because of the unacceptable risks to our water catchments, groundwater, agricultural industries, natural environment and human health.
  - B Council write to the Premier of NSW informing him of Council's position and seeking a ban on Coal Seam Gas Mining and Exploration in the Central Coast Region.
  - C Council write to the Minister for Resources and Energy, Special Minister of State and Minister for the Central Coast, the Hon. Chris Hartcher, urging him to give notice to Gosford Council if any coal seam gas exploration license is granted or extended, or if permission is intended to be granted for exploratory drilling or drilling, before such permission is granted.
  - D Council write to the Central Coast Local Members of Parliament (State and Federal) and Wyong Shire Council seeking support for Council's position and refer the matter to the next Central Coast Regional Organisation of Councils meeting.
  - E Council support other Councils in NSW in their opposition to Coal Seam Gas Exploration and Mining.
  - F All coal seam gas extraction and exploration be banned within all water catchment areas on the Central Coast.

#### The Proposal

The EIS indicated the works and operations will involve the following:

The quarry has an estimated 2 to 3 million tonnes of resource which is proposed to be extracted at a rate of up to 150,000 tonnes p.a. of washed and screened and unwashed sand to local and Sydney markets over a period up to 20 years.

## 1 Preliminary Work and the Construction Period

Preliminary work will be that work necessary to establish the quarry's operation. It will involve, principally, fencing and site security, protection for hollow bearing trees and other

significant vegetation, construction of noise barriers, access to Wisemans Ferry Road, construction of a temporary internal access road, construction of the wheel wash and the reinstatement of the sand processing plant.

A major part of the preliminary work will be the improvement of the intersection between the access road and Wisemans Ferry Road to a design and specification approved by the Gosford City Council and the Roads and Maritime Services.

The noise assessment prepared as part of the EIS predicted that some construction work might generate noise exposure at adjacent residences above the normal limits allowed by the NSW Industrial Noise Policy. Work that might exceed the noise targets by more than 10dBA will be performed during the designated 4 week construction period at times agreed with the most affected residents. This work will include the construction of:

- noise barriers;
- the junction of the access road and Wisemans Ferry Road;
- the internal access road; and
- the wheel wash.

The NSW Industrial Noise Policy allow for a 26 week construction period during which noise exposure may exceed the noise exposure targets set down for the project by 10dBA. Within this period, there is a period of 4 weeks during which noise exposure may exceed noise exposure targets by up to 20dBA.

Other preliminary work necessary to establish the quarry's operation will continue throughout the 26 week construction period. This work will include:

- construction of the perimeter fence and other site security;
- protection for hollow bearing trees and other significant vegetation;
- earthworks to clean up the operational areas and obtain materials for the construction of noise barriers;
- earthworks to adjust and construct drains and sediment control infrastructure;
- construction of a temporary internal access roads to the sand processing plant and the quarry floor;
- the reinstatement of the sand processing plant; and
- preliminary rehabilitation work.

Essential earthworks during the construction period will involve the use of a bull dozer, excavator, wheeled loader and between one and three dump trucks.

A site office will be located adjacent to the access road a short distance to the east of the site of the wheel wash.

## 2 Staging of the Quarry's Operation

The quarry will be developed and operated in the five stages described below. (Figures 5-9 attached to the report show each stage).

**Stage 1** (Years 1 and 2) of the quarry's operation will begin at the end of the construction period described above although there is likely to be some overlap with preliminary work related, for example, to the reinstatement of water management infrastructure and rehabilitation which is likely begin during the construction period. It will involve quarry establishment works, a reinstatement of the quarrying and sand processing operation and a substantial start to the rehabilitation program (*Figure 5*). Sand processing will be a screening process. Sand washing will not begin until *Stage 2*.

The principal activities will be to:

1) decommission and rehabilitate the two former tailings ponds at the eastern end of the property;

- 2) clean up *Cell 1* and *Cell 2* and establish a quarry floor at a nominal RL (relative level) of 216 metres AHD;
- 3) tidy up and consolidate plant and product stockpiles in the area of Cell 3;
- 4) clean up cells 3 and 4 as needed;
- 5) establish a new tailings pond in a former quarry cell to the east of Cell 1;
- establish or restore the basic infrastructure for sediment control and water management;
- construct a new fresh water pond in the north eastern corner of the property and prepare the area for rehabilitation. Viable vegetation in the corner of the property will be retained;
- 8) excavate storm water retention basin;
- 9) plant endemic species to establish initially an under story and in time a tree cover on embankments in the south-eastern corner of the site to stabilise the area and create a visual barrier to quarrying operations; and
- 10) demolish the fibro house within the quarry property to allow quarrying operations to extend to the west. Bench the high wall in this area to profiles consistent with good quarrying practice (Cell 5).

The Noise Impact Assessment (October 2012) indentifies that acoustic mounding and fencing along the side boundaries is to be constructed during Stage 1.

**Stage 2** (Years 3 to 5) will see the beginning of significant restructuring of the quarrying operation, the quarrying and preparation for rehabilitation of disturbed areas along the northern boundary of the property and the expansion of the rehabilitation program (*Figure 6*).

The principal activities will be to:

- realign and regrade the access road to a new alignment adjacent to the northern boundary of the property. The road surface will be lowered, extended and constructed with a constant grade of less than 1 in 10. The regrading and lowering of the road surface and the construction of bunds will reduce the exposure of adjacent properties to truck noise;
- 2) relocate the plant and product stockpiles into Cell 2 in the centre of the property;
- 3) quarry and bench to final levels for rehabilitation *Cell 3* and *Cell 4* along the northern boundary of the property; and

4) complete the rehabilitation of the eastern side of the property by continuing the work in the south-eastern corner started in Stage 1 and extending it into the north-eastern corner.

**Stage 3** (Years 6 to 10) will involve a significant expansion of the rehabilitation program into Cells 3 and 4 and an expansion of the quarrying operation westwards towards Wisemans Ferry Road into *Cell 6* (*Figure 7*). Topsoil and overburden from *Cell 6* will be used for rehabilitation.

**Stage 4** (Years 11 to 19) will involve a progressive extension of the quarrying operation towards Wisemans Ferry Road and the possible establishment of new tailings and fresh water dams. Areas no longer used would be decommissioned and rehabilitated progressively. Present plans for Stage 4 can be regarded as indicative only (*Figure 8*).

**Stage 5** (Year 20) will involve the decommissioning and removal of all plant and equipment, the final rehabilitation of the site to the rehabilitation plan and the final inspection of the site by the Council and other relevant authorities. The final form of the quarry after decommissioning is shown in *Figure 9, Indicative Final Landform*.

#### Consultation

The following Authorities were notified of the proposal:

- Roads and Maritime Services (RMS)
- Environment Protection Authority (EPA)
- Resources and Energy (NSW Department of Trade and Investment Regional Infrastructure and Services)
- NSW Department of Primary Industries Office of Water and Agriculture
- Central Coast Public Health Unit NSW Department of Health
- Department of Planning and Infrastructure
- Office of Environment and Heritage
- Darkinjung Aboriginal Land Council and Aboriginal Groups
- Council Officers:
  - \* Development Engineer
  - \* Waste Service Officer
  - \* Environment Officer

The application was advertised from 4/7/2012 to 3/8/2012 with sixty-eight (68) public submissions received. The applicant submitted additional information to address issues raised by public submissions and Government authorities.

The additional information was advertised from 16/1/2013 to 15/2/2013, with submissions accepted up until 28/2/2013. Seventy-four (74) submissions were received, plus three (3) late submissions.

Copies of the public submissions were sent to NSW Office of Water, Office of Environment and Heritage/EPA, and Department of Planning and Infrastructure.

#### **Assessment**

This application has been assessed using the heads of consideration specified under Section 79C of the Environmental Planning & Assessment Act 1979, Council policies and adopted Management Plans. The assessment supports refusal of the application and has identified the following key issues which are elaborated upon for Council's information.

## **Interim Development Order 122**

Objectives Of Zone

Clause 5(3) of Interim Development Order No 122 stipulates that consent must not be granted for development of land within the prescribed zone, unless the objectives of the zone have been taken into consideration in conjunction with the objectives of the Local Government Act 1993, pertaining to Ecologically Sustainable Development.

The objectives of the 1(a) zone are:

- (a) to identify and provide suitable land for agricultural use; and
- (b) to protect the agricultural potential of land identified as suitable for agricultural use; and
- (c) to prevent the fragmentation of prime agricultural land; and
- (d) to enable uses which are complementary to, and compatible with, the use of land for agriculture; and
- (e) to protect the rural landscape quality of the area; and
- (f) to protect water catchments, water quality, soil conditions, and important eco-systems such as streams, estuaries, and wetlands, from inappropriate development and land management practices.

In this instance, it is considered that the proposal is consistent with the stated objectives of the 1(a) Rural (Agriculture) Zone as well as being consistent with the principles of Ecologically Sustainable Development, as specified within the Local Government Act 1993.

#### b Character

Clause 5(4) of Interim Development Order No 122 stipulates that the Council must not grant consent for development unless it has taken into consideration the character of the development site and the surrounding area, where, for the purpose of this provision, character means the qualities that distinguish each area and the individual properties located within that area.

In this instance, the proposal does not detract from the character of the immediate locality.

- c Clause 101C of IDO 122 applies to the land and states:
  - 101C. Despite any provision of this Order, a person may, on land to which Sydney Regional Environmental Plan No 8 (Central coast Plateau Areas) applies that is within zone No 1(a) or 7(b), carry out development for the purpose of an extractive industry but only:
    - (a) with development consent, and
    - (b) in locations specified for extractive industry on the map marked "Gosford/Wyong Local Environmental Plan 2001 Central Coast Plateau Areas" deposited in the Newcastle office of the Department, copies of which are held in the offices of the Councils of Gosford City and of Wyong.

## **Draft Gosford Local Environmental Plan 2009**

The application has been assessed under the provisions of Draft Gosford Local Environmental Plan 2009 in respect to zoning, development standards and special provisions. The assessment concluded the proposal is consistent with the Draft Plan.

The site is proposed to be zoned RU1 Primary Production under the draft LEP 2009. Extractive Industries are a use permissible with consent under the proposed RU1 zone.

## Climate change and sea level rise

Climate change and sea level rise have been considered in the assessment of this application.

Climate change and sea level rise will be felt through:

- increases in intensity and frequency of storms, storm surges and coastal flooding;
- increased salinity of rivers, bays and coastal aquifers resulting from saline intrusion;
- increased coastal erosion;
- inundation of low-lying coastal communities and critical infrastructure;
- loss of important mangroves and other wetlands (the exact response will depend on the balance between sedimentation and sea level change); and
- impacts on marine ecosystems.

Internationally there is a lack of knowledge on the specifics of climate change and the likely impact it will have on the subject development. Government action may mitigate the impact of climate change and the question of sea-level rise may be able to be addressed through the construction of containment works or through Council's policies that may be developed over time.

In the absence of any detailed information at the present however, refusal of this application is not warranted.

## **Environmental Impact Statement (EIS)**

The EIS includes reports on air quality, noise, ground and surface water, flora and fauna impacts and impacts on Aboriginal sites.

The reports have been based on the quarry extracting on a typical day of 500 tonnes, 20 trucks leaving the site, and hours of Monday to Friday 7:00am to 5:00pm and Saturday 7.00am to 1.00pm (no extraction prior to 8:00am).

## (a) Air Quality Reports

The report is dated May 2012 and concludes that based on the results of the modelling:

- deposited dust, PM<sub>10</sub> (annual average) TSP, NO<sub>2</sub> (annual average) and CO will comply at nearest receptors.
- PM<sub>10</sub> (24 hour average) and NO<sub>2</sub> (1 hour average) will exceed requirements at the four nearest receptors.

The report states that the non-compliance of PM<sub>10</sub> and NO<sub>2</sub> are predicted during worst-case wind directions and actual concentrations are likely to be lower due to:

- conservative emission factors used.
- provision of vegetative buffer zones.
- management measures such as regular use of water truck on exposed areas, maintenance of haul routes and equipment.

#### The EIS states:

"Overall, based on the predicted results and giving consideration to conservative assumptions, the risk of emissions to air from the proposed sand quarry to both human health and environment is likely to be low provided the recommended controls are implemented at the site. It is therefore recommended that these controls are incorporated into the environmental management plan for the site prior to the commencement of operations."

## (b) Noise Report

The Noise Report dated October 2012 concludes:

 six residential properties adjacent to the quarry site were identified as being potentially affected by noise from the quarry;

- the existing ambient noise environment for the area would be described as typically suburban as it is controlled by traffic noise on the F3 Freeway. The noise environment is also influenced by local road traffic on Wisemans Ferry Road;
- noise modelling has shown that noise levels are predicted to exceed project assessment goals, mainly during the construction of boundary noise mounding;
- other than for surface works in Cells 4-7, the modelling results show that predicted noise levels can be controlled to satisfy the recommended project assessment goals;
- At maximum production and assuming all trucks travel north, road traffic noise at the Somersby Public School and residences along Wisemans ferry Road, noise impacts would comply with the Industrial Noise Policy.
- To control and reduce noise emissions, a Site Noise Management plan is required.
   This would include procedures for residents to contact the Quarry Manager in regard to complaints.

## (c) Hydrogeological Investigation/Report

This report is dated August 2004. This report concludes:

"The geology of the site comprises sandstone of varying degrees of weathering and is highly cross bedded.

Groundwater flow at the site follows the topography and flows to the east. Modelling of a single layer aquifer predicts that there is significant drawdown (>5m) within a 0.6km radius the site and up to 13 bores will potentially be affected. Further modelling was undertaken using a stratified model to simulate zones of lower permeability within the aquifer. Modelling indicated reduced drawdown predictions, with a radius of impact of 0.4km from the site. It is recommended that additional fieldwork be undertaken to aid in calibration and confirm model predictions. Fieldwork should include the measurement of groundwater levels in the regional bore field, groundwater pumping test on site and regional water quality analysis.

The groundwater chemistry suggests that activities at the site are not affecting groundwater quality at this time."

The EIS states that water supply from three bores at three adjoining residences (R1, R2, R4) are likely to be affected by quarry operations unless the bores are deepened. The proponent offers to pay the cost of this.

## (d) Water Usage and Management

The EIS states that water will be harvested from three sources being:

- recycled water from processing operations,
- run-off from rainfall within the site,
- seepage from the quarry faces.

The EIS estimates up to 33.6ML of water will be available and 14.7ML would be required to process 75,000 tonnes/yr or 29.9ML to process 150,000 tonnes/yr.

Excess water will pass through detention basins and setting ponds on the eastern side of the site before leaving the site.

## (e) Flora & Fauna Report

The Report in summary states:

"The site is partially naturally vegetated, situated at the edge of the Somersby Plateau. The site has been an active quarry since 1979 and the proposed works area will be buffered from adjacent habitat by retained vegetation. Only 0.88 hectares of Somersby Plateau forest will be removed for the project and 5 or 6 hollow-bearing trees may also be removed. Their loss will be ameliorated by the installation of nest boxes.

There is potential for two small patches of hanging swamps to become drier over a long period, but the modelling predicting this outcome relies on the aquifers being connected and there is no evidence that this is the case. Overland flow to these downslope off site areas will remain intact.

The site provided potential habitat for a number of threatened species of flora and fauna and several threatened fauna species were recorded on and near the site, principally bats.

The impact of this proposal on threatened species and endangered ecological communities of interest is likely to be minimal as it is concentrated mainly in the existing development footprint of the site.

The assessment of the criteria under the Commonwealth EPBC Act (1999) concluded that a referral to the Department of Sustainability, Environment, Water, Population and Communities is not required.

The assessment of likely impact under the New South Wales TSC Act (1995) concluded that a significant impact is not likely to occur upon any state listed threatened species, populations or endangered ecological communities. Therefore a species Impact Statement is not recommended to be prepared for the proposal.

Whilst it is judged that there will be no significant impact wrought by the proposed development on any species of conservation significance, the following recommendations are provided in order to ameliorate any impacts in relation to the proposal, particularly in regard to resident fauna and protection of downslope environments:

- 1. Consideration should be given to moving the bund near the entrance so that it impacts on already disturbed ground rather than cut into intact forest vegetation.
- 2. Lights to be used on site should be of a type that reduces spill and glare so that foraging by microbats is not further disrupted.
- 3. Clearing should be timed so that the felling of hollow-bearing trees can occur in a season that is least disruptive to resident breeding animals.
- 4. Hollow-bearing trees must only be removed with Council's permission and under supervision of a suitably-qualified and experienced ecologist or wildlife handler/rescue service (such as WIRES).
- 5. Prior to felling, a number of nest boxes of a variety of types should be erected in retained trees in order for animals to relocate or be relocated.
- 6. Ultimately, boxes should compensate for lost hollows at a ratio of at least 1:1. Supplementary boxes may need to be installed after the felled trees are inspected and the numbers and characteristics of the hollows properly determined.
- 7. It is important that the next boxes are designed and built to provide thermal stability and so should the walls be no thinner than 19mm.
- 8. Plant species used for rehabilitation should be restricted to locally-native species and/or those introduced species that do not have the potential to become environmental weeds.
- 9. Unless it poses a safety hazard, fallen timber should not be removed from the site.

10. Sediment controls should be strictly observed through the life of the quarry.

In response to information requested by Council's Environmental Officer, additional information was submitted which addressed the following:

## "Duffys Forest EEC

It is uncertain whether Duffys Forest EEC occurs on the subject site or on the Central Coast in general. However, a broad interpretation of the Final Determination indicates that areas classified as E26d Somersby Plateau Forest may be equivalent to the listed entity. Until adequate floristic analysis has been undertaken that incorporates the Central Coast, metropolitan Sydney and the areas to the south of Sydney, the extent of this EEC, the characteristics that define it, its ecology and conservation status remain mysterious.

Notwithstanding the unknowns, this vegetation occurs in fragmented remnants across the Somersby and Kulnura Plateaux and probably beyond to the north. The proposal will remove a total of 0.88 hectares of vegetation made up of narrow bands of degraded vegetation along track edges and a relatively small area at the edge of a large remnant. The proposal also provides the opportunity to formally retain the majority of the natural bushland on site and also rehabilitate areas of vegetation after quarrying is complete.

This is unlikely to result in a significant adverse impact on this community such that a local occurrence will be placed at risk of extinction.

## Coastal Upland Swamp

There is a great deal of uncertainty surrounding the likelihood of the magnitude of the drawdown of the aquifer. There is also uncertainty regarding the recharge rates for downslope vegetation from overland flows and incident rainfall.

Assuming the worst case scenario, the likely losses of this community will be that two small patches of 0.2 and 0.3 hectares will become drier.

This is unlikely to result in a significant adverse impact on this community such that a local occurrence will be placed at risk of extinction."

#### (f) Aboriginal Objects/Sites

Three reports were included on Aboriginal Heritage. The Reports submitted identify one (1) object on the site which consists of an isolated stone artefact of dimensions of 26 x 31 x 15mm. The artefact is located in the mid-section of the site within a paddock.

The Darkinjung Local Aboriginal Land Council recommends the proposal be refused as there is the possibility of other objects on the site.

Other reports recommend a permit be applied for to relocate the stone artefact.

## SEPP (Mining, Petroleum and Extractive Industries) 2007

The aim of the Policy is to provide for the proper management and development of extractive material resources for the social and economic welfare of the State by appropriate planning controls and ESD principles.

Under the SEPP, development for an extractive industry is permissible with consent on land on which agriculture may be carried out.

Clauses 12, 14, 15, 16 and 17 of the SEPP states:

## 12 Compatibility of proposed mine, petroleum production or extractive industry with other land uses

Before determining an application for consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must:

- (a) consider:
  - the existing uses and approved uses of land in the vicinity of the development, and
  - (ii) whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be preferred uses of land in the vicinity of the development, and
  - (iii) any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and
- (b) evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a)(i) and (ii), and
- (c) evaluate any measures proposed by the applicant to avoid or minimise any compatibility, as referred to in paragraph (a)(iii).

## 14 Natural resource management and environment management

- (1) Before granting consent for development for the purposes of mining, petroleum or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following:
  - (a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable.
  - (b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,
  - (c) that greenhouse gas emissions are minimised to the greatest extent practicable.
- (2) Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

## 15 Resource recovery

(1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider the efficiency or otherwise of the development in terms of resource recovery.

(2) Before granting consent for the development, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at optimising the efficiency of resource recovery and the reuse or recycling of material.

(3) The consent authority may refuse to grant consent to development if it is not satisfied that the development will be carried out in such a way as to optimise the efficiency of recovery of minerals, petroleum or extractive materials to minimise the creation of waste in associated with the extraction, recovery or processing of minerals, petroleum or extractive materials.

## 16 Transport

- (1) Before granting consent for the purposes of mining or extractive industry that involves the transport of materials, the consent authority must consider whether or not the consent should be issued subject to conditions that do any one or more of the following:
  - (a) require that some or all of the transport of materials in connection with the development is not to be by public road,
  - (b) limit or preclude truck movements, in connection with the development, that occur on roads in residential areas or on roads near to schools.
  - (c) require the preparation and implementation, in relation to the development, of a code of conduct relating to the transport of materials on public roads.

#### 17 Rehabilitation

- (1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.
- (2) In particular, the consent authority must consider whether conditions of the consent should:
  - (a) require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated. or
  - (b) require waste generated by the development or the rehabilitation to be dealt with appropriately, or
  - (c) require any soil contaminated as a result of the development to be remediated in accordance with relevant guidelines (including guidelines under section 145C of the Act and the Contaminated Land Management Act 1997), or
  - (d) require steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation, does not jeopardize public safety.

With regard to the above, the following comments are made:

## (a) Compatibility

In consideration of the compatibilities there are six (6) dwelling-houses adjoining the site. Some of these were there prior to the quarry, and some have been approved/constructed since the guarry commenced in 1979.

The quarry operators would have a significant impact on the amenity, quality of life, and health of adjoining and surrounding residents unless stringent and significant mitigation measures are put in place.

The information submitted in the EIS and responses from Government authorities indicates that inadequate information is available to assess the impact or there will be a significant impact on adjoining residents. This must be weighed against the public benefits of employment and value of material to be extracted.

## (b) Natural Resource Management and Environmental Management

The information submitted with the EIS on impacts on water resources and threatened species is inadequate given the responses from Government authorities and Council's Environmental Officer.

The EIS includes a detailed assessment of greenhouse gas emissions. The EIS concludes that the proposed emissions are relatively low and is not expected to exceed the reporting threshold of 25 kilotonnes of  $CO_2$ . The EIS states the quarry will make an incremental contribution of less than 10% and makes a number of recommendations to reduce/minimize  $CO_2$ .

## (c) Resource Recovery

The proposed method of operation is considered to be the most efficient given the close proximity to adjoining residents and the need to minimise and mitigate impacts.

## (d) Transport

All transport from the site will be via Wisemans ferry Road. A condition of consent could restrict the volume of traffic passing Somersby Public School.

The RMS has not objected to the proposal.

#### (e) Rehabilitation

The proposal includes a plan of rehabilitation. Rehabilitation would also be required as a condition of consent with completion of each stage.

#### **Sydney Regional Environmental Plans**

#### (a) Sydney Regional Environmental Plan No 8 – Central Coast Plateau Areas

SREP 8 – Central Coast Plateau Areas aims to provide environmental protection for the Central Coast plateau areas and provide a basis for evaluating competing land uses. The SREP seeks to encourage use of land of high agricultural capability for that purpose and as much as possible and direct development for non-agricultural purposes to land of lesser agricultural capability.

The SREP also aims to protect regionally significant mining resources and extractive materials, enable development of extractive industries in specified locations, protect natural ecosystems and opportunities for wildlife movement and discourage rezoning that would permit rural-residential development.

Prior to quarrying operations, the site was classified as agricultural class 3-4, which is suitable for crops and pasture. However the site is no longer suitable for agricultural use due to past quarrying operations. Once the quarry operations are completed, rehabilitation of the land could return to agricultural capability.

## (b) Sydney Regional Environmental Plan No 9 – Extractive Industries

SREP aims to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance. SREP 9 also includes restrictions on development in the vicinity of extractive resource sites. These provisions are designed to avoid sterilisation of quarry resources and prevent new development, such as residential land use too close to a quarry, which might result in restrictions on quarry operations as a result of dust, noise and other quarry impacts.

The subject land is not identified under SREP 9 as a resource of regional significance, albeit an extractive industry is permissible with consent.

## (c) Sydney Regional Environmental Plan No 20 – Hawkesbury Nepean River

SREP 20 applies to land which falls within the catchment of the Hawkesbury-Nepean River. The subject land drains to Narara Creek which drains into Brisbane Waters.

## **Government Authority Responses**

## (a) Roads and Maritime Services (RMS)

"The RMS advise that it has no objections to the proposal subject to conditions. The conditions include:

- upgrading the driveway access onto Wisemans Ferry Road;
- preparation of a Construction Management Plan for works required within Wisemans Ferry Road."

## (b) Environment Protection Authority (EPA)

The EPA advises that the amended Air Quality Report has not adequately addressed issues previously raised by the EPA and the EPA is unable to issue General Terms of Approval. The EPA advise that it is satisfied with the noise and water quality assessments and could issue General Terms of Approval to implement noise and water quality strategies.

## (c) Central Coast Public Health Unit (CCPHU) (Department of Health)

In summary, the CCPHU made the following comments:

## (i) Groundwater Impacts

Groundwater is used for human consumption across the Central Coast.

Regular water level monitoring is recommended and any approval should include a requirement for quality assurance for private water supplies.

## (ii) Noise Assessment

All proposed noise mitigation measures should be incorporated into the consent. The timing of establishment works should be negotiated with affected residents due to noise impacts during initial works.

The EPA is the regulatory authority for noise, however consideration should be given to timing truck movements so as to create the least impact on traffic safety around the Somersby Public School, such as avoidance of school start and finish times.

#### (iii) Air Quality

The PM<sub>10</sub> estimation is not the best practice and requires updating. Ongoing monitoring for PM<sub>10</sub> needs to be incorporated in the approval conditions.

Silica content of local particulate matter in ambient air needs to be determined for worker's safety and health risk assessment. If approved periodic determination of silica levels is required.

The air modelling suggests that the project will result in a substantial increase in  $PM_{10}$  concentrates beyond the site boundaries, with potential for exposure of the wider community. Health impacts of particulate air pollution have been linked to low exposures of  $PM_{10}$ . Measures must be taken to minimise impacts on air quality.

## (iv) Monitoring and Enforcement

If the proposal proceed, a comprehensive monitoring of noise and air quality and management of community complaints is required. Any complaints must have a rapid response within 1 to 2 hours. A direct communication line is required between the operator and the residents.

Monitoring results must be regularly reported and monitoring must be continuous for the life of the quarry, particularly PM<sub>10</sub> and silica levels.

## (d) Resources and Energy (NSW Department of Trade and Investment Regional Infrastructure and Services)

The department advises that the Mineral Resources Branch has no concerns regarding the proposal. Land use and environmental factors can restrict opportunities to establish new quarries. Therefore recovery of resources from existing quarries is generally supported.

## (e) NSW Office of Water (NOW)

The NOW requested additional information to be provided including:

- (i) "Identification of all works to be undertaken on waterfront land (ie within 40m of the high bank of a watercourse)
- (ii) Confirmation of whether improvement works will be undertaken on the existing rocklined channel discharging into the unnamed tributary of Narara Creek
- (iii) If works are to be undertaken on the rock-lined channel, whether this work will occur on the subject site or on the adjacent site Lot 11 DP 261772
- (iv) If works are to be undertaken offsite, owner's consent will be required.
- (v) Copies of any existing unregulated river water access licenses within the Brisbane Water Plateau Water Management Zone of the Water Sharing Plan for the Central Coast Unregulated River water source.
- (vi) Copies of any existing aquifer water access licenses within the Water Sharing Plan for the Kulnura Mangrove Mountain groundwater source
- (vii) Copies of any water supply works approvals for the existing water storages and diversions onsite.
- (viii) Storage capacity of any proposed water storages on site that will be capturing surface water runoff.
- (ix) A current Hydrogeological Investigation Report. The reports submitted with the EIS are dated 2004 and 2005."

A consent/updated hydrogeological report has not been submitted. The site has a licence for groundwater extraction of 16.5ML/year and will rely on surface water run-off of 13.5ML/year to operate.

## (f) Department of Primary Industries (Agriculture)

The Department advises:

"The land was previously assessed as agricultural land Class 3-4, depth to rock being 0.5m to 1m and suitable for crops and pasture (equivalent to agriculture land suitably Class 3). Rehabilitation of the site should provide for returning the landscape to enable opportunities for agriculture.

The dust, monitoring and management planned for sensitive receptor locations should also ensure that there is minimal impact on nearby pastures and orchards."

## (g) Darkinjung Local Aboriginal Land Council

The Council advises:

"I am writing to lodge a formal objection to the proposed Development Application listed above.

Darkinjung Local Aboriginal Lands Council has reviewed the amended plans for this proposal and there are significant concerns relating to this development application.

Please refer to the list of issues noted below in regards to this development application.

- Comparison of Quarry Plan Stage 4 dated 24/2/2011 and Quarry Plan Stage 4 dated 18/10/2012 shows no obvious difference between the two plans. Although it has been indicated the amendments to the pattern of surface drainage within the quarry will alter in detail to take account of the immediate placement of the processing plant and stockpiles in cell 1.
- In 2012 Darkinjung Local aboriginal Land Council produced the Darkinjung Local Aboriginal Land Council Aboriginal Heritage Report Rindean Quarry 620 Wisemans Ferry Road Somersby Lot 2 DP 362339. Report to Insite Heritage 17 February 2012.
- Within this report was the following recommendation:
  - Recommendation 1: DLALC do not recommend the quarry be given development approval. DLALC do not support the expansion of any existing or new quarry development within the Somersby Plateau and Peats Ridge region.
- There has been an Aboriginal Cultural Heritage site (stone artefact) recorded during an Archaeological survey of the subject property in February 2012.
- The guarry site lies in an area rick with Aboriginal cultural Heritage.
- OEH AHIMS Database shows that eight (8) registered Aboriginal sites are located within only approximately 650 metres from the assessment site.
- Seven (7) of these are located along a tributaries and also Narara Creek to the east and down slope from the subject property.
- The expansion of the existing quarry may have an impact on the hydrology and natural water flow within the area. The natural water flows down slope from the quarry into the Narara Creek and its tributaries. This has the possibility to negativity impact Aboriginal Cultural Heritage sites located within the creek system, due to either increase sedimentation or decreased water flow.
- A total of 22 Registered aboriginal Cultural Heritage sites lie within a 1.2km radius of the quarry.
- The Somersby area is part of a significant Aboriginal Cultural Landscape interconnected with Aboriginal Cultural Heritage sites.
- The landscape surrounding an Aboriginal place or site can be seen in a spiritual sense and is very important to Aboriginal people. The landscape can be an extension of a site, or the landforms and features within the landscape can be the site. Aboriginal

sites can also be connected through sight lines to other sites or places of significant. These features are all part of the cultural landscape.

- Aboriginal sites are connected to each other within the landscape, a number of places and sites hold spiritual and cultural importance to the local aboriginal community through their physical link to ancestors and the past. This connection attaches the community to land, traditions and strengthens bonds within the Darkinjung Local Aboriginal community.
- The major impact to the environment as a result of the extension of the quarry would further fragment an already compromised Aboriginal Cultural Landscape of the Somersby, Calga, Peats Ridge and Kariong areas."

## **Engineering Assessment**

Council's Development Engineer has no objection to the proposal subject to conditions.

#### **Environmental Assessment**

Council's Environmental Officer advises:

"It is understood that environmental impacts on noise, water and air will be assessed by the EPA and NSW Officer of Water. The following comments are provided in respect to potential impacts on the natural ecology of the subject site and adjoining areas.

## Ecological Assessment

## Threatened Species

#### Flora

A total of three individual specimens of the vulnerable listed Grevillea shiressii were recorded from the site under previous ecological studies completed as part of DA26467. Given these specimens are growing outside their preferred habitat (moist eucalypt gully vegetation), are located in close proximity to adjoining residences and are commonly sold in commercial nurseries; these plants are considered horticultural plantings on unknown genetic origin. Notwithstanding this, these specimens will be retained in the proposed vegetated buffer and managed under an overall Plan of Management (if approval is granted).

In addition, habitat within the site has been identified as suitable for the following threatened flora species; Darwinia glaucophylla, Hibbertia procumbens, Prostanthera junonis and Tetratheca glandulosa. Targeted surveys conducted as part of the Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012) failed to locate any specimens of these species within the subject lands. Section 5A assessments have been completed for these species and concluded that the proposal is not likely to lead to a significant impact on any actual species or their habitats.

#### Fauna

The following threatened fauna species were recorded near or from within the subject site; Gang-gang Cockatoo, Grey-headed Flying-fox, Eastern Bent-wing Bat, Large-footed Myotis, Greater Broad-nosed Bat and Eastern False Pipistrelle. In addition, suitable habitat has been identified for a number of other threatened fauna species that are listed in Section 3.5 of the Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012).

The proposed quarry operations will result in the direct removal of 0.88ha of Somersby Plateau Forest and the removal of up to 6 hollow-bearing trees. Amelioration measures have been recommended in Section 6 of the Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012) to minimise and reduce impacts on threatened species habitats. A condition of development consent is attached that requires these recommendations to be

incorporated within an overall Plan of management for the site. This condition should form part of any consent if approval is granted.

## Endangered Populations

No listed endangered populations have been recorded from the subject site or the nearby locality.

## Endangered Ecological Communities (EEC)

Two endangered ecological communities (Duffys Forest & Coastal Upland Swamp) have been recorded from within and adjacent to the subject site. The Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012) had not addressed potential impacts on these communities. As such, Section 5A assessments were requested to be undertaken (memo dated 19/09/12).

## **Duffys Forest**

The majority of remnant native vegetation within the site has been identified as consistent with Map Unit E26d – Somersby Plateau Forest as described by Bell (2009). This vegetation type has been identified as having very strong similarities to the endangered ecological community listed as Duffys Forest.

Further Ecological Information report (Keystone Ecological, dated 9<sup>th</sup> October 2012) has explored the relationship between Duffys Forest and the subject site and indicates that there is uncertainty in respect to the presence of Duffys Forest on the site.

Notwithstanding this and based on the precautionary principle, it has been assumed that this EEC does occur on the site and a Section 5A assessment has been completed for this community.

In total the proposed quarry operations will result in the loss of 0.88ha of potential Duffys Forest EEC with a further 2.87ha being retained within proposed vegetated buffer areas. The retained buffer areas will be subject to weed management under any approved Plan of Management for the site.

A Section 5A assessment (Keystone Ecological, dated 9<sup>th</sup> October 2012) conducted for this community has concluded that the proposed impact is unlikely to lead to a significant impact on Duffys Forest or suitable habitat for this EEC.

#### Coastal Upland Swamp

This EEC has not been recorded from the subject site although two patches occur less than 100m from the eastern boundary. Vegetation mapping of the Gosford LGA has recorded these two patches as E54 Sandstone Hanging Swamp (Bell 2009) that correspond to the final determination listing of Coastal Upland Swamp EEC.

Confirmation of the presence of this community has been undertaken as part of the Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012) and a Section 5A assessment has been conducted as part of the Further Ecological Information report (Keystone Ecological, dated 9<sup>th</sup> October 2012).

In respect to potential indirect impacts on these two patched (0.2ha & 0.3ha) uncertainty exists in regard to groundwater drawdown and aquifer connectivity. Groundwater modelling has assumed aquifer connectivity and as such indicates the potential for between 8 and 28m drawdown. Natural drawdown during dry periods has been estimated to be approximately 5m. If aquifer connectivity exists then a gradual drying of these swamps is likely to occur that will result in floristic and structural changes to this EEC.

Overland water flows are anticipated to remain relatively consistent with current flows that exit the site via the tailings dam and other water controls on the site. Impact assessment (Keystone Ecological, dated 9<sup>th</sup> October 2012) has considered that these flows have the potential to lessen the full impact of any drawdown although the Section 5A assessment has been completed on the full potential impact on these communities based on a precautionary approach.

The Section 5A assessment (Keystone Ecological, dated 9<sup>th</sup> October 2012) has therefore assumed a worst case scenario, being the loss of 0.2ha and 0.3ha patches of this community and concluded that the proposal is unlikely to result in a significant adverse impact on Coastal Upland Swamp such that a local occurrence will be placed at risk of extinction.

This conclusion has been based on the local occurrence comprising of 161 separate patches within 5km of the subject site that totals and area of 468ha with an average patch size of 2.9ha. It should also be noted that any indirect impacts through potential changes in groundwater levels will not result in actual vegetation loss but has been considered in the context of floristic and structural changes to this EEC.

## <u>SREP 8 – Central Coast Plateau Areas</u>

Clause 8 of SREP 8 has been considered as part of this environmental assessment. Based on an inspection of the site, review of the Flora & Fauna Impact Assessment (Keystone Ecological, Ref: GCC 11-498 – February 2012), Further Ecological Information report (Keystone Ecological, dated 9<sup>th</sup> October 2012) and ecological assessment comments provided above I am satisfied the proposal is consistent the aims and objectives of the planning policy.

## Conclusion

The objectives of the relevant policies, zoning objectives and potential ecological impacts associated with the proposal have been considered. It is deemed that the proposed quarry operations are not likely to lead to a significant impact on threatened species, populations, ecological communities or their habitats."

#### **OSSM**

Council's Waste Services Officer advises:

"Waste Services has assessed the application for a proposed Quarry located at the abovementioned property known as Rindean Quarry. Section 2.3.10 of Volume 3 of the Environmental Impact Statement quotes the use of portable toilets in the short term with a waterless composting toilet system to be used thereafter. Any excess wastewater is stated as being "collected in a lined pit, treated and drained or emptied periodically onto a reclamation area away from the water management infrastructure".

There is a lack of detail to support this proposal and as discussed on site 25 July 2012, there may be a more environmentally and economically sustainable option for on-site wastewater management which is consistent with AS 1547:2012 On-site domestic wastewater management and the Environment and Health Protection Guidelines On-Site Sewage Management."

The applicant was requested to provide additional information on this matter. Council's Waste Services has assessed the additional information provided and advises:

"Waste Services has assessed the Wastewater Management Plan prepared by Larry Cook Consulting Pty Ltd dated 10 December 2012 numbered 12075 in association with the proposed Quarry. The location of the absorption trenches shown within the report, are not compliant with the NSW Health Guidelines or AS 1547:2012 in relation to buffer distances. The trench area shown on the report site plan is within close proximity to a dam and also upstream of the dam.

Prior to further assessment the following information is required:

An amendment to the Wastewater Management Plan prepared by Larry cook Consulting Pty Ltd dated 10 December 2012 numbered 12075 increasing the buffer distance to the existing dam shown within the effluent disposal site plan (Figure 4). An alternative effluent disposal location may also be considered taking into account overland flow paths of stormwater, soil depth and proximity to the existing dam."

#### **Public Submissions**

A number of public submissions were received in relation to the application. Those issues associated with the key issues have been addressed in the above report. The remaining issues pertaining to various concerns were addressed in the assessment of the application pursuant to the heads of consideration contained within Section 79C of the Environmental Planning and Assessment Act 1979.

A summary of the submissions is detailed hereunder.

- 1 The existing quarry has exceeded the amount of extraction permitted under the previous consent and did not comply with the conditions of consent including:
  - Maximum area to be worked at a time is 0.5ha;
  - Method of extraction;
  - Batters and bunding required;
  - Rehabilitation
  - Use of water

#### Comment

This application must be assessed on the merits of the proposal. Previous non-compliance is not a relevant reason to refuse the application.

2 Air quality and dust fallout from quarry operations. This will impact nearby residents as well as the Somersby Primary school and livestock. The quarry is located in close proximity to adjoining residents.

#### Comment

The air quality report has not satisfied the EPA requirements.

3 The quarry will contaminate rainwater with silica dust. Nearby residents and livestock are reliant on tank water collected from run-off from roofs.

#### Comment

The Department of Health and EPA have raised concerns about the health impacts of silica dust and adequacy of the Air Quality Report.

There are already substantive quarry operations in the area and to permit another quarry would be negligent.

#### Comment

The number of other quarries is not relevant other than in assessing cumulative impacts. The economic viability or competition is not a relevant matter for consideration.

Increased use of groundwater and lowering of water table. A number of nearby residents rely on bore water for domestic use. The anticipated drawdown is 10% up to 1km away and 25m in the immediate vicinity.

#### Comment

The Office of Water requested an amended Hydrological Report.

Increased use of Wisemans Ferry by trucks. There is already a significant number of quarry truck movements at all times of the day. This impacts the quality of life of rural residents as well as increased road danger levels. There will be 240 truck movements per week and 12,000 extra movements per year.

#### Comment

Wisemans Ferry Road can cater with the additional traffic. Council's Development Engineer and RMS have no objection to the proposal.

7 Property Devaluation. The re-opening of the quarry will significantly de-value nearby properties.

#### Comment

The value of nearby properties would be decreased if the proposal affects the amenity of residents on surrounding properties.

The quarry will use 33% of groundwater in Zone 3 Brisbane Water Groundwater Supply of the Kulnura Mangrove Mountain Ground Water Sharing Plan. There is 88ML available in this zone and the applicant intends to use 29ML, but only has 5ML license and intends to lease another 11ML. Where is the balance of 13ML to come from?

## Comment

The Office of Water has advised the Groundwater Report is inadequate and needs to be revised.

9 The Hydrological and Noise Reports were done in 2004. 2012 reports should be done. No updated Water Report that analysed the impact on adjacent bores has been done.

#### Comment

This has been requested by the Office of Water, Department of Health and EPA. The EPA advise that the amended Noise Report is satisfactory.

10 The proposal will increase competition with existing local compliant quarries.

#### Comment

Increased competition with other quarries is not a relevant matter for consideration. If approved, the guarry operation will need to meet relevant standards.

11 The proposal will impact EEC, hanging swamps and habitats of endangered wildlife and potential impact to Narara Creek from excess run-off.

#### Comment

Council's Environmental Officer has assessed the additional information and advises the proposed quarry operations are not likely to lead to a significant impact on threatened species populations, ecological communities or their habitats.

12 Children and elderly people are most susceptible to Silicosis and NO<sub>2</sub> emissions generated by quarry operations. The Somersby Public School is 1.7km from the site. Some adjoining residents already suffer ill health which will be increased due to the impact of the quarry operations, particularly air pollution.

#### Comment

The EPA advise the amended Air Quality Report is inadequate.

13 Noise will be exceeded up to 500m from the quarry which is detrimental to health. Whilst an updated Noise Report has been done, the level of monitoring is inadequate.

#### Comment

An amended Acoustic Report has been requested by the EPA which has been submitted. The EPA advise the amended Noise Impact Assessment is satisfactory. Implementation of the mitigation measures would be required with any approval.

14 The quarry was required to cease by the Land and Environment Court in 2003 due to impacts on groundwater, excessive dust, health issues, increased noise and visual impacts to residents.

#### Comment

This is not relevant to determination of the current application. The current application must be assessed on the information provided and current standards.

15 The proposal is incompatible with the current area. Many houses were here prior to the 1979 DA. They have prior use rights and the quarry should not be allowed to encroach closer to residents.

## Comment

Dwelling-houses and extractive industries are both permissible uses with consent on the land. Existing use rights do not apply. The impact on the existing dwelling-houses must be taken into consideration.

16 Soils in this area contain 90% crystalline silica and will affect people within 2km of the site, including the Somersby Public School and over 50 residents.

The site is subject to high easterly winds and air quality will exceed  $PM_{10}$  levels in 24 hour period. The Air Quality Report has not analysed the  $PM_{2.5}$  levels for surrounding residents.

## Comment

The EPA has advised the additional information on air quality has not addressed their issues.

17 Inappropriate buffer zones. It is proposed to remove the existing trees along the northern, southern and western boundaries of the site to provide noise bunds and a fence. This will remove the only protection surrounding residents have.

Replanting the buffer zone with tube stock will be inadequate.

#### Comment

Buffer zones and bund walls are proposed to mitigate the impact on adjoining residences. Whether these are adequate will need to be reviewed if additional information is submitted.

18 The noise impacts on the adjoining Linton Gardens and home businesses.

#### Comment

The EPA advise the additional information is satisfactory and noise impacts can be mitigated.

19 The proposal will create dust and affect the green tea crops being grown at the Somersby Agricultural Research Station 500m away.

#### Comment

The Department of Agriculture runs the Research station and has not objected to the proposal. An amended Air Quality Report has been requested by the EPA.

The proposal will impact endangered species including Hibbertia *procumbens*, Grevillea *shiressii*, Bats and Hanging swamp and sedgelands.

## Comment

Council's Environmental Officer has assessed the additional information and advises the proposed quarry operations are not likely to lead to a significant impact on threatened species populations, ecological communities or their habitats.

40% of the site remains untouched and natural bush regeneration has taken over the old quarry without any help from the owner. The owner has abandoned the quarry and left it for 11 years with rusted out equipment still present. What assurance is there that if the application is approved the owner will re-habilitate the site?

## Comment

The information submitted to Council indicates that the owner has not abandoned the quarry. If the current application is approved, rehabilitation would be required as conditions of consent.

The site is immediately surrounded by 6 families, further out by another 17 families who will be exposed to PM<sub>2.5</sub> silica dust, and a further 20-30 families and Somersby Public School within 2km who will also be similarly affected.

#### Comment

The EPA has advised the amended Air Quality Report is inadequate.

23 Sand mining is an industrial activity and not an agricultural activity as required under the 1(a) Rural zone and Sydney REP 8.

#### Comment

The 1(a) zone permits an extractive industry with consent. The impact of the extractive operations on surrounding properties must be taken into consideration in assessment and determination of the proposal.

24 Council should take action to enforce the previous conditions of consent and rehabilitation of the site.

#### Comment

This would be necessary if the current application is refused.

25 The proposal is very close to a school bus stop which increases the hazard to the community.

#### Comment

The school bus stop could be relocated if necessary. The RMS have not objected to the proposal.

The Somersby Falls sand mine proposed was refused by the then Minister for Planning due to effects of dust on school children and neighbours who were 300 metres away at the closest point. This set a standard for quarries in NSW. One house is 50m away from the proposal with young children.

## Comment

The Somersby Public School was located adjacent to a proposed sand quarry. This site has an existing sand quarry and is not located next to a school, although it does adjoin a number of residences.

27 The proposal is incompatible with the surrounding rural/residential land use. Sand mines should only be in remote locations away from populated areas.

#### Comment

Sand mines or quarries should be located in rural areas or zones which is the case in this situation.

28 Crystalline silica has the same health impacts as asbestos. The State of California has classified crystalline as a toxic air contaminant the same as asbestos in 1986. The substance affects the immune system and causes a range of other disorders such as bronchitis, kidney disease, and arthritis.

Emission rates of crystalline silica are extremely underestimated in all sand mine proposals to play down the health risk and hide the true facts. The soils on this site are almost identical to the Somersby Falls site.

#### Comment

The EPA and Department of Health have advised of concerns with the Air Quality Reports.

29 Studies show that 95% of PM10 dust generated will travel up to 400m into the air and many kilometres from the site.

Comment

The EPA has advised the Air Quality report has not adequately addressed the issues.

30 A dual occupancy was refused on the adjoining land due to the impact of the quarry.

Comment

The application was refused for a number of reasons including:

- Inadequate information on OSSM;
- Impact on threatened species;
- Potential restriction of quarry operations and inadequate information on dust, vibration and visual impacts;
- Inadequate connection for an attached dual occupancy.
- 31 Council should rezone the site to prohibit a quarry. They should not be in locations where health, noise and water quality issues will be a concern.

Comment

The quarry currently exists and has a previous consent. Rezoning the land will not prohibit a quarry which would then have existing use rights.

32 The proponent states prior use and existing use rights, however only the rear half of the site has been quarried.

Comment

The whole site is zoned 1(a) and extractive industries are permissible with consent.

33 The quarry operations (mine and dust) will affect home businesses nearby of an industrial designer and a screen printing business. The ripping of sandstone will cause noise and vibration.

Comment

The EPA has advised the Air Quality Report is not satisfactory. The impact on residents is the relevant consideration.

34 Dust suppression requires extensive watering. If there is insufficient water, quarry operations should cease.

Comment

The Office of Water has requested an amended Hydrogeological Report which has not been submitted

35 The buffer zones and bunds are inadequate. The 4m high bund along the southern boundary will be 12.4m wide at the base, however there is only 5m available. The bunds have been reduced from 6m previously to 4m in this application.

#### Comment

The applicant has not justified the decrease in the height of bunds. Bunds could be reduced if solid fences or barriers are erected.

36 Hibbertia procumbens, a threatened species is located on the site.

#### Comment

Council's Environmental Officer has assessed the additional information and advises the proposed quarry operations are not likely to lead to a significant impact on threatened species populations, ecological communities or their habitats.

37 Many of the mitigation measures in the EIS begin with the words "where practicable". This leaves it to the proponent to determine what to comply with or not.

#### Comment

If approved, conditions of consent would not include the words "were practicable".

38 Noise and other impact monitoring do not ensure compliance only recording of information. There should be binding conformance requirements and penalties for non-conformance.

## Comment

Monitoring and reporting of data would be required as well as compliance with standards for air and water quality. Penalties for non-compliance with conditions cannot be specified in conditions of consent.

39 The proponent did not carry out any community consultation with surrounding land owners and occupiers in preparing the EIS. This is contrary to the Director Generals' specification.

#### Comment

The number of public submissions substantiate this claim. However the EIS refers to consultation carried out in the previous application.

- 40 If the proposal is approved the following conditions at least should be imposed:
  - Buffer Zone be increased to 200m as per other Sydney Councils.
  - Haul Zone be located outside the Buffer.
  - Activity of any type not to be permitted on weekends and public holidays.
  - Queuing and waiting areas for trucks be located within the quarry site.
  - Ripping should not be permitted as per original conditions of consent. The constant vibrations will be felt throughout the home.

 Monitoring of dust and noise be conducted with reports and results made available to all surrounding residents on a monthly basis.

- Monitoring of water usage be conducted monthly and testing to establish seasonal water table levels and flow rates be conducted prior to any consent be given.
- Controls over the water extraction amounts should apply to ensure limits are being adhered to.
- Hours of operation be restricted to 8:00am 4:00pm to allow consideration for the surrounding children's needs.
- Vegetation on bunds to be maintained.

#### Comment

The above would be taken into consideration if consent was granted.

The proponent has not complied with previous conditions. There is concern that any conditions imposed if approved will not be followed. A stringent management of conditions would need to be followed.

#### Comment

Monitoring and reporting on compliance with conditions would be required for the life of the operation.

42 Council has approved two new dwellings and extensions to two others adjoining the quarry since the quarry ceased operations. It would be negligent of Council to approve the new quarry proposed when it is aware of the impact of noise, dust, traffic etc. on the residents of the six adjoining dwellings.

#### Comment

In consideration of applications for new dwelling-houses, Council took into consideration the likely impact of the quarry operations and applied conditions where appropriate to mitigate impacts such as noise.

The Air Quality Report should have used information from the Narara Weather Station 3.5km away not the Peats Ridge Weather Station 9km north-east from the site. Even though the report uses incorrect air quality comparisons, it still shows PM<sub>10</sub> and NO<sub>2</sub> levels being exceeded for adjoining residences. The amended air Quality Reports still shows exceedence of PM<sub>10</sub> and NO<sub>2</sub> constraints at nearby residences. PM2.5 particles are also of concern due to likely impact on roof water.

#### Comment

The EPA has considered the amended Air Quality Report which is still not satisfactory to the EPA.

44 Council previously required a buffer zone from residences of 100m. The current buffer zones are less than 100m and 65m from the adjacent north-western property. An appropriate buffer would be 200 metres.

#### Comment

A buffer zone of 200m cannot be achieved within the site adjacent to adjoining dwelling-houses in the north-west corner of the site. The buffer zone provided within the site is less than 100m.

The applicant needs 29ML of water to operate at full capacity. The applicant only has licences for 16ML. The owner should have to acquire further licences before operating.

#### Comment

The NOW has conferred that the current extraction licence for the site is 16M/L year.

The applicant contends that 13.5ML/year will be captured from surface water run-off.

The Office of Water has requested additional information/reports on ground water impact which has not been submitted.

There is currently a legal obligation on the owner to rehabilitate the quarry under previous consents whether or not the current proposal is approved.

#### Comment

Council must determine the current application. If refused Council may then consider further action options.

47 Since the previous consent was granted (which has lapsed), more information in relation to the impact on the water table and potential health effects of dust from sand mines (eg silicosis) has become available.

The Minister for Planning refused the Somersby Falls project for the following reasons:

- The planning setting of the quarry in close proximity to a school and residential area would introduce land use conflicts which could necessitate ongoing and onerous management. The extraction of the resource as proposed is therefore fundamentally and strategically inconsistent with good land use planning and the broader public interest.
- There remains residual impact and a degree of uncertainty relating to both noise and air quality. If approved, these impacts would necessitate a very stringent ongoing management and control at this location is unacceptable.

These reasons also apply to this proposal. It would be inappropriate to grant consent subject to strict conditions which would be so onerous that management and compliance would be unlikely especially given past breaches of conditions.

#### Comment

The EPA and Department of Health have raised issues about the amended Air Quality report.

48 The quarry does not have existing use rights and a number of adjoining homes were built prior to the quarry and have prior rights and should be compensated if approval is granted. The dwelling (R4) was built in the 1960's. In 1979, the quarry

was 500m from this house and a now will be 90m away from Cell 7. The EIS states 100m and therefore is inaccurate, being 10m closer.

Comment

Existing use rights are not applicable in this case. The use is permissible with consent. The assessment of the proposal must consider the impact on nearby dwelling-houses in determining the proposal, irrespective of when adjoining houses were built.

The quarry will devalue adjoining properties. The adjoining property (R4) would be devalued by \$200,000.00 to \$400,000.00 due to impacts of the quarry. Full monitoring for air, noise and water impacts on surrounding properties must be done if approved.

Comment

If the quarry significantly reduces or impacts the amenity of adjoining residents then this may impact property values.

The statement in the EIS that the site has always been a quarry is misleading. The site has only been used for extraction 12 years out of 25 years.

Comment

The extraction is not required to be continuous and can be intermittent. This does not result in the loss of the previous consent.

51 The current owner has not undertaken any rehabilitation yet received rent to do so from a District Court ruling in 2010 Court case.

Comment

Rehabilitation of the guarry will be required as guarry operations are completed.

52 The western half of the site never had existing use rights as a quarry and is suitable for agricultural use.

Comment

The whole site is zoned 1(a) and the proposal is permissible with consent. Existing use rights are not relevant.

53 The site has been the subject of past illegal dumping allegedly of asbestos. More investigation into this matter is required.

Comment

The EPA has requested more information on this matter which has not been submitted.

54 The proposal will impact the amenity and health of surrounding residents particularly the young and elderly. A number of children and elderly already suffer health problems and moved to the rural area for a clean and quiet lifestyle.

Comment

The EPA and Department of Health advised air quality has not been satisfactorily addressed.

55 The proponent must purchase any residence or occupants significantly impacted at market price as if there was no sand mine.

Comment

This cannot be imposed as a condition of approval and is beyond Council's power.

Loss of income. The proposal will impact existing and future expansion of home businesses such as bed and breakfast accommodation.

Comment

The impact on adjoining residents must be taken into consideration, particularly noise and air quality impacts.

57 The proposal should be restricted to business hours Monday to Friday 9:00am to 5:00pm.

Comment

The hours and days of operation can be restricted under conditions of consent. However the above hours would be unreasonable for a quarry operation.

The proposal will increase noise generation and move the operation closer to existing houses. The NSW Industrial Noise Policy states that any unacceptable impacts from a development that are likely to persist after noise mitigation are unacceptable. Noise monitoring and mitigation measures must be certain.

Comment

Any conditions of consent would be specific and not open ended at the discretion of the proponent.

59 It is uncertain on the number of truck movements per day. The EIS states 20 to 40 per day. The applicant verbally states 30.

Comment

The number of truck movements will depend on the volume of material removed which may be up to 150,000 tonnes p.a. However, Council could impose a condition restricting the number of truck movements.

The air quality will not meet EPA guidelines. The PM<sub>10</sub> and NO<sub>2</sub> emissions will place adjoining residents, and Somersby Public School with 2km, exposed to dangerous levels. Soils in the area are 90% crystalline silica. This will affect up to 100 school children and 50 residents. More evidence on health effects is known to-day than in 1979. The Air Quality Report has not analysed PM2.5 levels. Even on the provided data, surrounding residents will be subjected to 65% dust even if adequate buffer zones are provided.

#### Comment

The EPA and Department of Health have advised that the amended Air Quality report is inadequate.

operate when insufficient water is available to manage dust emissions and dust monitoring is continually done.

Comment

This can be imposed as a condition of consent.

The proponent must compensate surrounding residents for regular cleaning of roofs, sludge removal from water tanks, and repairs to equipment damaged due to sludge build up.

Comment

This should not occur if the site is appropriately managed.

The visual impact on adjacent properties. This will not be improved by the removal of vegetation and bund walls. Some houses are on land higher than the bund walls.

Comment

The visual impact will be worse to start with from adjoining houses but will be improved in the medium to long term by replanting.

The impact on flora and fauna and threatened species. The information submitted is not in accordance with the required guidelines and survey methods.

Comment

Council's Environmental Officer has assessed the additional information and advises the proposed quarry operations are not likely to lead to a significant impact on threatened species populations, ecological communities or their habitats.

An Aboriginal artefact has been found on the site. The proponent must carry out further surveys and protect any aboriginal sites identified.

Comment

The Darkinjung Local aboriginal Land Council has objected to the proposal.

Narara Creek is mapped as containing rainforest species. Council's Rainforest Policy has not been addressed.

Comment

Council's Environmental Officer has assessed the additional information and advises the proposed quarry operations are not likely to lead to a significant impact on threatened species populations, ecological communities or their habitats.

Regular/ongoing independent monitoring of air, noise, water bores and surface water quality should be conducted on adjoining properties. The results are to be made available to all owners and compensation paid for any exceedence of impacts. The proponent must purchase properties if they become uninhabitable.

#### Comment

Monitoring and reporting of air, noise and water levels can be required as a condition of consent. Compensation and compulsory purchasing of properties cannot be required as a condition of consent.

68 There are approved tourist operations downstream which rely on clean air and water to survive.

Comment

Nutrient and sediment controls are proposed to mitigate such impacts leaving the site.

69 Reopening of the Quarry will put further pressure on Narara Creek and the fragile groundwater aquifers.

Comment

Reopening the Quarry would require improved mitigation control measures to be installed which were not required under the original consent.

#### Conclusion

The proposal is permissible with consent under Clauses 5 and 101C of IDO No 122 and SEPP (Mining, Petroleum Production and Extractive Industries) 2007

The proposal is not inconsistent with draft Gosford LEP 2009, Sydney REP's No 8, 9 and 20.

The Department of Primary Industries, Roads and Maritime Services, and Council's Development Engineer have no objections to the proposal, subject to conditions. Council's Waste Services advises the OSSM Report and On-site Effluent Disposal has not been adequately addressed.

The proposal is supported by the Department of Resources and Energy.

The EPA, Department of Health and NSW Office of Water do not support the proposal mainly due to inadequate information or unknown impact on air quality and groundwater resources. Under the terms of Integrated Development, consent cannot be granted unless the EPA issues General Terms of Approval. As the EPA has not issued any GTA, the application cannot be approved.

The operation relies on 13.5ML/year of surface water collection which in turn relies on capturing rainfall. Rainfall may be inconsistent and any additional groundwater extraction will require additional licence from NOW.

The applicant was requested to provide additional information to satisfy the above matters by letters on 25/7/12, 30/7/2012, 8/8/2012, 13/8/2012, 30/8/2012, 4/9/2012 and 21/9/2012.

In addition, a number of phone calls were made requesting the information.

The Darkinjung Local Aboriginal Land Council has objected to the proposal as well as 68 public submissions objecting to the proposal.

The public objections are mainly to:

- the impact of dust and particulate matter on the health of adjoining and surrounding residents as well as the public school; particularly by crystalline silica.
- the impact of noise on adjoining residents.
- the additional truck traffic and safety concerns.
- the impact on groundwater bores in the locality.
- the impact on downstream water bodies including Narara Creek.
- past poor performance and compliance with previous conditions of consent.
- the close proximity of quarry operations to the six adjoining residents.
- the impact on flora and fauna species and the Aboriginal artefact.

The quarry operations were approved under a previous consent and stopped as a result of non-compliance with conditions of consent. There is no benefit in leaving the site as it is in the current state as a large hole in the ground. There is a significant benefit to be gained, particularly to adjoining and surrounding residents, to have the site eventually returned to an acceptable level of restoration.

Due to the submissions by the EPA, Department of Health, NSW Office of Water and local residents, there is uncertainty in the impacts of the proposal. Therefore the proposal cannot be approved and is recommended for refusal.

The other alternative is for the Panel to defer the matter to permit the applicant to address outstanding matters.

**Attachments:** Figures 5-9

Tabled Items: Nil

#### RECOMMENDATION

- A The Joint Regional Planning Panel as consent authority refuse Development Application No 42409/2012 for the proposed Extractive Industry 5 Stages Designated / Integrated Development on LOT: 2 DP: 362339, 620 Wisemans Ferry Road SOMERSBY for the following reasons:
  - 1. The Environmental Protection Authority has not issued General Terms of Approval for the proposal.
  - 2. Inadequate information to assess the impacts on air quality, and impact on adjoining resident/human health, particularly by  $PM_{2.5}$  and  $PM_{10}$  crystalline silica.
  - 3. Inadequate information and impact on groundwater resources.
  - 4. The impact on the Aboriginal artefact and objection by the Darkinjung Local Aboriginal Land Council.
  - 5. Inadequate information to access on-site wastewater disposal.
  - 6. The impact on the amenity of adjoining and nearby residents.

B The applicant is advised of Councils decision and of their right to appeal to the Land and Environment Court within six (6) months after the date of determination.

- C The objectors are notified of the decision.
- D Roads and Maritime Services (RMS), Environment Protection Authority (EPA), Resources and Energy (NSW Department of Trade and Investment Regional Infrastructure and Services), NSW Department of Primary Industries Office of Water and Agriculture, Central Coast Public Health Unit NSW Department of Health, Department of Planning and Infrastructure, Office of Environment and Heritage, Darkinjung Aboriginal Land Council and Aboriginal Groups, be notified of the Joint Regional Planning Panel decision.

<<Insert Attachment Link/s Here >>