



THE WILDERNESS SOCIETY

Howard Reed
Manager Mining Projects
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

15th February, 2015

Dear Howard,

RE: Objection to the Cabbage Tree Road Sand Quarry SSD 13_6125

Thank you for the opportunity to submit our objection to the controversial Cabbage Tree Road Sand Quarry. This sand mine proposal is not supported by local residents who will be directly impacted by the dust, noise and traffic created from this industrial site and is not supported by the broader Port Stephens community who place strong values on clean drinking water and the vulnerable Koala population.

The negative social and economic impacts for local residents far outweigh the benefits of the project. The long term value of retaining the topsoil and vegetation for water purification, groundwater stability, habitat, local aesthetics, property value and quality of life for residents amongst many other eco-system services is far greater than the value of another sand mine in the already heavily sand-mined area of Port Stephens. The land should never have been leased given the extremely close proximity to neighbouring properties.

Please find attached an analysis of the Social Impact Assessment, Ecological Assessment and Groundwater study, whose findings are supported by the Wilderness Society Newcastle and we ask to be included as part of this submission.

In summary the key reasons for the rejection of the Cabbage Tree Road Sand Mine Development Application relating to ecology and water are:

- The sand mine is located on preferred habitat for the Federally and State listed threatened Port Stephens Koala population. This project contradicts SEPP 44 and the Port Stephens Koala Plan of Management and therefore must be rejected.
- There is no off-set package provided for the Koala, Earps Gum and predicted to be no suitable off-sets available giving the growing development in Port Stephens

encroaching on preferred Koala habitat and the limited number of mature trees within the Koala's movement corridor.

- There is no cumulative impact assessment on Koala's, this is a Secretary requirement and particularly important given the low population numbers and high rate of development in the region that impacts on preferred Koala habitat
- Planting trees additional trees in already vegetated area elsewhere is not a viable solution for the razing of hectares of Koala habitat due to the decades required for those trees to mature and the already precariously low numbers of Koala's left in Port Stephens
- There has been no assessment of the impact of clearing the land on groundwater levels. Therefore the assumption that the sand mining will be above the groundwater table with a buffer distance of one meter is unfounded
- The impact of raising the groundwater levels on the spread of contamination or on the Hunter Water supplies has not been assessed
- Any pumping or dredging may cause the contamination plume to migrate towards the sand mine site.
- Previous applications to clear vegetation within the Tomago Sand beds aquifers have been rejected by Hunter Water due to the instability it causes for the groundwater levels.

The key social and economic reasons that the sand mine must be rejected include:

- The proximity of this new sand mine to a densely populated area is unprecedented. The sand mine pit will be less than 50m from 16 occupied houses. There are standard recommended buffer zones from the NSW DPI, Victorian and Western Australian EPA for the distance between residences and industrial activities that specify a minimum of 500m for sand and silica mining.
- The impact of having a sand mine in such close proximity properties would greatly decrease values
- The project justification 'construction sand shortages in Sydney and the Hunter' is not supported by any evidence, and is unlikely to be true given the fact that there have been a number of recent approvals for sand mines in the area.
- There is no analysis of the options for the supply of construction sand to supply the State's Infrastructure boom, therefore there may be preferable alternatives in less sensitive environments, away from water catchments and further from densely populated areas that this EIS fails to identify
- The Social Impact Assessment has failed to meet basic standards. The assessment provides a list of impacts with no analysis of what the result of these impacts will be to local residents, it also has questionable ethics. Given the lack of analysis of social impacts it is recommended that a full EIS using the DPE's own adopted international standards and methodologies be conducted.

Critique of the EIS Main Text

Page (i) of the Background states that Port Stephens Council entered into a Lease agreement with Williamtown Sand Syndicate. We are currently seeking legal advice as to legality of the original awarding of the lease to Nathan Tinkler and Darren Williams company Castle Quarry Products (CQP) and the subsequent approval to transfer the lease to Benelli Holdings and the eventual transfer to Williamtown Sand Syndicate (WSS).

CQP are currently in receivership and at the time they were awarded the lease they were the contractor for the illegal clearing that was being pursued by Port Stephens Council. Of the applicants they were strongly recommended against by Port Stephens Council staff. It is not clear why this company was selected given their environmental breaches and financial instability.

The lease was then voted on to be transferred to Benelli Holdings. A company with Darren Williams wife and Nathan Tinklers father as directors. The lease was never transferred to this company and at yet another Council meeting transferred to WSS. All companies share the same address. Company WSS was formed less than one month before the Council's vote, is run by an accountant Chris Sneddon, there are two other involved with the company who have been identified by the Newcastle Herald as former CQP director Darren Williams and former CQP employee Murray Towndrow.

The entire tender process has been a debacle that has left the public with no confidence in the ability of Council to effectively manage the sand mine site. There is also speculation over the \$250,000 security deposit for the mine from CQP as to who paid it? The mayor has been heavily involved in this process despite having a conflict of interest in being a local sand mine operator.

This dubious tender process is relevant as it puts into question the motives behind the mine, not being in the public interest. It also questions the ability of WSS to meet their obligations to the Council and should the project be approved the ability of the company to meet the conditions. In particular given the record of Darren Williams and illegal clearing of sand mine site we would want limited access to the site until any such approval was granted.

Page (i) also states that the project will mine up to 600,000 tonnes of sand per annum. However the total available to be mined is 3.3 mtpa and the expected lifespan of the mine is 10 to 15 years. At 600,000 per year the mines lifespan is 5.5 years. We believe that WSS, with their 5 staff have no intention or ability to mine over 500,000 mtpa. Therefore the proposal is not a state significant development.

Page (i) states that the the project has been designed to extract up to 1m above the highest predicted groundwater table level, however the impact of clearing on the groundwater level has not been modelled which is a critical process occurring. Therefore this assumption is invalid and a complete groundwater study must be conducted. This is described further in Section 3: Geotechnical Groundwater Study.

Page (ii) states that the project aims to meet three key criteria, however fails at all three as below:

ensure a suitable buffer is maintained between groundwater	the impact of clearing on groundwater has not been assessed therefore it is likley that groundwater levels will increase to proposed sand mining depths
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provide appropriate separation from surrounding residences	There is serious failure to provide separation to surrounding residence. The proposed sand mining pit is within 50m of at least 8 houses when NSW, VIC and WA buffer distances between residences and sand mining at least 500m. Increasing the distance must be looked at due to the grade of silica sand the health impacts of dust.
avoid impact on Swamp Schlerophyl and Koala habitat	The proposal will clear hectares of Swamp Schlerophyal and Primary Koala habitat.

The site is clearly not suitable due to the close proximity of residences to the sand mine pit. This large scale industrial activity should not be located in a local neighbourhood. The increased noise, dust and traffic will have serious detrimental impacts on local families, children in particular.

In addition the site is far more valuable left vegetated. This is due the site being located in the water catchment for the Tomago Sandbed Aquifers. The site having Primary Koala habitat and due to the site being located within the red-zone. The impacts of clearing and disturbing the site and interactions with the contamination plume has not been addressed.

1.1.1 Background to the project

RZM found to contaminate local water supplies with arsenic leading to it's closure. The site has been successfully rehabilitated and is far more valuable as a water catchment and Koala habitat site. We recommend that the land be classified as part of the Tilligerry State Conservation Area and handed over to National Parks to be managed.

1.2 Approvals required

1.2.1 Development approval. What evidence does the company have to support their claim that the project warrants State Significance status? The projects life span is 15 to 20 years and the average sand extracted is 300,000 tpa. At the upper limit of 600,000 tpa the the sand quarry would have a lifespan of 5 and a half years.

1.2.3 EPBC Act. The project will have significant impacts on a number of Matters of National Environmental Significance (MNES) and clearly needs to be referred to the Federal Environment Department. When will the proponent refer this project?

1.3.2 Consultation

States that at a public meeting concerns were noted and fed back to the proponent who then modified the proposal. What were these concerns and how was the project modified to address them?

Visiting 16 residents is inadequate as there are at least 40 residents that will be within a 1km distance of the sand mine.

The EIS also states that the sand mine has been featured on numerous occasions in the local newspapers and local television. These features have been focussed on distressed neighbours to the project and dubious dealings by the council and CQP. As per the attached critique of the Social Impact Assessment media articles are a record of the Journalists opinion of the social impact and not a substitute for a proper SIA. The news features do however provide an account of the questionable dealings of council.. Here is a brief list of news features:

<http://www.theherald.com.au/story/2679181/sandmine-lease-advice-ignored/>

<http://www.abc.net.au/news/2015-02-19/residents-raise-health-fears-over-castle-quarry-sand-mine/6144408>

<http://www.abc.net.au/news/2015-02-27/revelations-icac-looked-into-port-stephens-sand-mine-deal/6267626>

<http://www.theherald.com.au/story/3245058/mayor-votes-on-sand-mine-despite-conflict-of-interest/>

<http://www.theherald.com.au/story/3230032/future-of-sand-mine-under-question/>

<http://www.portstephensexaminer.com.au/story/2919999/objection-to-mines-ramps-up/>

<http://www.portstephensexaminer.com.au/story/3545321/sand-mine-progress-deals-untimely-blow/>

2.2.2 Future Demand for Stockton Bight Sand Products

The project is primarily justified citing a predicted shortage of construction sand in Sydney. There has been no independent analysis of sand supply and demand for NSW, that assesses proximity to residents, Matters of National Environmental Significance etc. Therefore it can not be used to justify this development. There may be far more opportune locations for sand extraction and sustainable alternatives to the use of sand and concrete in new developments. Concrete has a high carbon foot-print and it's use must be reduced to address climate change.

There is a document titled 'Industrial Minerals Opportunities in NSW' that is stated to aim at encouraging further exploration by the Department of Minerals and Energy. There needs to be a more balanced independent strategic look at construction sand supply and demand in NSW that also looks at social, environmental and economic impacts.

Figure 4.6 shows existing sand operations in the region. All other sand mines are located remotely from residential areas. This sand mine would be a significant deviation from planning to allow a sand mine so close to families.

2.3.8 Rehabilitation

This has not taken into consideration an elevated groundwater level due to clearing. Refer to the attached critique of the Groundwater assessment.

2.4.2 Alternative sites

This only looked at sand extraction within the Council owned property which is inappropriate due to its proximity to residents, primary Koala habitat and location within the Hunter Water Special (Protected) Area. As stated before there must be an independent analysis of construction sand supply and demand in NSW.

There are a number of alternatives to sand listed in the EIS. The relative costs don't take into consideration the externalities associated with sand mining in environmentally sensitive areas.

2.4.3 Alternative of not proceeding

The alternatives of not proceeding listed is not justified by any evidence. The statement 'an increased price and reduction in construction activity' is not justified.

The statement that despite the recent approvals 'it is considered' that there is still insufficient supply of sand is also unjustified.

There are very few jobs created by the proposal.

4.2.3.3 Contaminated Land

There is a high potential of contaminated lands due to the previous use of the site by RZM. This mineral sands operation, used dredging, heavy machinery and contaminated groundwater with arsenic. Thorough testing of the site for contaminants must be conducted.

Ecology

For a detailed account of the limitations and flaws of the Ecological Assessment please refer to the attached critique by Ecologist David Paull. In summary there are a number of grounds for the rejection of this application and that requires further information, these include:

- significant impact to threatened species - Koala
- flawed methods - minimum survey requirements not met
- no off-set package therefore this is an invalid application
- no cumulative impact study as required in the SEAR's (particularly important for the Koala)
- Minimum survey requirements not met for Threatened species (Koala and New Holland mouse)
- Earps Gum significant impact - records indicate that 50% (284 out of 586) of the local population will be removed. Even if they are planted, this does diminish their significance, Offset rules should be used to retire impact on this species.
- Wallum Froglet significant impact. Records indicate mine will directly affect 50% of known records in the study area. Retirement of credits not indicated.

4.2.3.1 Koala

This project will have a significant impact on the State and Federally listed threatened Koala. The Port Stephens Koala population has also been nominated as an endangered population. Latest estimates of the Koala numbers in Port Stephens may be as low as 200. There is high Koala activity at the site as the site is covered in Preferred Koala habitat as mapped by the Australian Koala Foundation and Port Stephens Council.

Approximately 50% of preferred habitat in the project area will be removed including areas of core Koala habitat. There are six records of Koalas within the development footprint, though where the consultants found Koalas during surveys is NOT indicated. Umwelt have provided misleading information in that the figure which is supposed to show locations of Koalas detected in their surveys (was detected according to the results) only shows the BioNet records. The number and location and age sex any information on Koalas detected during surveys is not indicated. Major disruption of habitat connectivity for the Koala in the locality.

Off-set strategy

The EIS lacks an off-set strategy. This EIS should not have been put out to exhibition whilst lacking an essential component of the Secretary requirements. This has placed the public at a serious disadvantage when responding to this development application.

Numerous 'one liner' comments occur stating that the removal of ~50 ha of habitat is unlikely to result in a significant impact on threatened species. Essentially Umwelt claims that as adjoining habitats occur, the removal of this habitat is unlikely to place the local population at increased risk of extinction. No calculation of the percentage of the amount of the local habitat (i.e. within 5 km) of the study area proposed for removal are provided. Therefore no justification for the one liner comments occur. The Seven Part Tests need to be re-written for all species.

Social Impact

Please find attached a critique of the social impact assessment by Professor Patricia Gillard a social scientist. She finds the social assessment to be grossly inadequate.

4.15.4 Assessment of Costs and Benefits

The costs associated with the drop in property value has not been assessed or the compulsory acquisition of the approximately 30 houses within 500m of the sand mine open pits.

The mental health impacts of this sand mine on a community who have already faced the threat of coal seam gas and the contamination of their land and groundwater from the Williamstown RAAF base must also be considered.

This sand mine is obscenely close to local residents. The recommended Buffer Distances between Sand and Silica Mining and houses can be found in the documents below and are

far greater than 50m with most specifying 500m. Should this be taken into account it would remove the southern pit (closest to Cabbage Tree Road) from the project.

http://www.epa.wa.gov.au/EPADocLib/1840_GS3.pdf

http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0019/210196/Living-and-working-in-rural-areas-Ch6.pdf

<http://www.epa.vic.gov.au/~media/Publications/1518.pdf>

Groundwater Impact

Attached is an analysis of the Groundwater Study by Steven Pells of Pells Consulting a specialist firm that undertakes work in areas of civil, geotechnical and groundwater engineering.

They found that by removing the vegetation and digging a 'bowl', it will decrease evapotranspiration (water usage by the plants), and rainfall recharge will go up and that this would increase groundwater levels around the vicinity of the mine. This process was recently noted by the consultants at a site in Darwin, where groundwater levels came up 1 to 2 metres during excavation and caused problems for the construction process.

For the EIS, the proponent did a groundwater flow model, but it is not the right model. This is because evapotranspiration accounts for over 80% of the rainfall, so change to evapotranspiration is the major issue that will impact on groundwater quantities - not groundwater flow. In contrast, they simulated only groundwater flow and ignored changes to vegetation.

Consequently the "effects" of development on groundwater levels, based on their analysis, were considered to be negligible, however their modelling doesn't represent the key process.

They also have not addressed any interactions with the contamination plume from the airbase.

We recommend that the EIS should address the following issues:

1. If mining changes the groundwater regime (due to deforestation), what are the implications for the contamination plume.
2. there should be a plan for what the mining operation will do if groundwater levels rise above the base of the excavation – how will they deal with this? Will they pump the water out? Will it be contamination, and, if so, where will they pump it?

Should you wish to discuss any of the issues raised in this submission please contact me on the details provided below.

Kind Regards,

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