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Telephone Inquiries:  
A K STONE  
File No: 25-2010-7-1  
Parcel No: 44291  
Your Ref: 10-0133

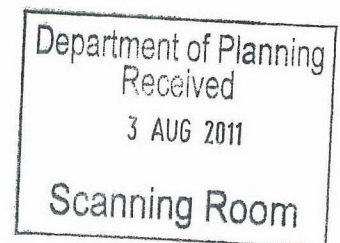
29 July, 2011

Department of Planning and Infrastructure

**Attention:** Belinda Scott

GPO Box 39

Sydney, NSW 2001



Dear Madam,

Re: **Proposed: Utility Installation - MP 10-0133 - Gas Storage Facility**  
**Property: LOT: - DP: 999999**  
**Miscellaneous PORT STEPHENS**

Reference is made to the Departments correspondence received by Council on 16 June 2011, in relation to the proposed Newcastle Gas Storage Facility (10-0133).

Council has assessed the adequacy of the 'Environmental Assessment for Newcastle Gas Storage Facility', dated May 2011 and prepared by Coffey on behalf of AGL Energy Limited, and in response to your notification under Clause 75H of the *Environmental Planning and Assessment Act 1979*, provide the following comments:

#### Town Planning Matters:

1. *Section 94 Contributions* - In addition to the standard conditions of consent that Council considers the Department shall impose upon the proposed development (surrounding construction and general operation of the facility), Council requires that the following condition be imposed upon any consent issued:

- a. Pursuant to section 80A(1) of the Environmental Planning and Assessment Act 1979, and the Port Stephens Section 94A Development Contributions Plan, a contribution of 1% of the cost of the development, as determined in accordance with clause 25J of the Environmental Planning and Assessment Regulation 2000, shall be paid to Council

The amount to be paid is to be determined in accordance with the provisions of the Port Stephens Section 94A Development Contributions Plan. The contribution is to be paid **prior to issue of the Construction Certificate or prior to issue of the Subdivision Certificate, whichever occurs first.**

A Quantity Surveyor's Detailed Cost Report setting out an estimate of the proposed cost of carrying out development in accordance with Schedule 2 of the Port Stephens Section 94A Development Contributions Plan must be



approved by Port Stephens Council **prior to issue of the Construction Certificate or prior to issue of the Subdivision Certificate whichever occurs first.**

**Engineering (Traffic) Matters:**

1. *Construction traffic Management Plan* - Council has no objection to the proposed development with regards to traffic matters provided that the issues identified within the submitted Traffic Study are implemented, these include:

- a. That a Construction Traffic Management Plan (CTMP) be put in place to manage the traffic generated during construction of the gas plant

Council considers that the Department should condition that the measures in the CTMP include:

- i. containing heavy vehicle movements to off-peak hours when traffic volumes are typically at a minimum;
- ii. ensuring heavy vehicles engaged in construction abide by the Australian Road Rules and RTA standards so that road safety is not compromised;
- iii. notifying the local community by means of public notice publications and advertisements on the progress of the Project and the scheduling of works so as to inform the local community of any additional vehicles added onto the local road network;
- iv. transporting oversized equipment and machinery in accordance with the RTA guidelines for oversized movements; and
- v. implementing appropriate signage to warn road users of the presence of construction vehicles as well as changes to the normal traffic conditions.

**Development Engineering Matters:** Council's Development Engineering Section have reviewed the information provided by the Department, and have no objection to the proposed development, subject to the inclusion of the following conditions of consent on any consent issued:

- 1. Full details of stormwater drainage shall be approved by an accredited certifier or Council **prior to issue of Construction Certificate.**
- 2. Submission of Works-As-Executed plans and report prepared and certified by a suitably qualified drainage engineer confirming all drainage works (volume, discharge, levels, location, etc) are built in accordance with conditions of consent and the approved plan. Minor variations in height can be certified providing they are clearly identified in the report and the engineer certifies that the overland flow paths are not altered, discharge rates are not increased, and no additional



negative effects are imparted on any dwellings or property. Minor variations can only be certified where it can be demonstrated that the ease of maintenance and monitoring of the system has not been negatively affected.

The documents shall be submitted to, and accepted by the Certifying Authority, **prior to issue of the Occupation Certificate.**

3. The stormwater system, including any water quality or quantity components, shall be maintained in perpetuity for the life of the development.
4. Separate approval is required to occupy, close or partially close the road reserve adjacent to the property under the Roads Act. The storage of materials, placement of toilets and rubbish skips within the road reserve is not permitted.
5. Provide water quality report that shows that the system for removal of nutrients and other pollutants meets the targets set out in Councils "Urban Stormwater and Rural Water Quality Management Plan" (see section 8). Details to be provide to the certifying authority **prior to issue of the Construction Certificate.**

#### **Environmental Health ( Wastewater) Matters:**

1. *Assessment comments* - Worley Parsons, consultants for AGL have investigated 3 options for sewer servicing of the facility (Report 401010-00648 – 401010-00648-WW-REP-002, February 2011), these being reticulated sewer, on-site treatment and disposal and tanker removal. Estimated combined dry weather flows for human and process water waste is approx 27kL per day with waste volumes increasing due to wet weather flows.

This figure could be viewed as a conservative value based on a staff numbers used in the calculations greater than actual. A trade waste volume of approx 26kL per month is expected.

The options of sewer and on-site treatment have been rejected by the consultant based on cost and the location being a HWC special area. The preferred option nominated by the consultant is tanker removal. Whilst Council is not the consent authority for the development the following comments are made;

- a. The preferred option is not supported by Council as it is contrary to the provisions of the Port Stephens Development Control Plan 2007 (PSC DCP, 2007). The use of tanker removal is not a sustainable method of managing wastes, the additional tanker movements creates a further impact on local roads and there are increased odour issues during the removal process.
- b. The proposed storage tank capacities are 100kL (human) and 40kL (process wastewater). The storage of large volumes of wastes can create septicity. Septicity can cause odour and corrosion problems creating downstream processing impacts for Hunter Water Corporation (HWC).

- c. The location being sited on the HWC Tomago sandbeds whilst an environmental constraint for consideration does not have to preclude the use of on-site treatment and disposal as a wastewater management solution. The site is on the extremity of the south western corner of the nominated sandbeds area. Treatment and disposal solutions area readily available to adequately manage pathogen, chemical and nutrient loadings likely resulting in minimal risk to the aquifer. Pathogen and nutrient fate modeling is sufficiently developed to determine impacts on groundwater. Notwithstanding this the use of on-site treatment and disposal would require a significant level of environmental, hydraulic and engineering investigation for assessment and concurrence by a number of government agencies. Council notes HWC correspondence of 27/5/2010 in respect to the Special Area comments with respect to location of a HWC extraction borefield.
2. *Section 68 Local Government Act* - Under section 68 of the Local Government Act, 1993 Council could be the consent authority for the any wastewater solution involving a waste treatment device or human waste storage facility. The ongoing operation of the human waste system would be subject to an approval to operate in accordance with S68/S68A of the Local Government Act, 1993. The ongoing operation of any trade waste system is not subject to S68 of the Local Government Act and so should be included in the facilities Environment Protection Licence regulated by the Office of Environment and Heritage. The Department is recommended to ensure appropriate conditions of consent are imposed in this regard.
3. *Conclusion* - The on-site treatment and disposal of the human waste component should be further considered as a sustainable solution. The management of the processed wastewater component by tanker removal to an appropriate facility for processing and disposal would be supported by Council as an appropriate solution due to the possible types of contaminants in the trade waste stream though if appropriate pre-treatment measures are implemented for the process wastewater stream it is possible for those wastes to be further treated through the on-site sewage management system for on-site disposal. The management of the trade waste stream (approx 1 tanker per month) by tanker removal to a suitable facility is deemed appropriate.

#### **Natural Resources (Ecology) Matters:**

1. *Bushfire* - The Main Report provided with the Environmental Assessment states in relation to Bushfire that *"These APZs will be maintained in accordance with Inner Protection Areas standards to ensure vegetation is kept at less than 0.05 m in height."* Council notes that this is not in line with Planning for Bushfire Protection whereby trees can be retained as long as there is canopy separation, and clumps of understorey vegetation can be retained as long as they do not provide a path for fire to the asset. The Department should ensure that APZs on site are amended so as to be aligned with Planning for Bushfire Protection.
2. *Water Supply* – It is recommended that provision and/or construction of water supply infrastructure be designed and/or carried out so as to ensure that impact to



vegetation on site is minimised. The Department is advised to impose a condition of consent to this effect.

3. *Site Suitability* - The lot supports a surprising diversity of vegetation communities and numerous threatened species. Therefore, the development needs to be constructed and managed carefully. If there are plans to expand the facility at any time in the future, Councils Natural Resources Section consider that this is an inappropriate site for the development. However, as it stands, and with the future provision of a plan to manage Koalas and habitat on site, and provision of an appropriate offset, the overall impacts of the proposal will be acceptable.
4. *General - Impacts to Protected and Threatened Species (Vegetation Removal)* - The proposal will impact upon matters protected by the EPBC Act and the Threatened Species Conservation Act. There will be clearing of 67 individual **Earp's Gum** (*Eucalyptus parramattensis subsp. decadens*) listed as Vulnerable federally and in NSW; impacts on a known population of **New Holland Mouse** (*Pseudomys novaehollandiae*) listed as Vulnerable federally; and impacts on **Koalas** which are listed as Vulnerable in NSW. Koala habitat impacts will need to be limited as per the Port Stephens Comprehensive Koala Plan of Management (PS-CKPoM).

Other listed species recorded on site include:

- Little Lorikeet
- Squirrel Glider
- Rufous Fantail & White-bellied Sea Eagle (Migratory Species listed on EPBC Act)

And bats

- Eastern False Pipistrelle
- Little Bent-wing Bat
- Eastern Freetail Bat
- Large-footed Myotis
- Greater Broad-nosed Bat

The diversity of vegetation communities present is noteworthy. Those communities which will be impacted as part of the proposal that are of high conservation significance are the following:

- Freshwater Wetlands EEC (just downslope from the storage facility footprint)
- Riverflat Eucalypt Forest EEC (described as Alluvial Tall Moist Forest in the report, but actually conforms to the EEC)
- Swamp Sclerophyll Forest EEC (several sections. Also **Preferred Koala Habitat**)
- Red-gum-Apple-Banksia Forest – not an EEC but a **unique** vegetation community and also **Preferred Koala Habitat**.

The Riverflat Eucalypt Forest EEC, containing Flooded Gum *Eucalyptus grandis* occurs along Old Punt Road and is mapped as Community 1. As was discussed on site with the ecologist (Gilbert) and AGL Environment Manager (Aaron Clifton) on 11<sup>th</sup> July, there should be directional drilling or boring alongside this community due to its high conservation significance. It is endangered, and there are only 3 small remnant patches of this *E. grandis* vegetation community in Port Stephens.

The Red-gum-Apple-Banksia Forest – this community has not been described before. It is not only a unique community, it contains *E. tereticornis* as a dominant tree, making it Preferred Koala Habitat. Along the pipeline easement, minimising removal of this vegetation community and conserving as many of the Koala feed trees as possible is essential. Furthermore, this is a requirement in order to adequately satisfy the performance criteria of the Port Stephens CKPoM, and therefore comply with SEPP14.

The 7 Part Tests for Earps Gum, Swamp Sclerophyll Forest and the Koala conclude no significant impact (and no requirement for a Species Impact Statement) based on the fact that other areas of the habitat on site will be retained. It is therefore essential that the habitat for Earps Gum, the Swamp Sclerophyll Forest and Koala Habitat are not impacted by future development proposals.

**Council's Natural Resources Section will not look favourably upon any future proposals that would impact - or impinge on buffers to - these sensitive areas occurring on the Tomago Aluminium Company (TAC) site. As such, Council considers it necessary for part of the offset for this proposal to include securing the Swamp Sclerophyll Forest EEC and Earps Gum habitat (Tomago Sand Swamp Woodland) on TAC land.**

The number of hollow trees that will be lost due to the proposal is noteworthy – "between 300 and 400 hollow bearing trees will be removed as part of the proposed development" (Ecobiological, 2011).

5. Access Road - Preferred Koala Habitat was mapped by the consultants that had not been recorded until now, and that are of good quality. Of concern is that the proposed new road to be constructed will cut across this sensitive area and will impact on Preferred Koala Habitat, being Swamp Mahogany Forest / Swamp Sclerophyll Forest EEC. Approximately 1.09 hectares of this community is estimated by Ecobiological as being directly impacted. Much of the road will also remove Buffer to Preferred Koala Habitat and buffer to the EEC.

The Natural Resources Team find the details in 3.5.6: *Alternatives for the Access Road and Utility Corridor* on page 3-11 of the Main Report inaccurate.

The justifications put forward for not being able to: 1) co-locate this road with the gas pipeline; or 2) move the road slightly to the north to skirt around the Koala Habitat and EEC, are that the access road was designed within the constraints of the criteria: "physical location, hazard management, environmental impacts, engineering aspects and future site development. In other words, this route has been selected as it best balances the needs of all of these issues. There was only a limited space to work within, and this is the land offered to us by way of an access easement." "The intersection of the access road has been designed to accommodate the existing Ausgrid easement that runs within the site." (pers comm. Arianna Henty 1/7/11 & 29/6/11).

However, Council consider that a preferable alternative option would be for AGL could negotiate a small modification with TAC to **relocate the proposed road so it transverses around the north of the EEC**. Council considers that this amendment **would make very**



**little practical difference to the proposal but would make an important environmental difference.**

6. Tomago Aluminium Site - Council's Natural Resources Section submit that the remaining property comprising the Tomago Aluminium site should be substantially conserved by Tomago Aluminium Company. The property is essentially an environmental barrier purchased principally for this reason before the smelter was constructed. Any future development should unquestionably conserve in perpetuity the important remnant of EEC (labelled "12" on Figure 7 of ecobiological report). The Earps Gum habitat labelled "13" should similarly be conserved in perpetuity.

As such, and as outlined elsewhere within comments provided by Council's Natural Resource Section, Council recommends that for part of the offset for this proposal to include securing the Swamp Sclerophyll Forest EEC and Earps Gum habitat (Tomago Sand Swamp Woodland) on TAC land.

7. *Main Building* - The main buildings making up the gas storage facility will not have a footprint directly impacting on EEC or Preferred Koala Habitat, however they will impinge on the Buffer to the Preferred Habitat (2.9ha?). A good deal of **Supplementary Koala Habitat** will be impacted, and even more importantly there will be substantial loss of mapped **Buffers and Linking Areas** (see Figure 12 p. 80 Ecobiological report).

A 25m APZ and a 31m APZ around the processing plant and storage tank, is proposed for bushfire mitigation. Without a clearer picture/ plan of how this relates to the Swamp Mahogany Forest in the far eastern end of the development area, it is thought the APZ would likely impact or degrade the Swamp Mahogany forest.

In review of the response to the CKPoM Performance Criteria (p. 109-111 Ecobiological report), the arguments posed are a little unclear in part (b), (d) and (e). The Natural Resources Team do not believe the development has been designed to satisfy part (c) "*Minimise removal of any individuals of preferred Koala food trees, where they occur on the development site*". Particularly the latter part of the response – these hectares can be reduced by slight modifications, plus the argument in relation to 15% is not accepted, as 15% canopy cover does not apply to the CKPoM.

The 7 Part Test for the Koala states that the action proposed is inconsistent with the Recovery Plan for the Koala and "*the number of records of this species in the study area and in adjacent lands **indicates that the study forms part of a well used Koala habitat area and movement corridor.***" Approximately 23 hectares is going to be removed. If there was going to be more threatened species habitat impacted in the future, the Natural Resources Team would likely consider the future development to be a significant impact and a Species Impact Statement would be required. As impacts are cumulative, it is concerning when piecemeal development proposals are put forward for a large, sensitive, vegetated area such as is present around the Tomago Aluminium smelter.

Offsetting the loss is considered a requirement of the proposal going ahead.

Securing appropriate offset/s (BioBanking assessment methodology), developing a Vegetation Management Plan and providing a bond to ensure restoration of the offset area in accordance with the VMP, are considered to be critical to this development proceeding. A biodiversity offset assessment report should be provided and should demonstrate that the development proposal and its offsets meet the 'improve or maintain' test for biodiversity values.

8. *Conclusion* – Council's Natural Resources Section note that the subject site is inappropriate for the development and any future plans to expand the facility should not be supported. Furthermore, any future development, by any proponent, should be required to conserve in perpetuity the important remnant of EEC (labelled "12" on Figure 7 of ecobiological report).

Council recommends that the Department ensure the application of appropriate consent conditions in relation to the construction of water supply infrastructure to limit vegetation disturbance and ensure rehabilitation.

9. *Conditions* - Council's Natural Resources Section recommend the following conditions be imposed upon any consent issued:
  - a. Contract a botanist to undertake future additional targeted surveys in the appropriate season for *Asperula asthenes*, *Galium australe*, *Lindernia alsinoides*, *Persicaria elatior*, *Zannichellia palustris* and *Maundia triglochinosoides* in areas of suitable habitat within the final development footprint prior to construction. Translocation or propagating and replanting of appropriate offset plants at an acceptable location will be required prior to occupation certificate, should any threatened plants be identified within the development areas.
  - b. For the development site, a Vegetation Management Plan and Weed Management Plan shall be prepared detailing at least 5 years of vegetation rehabilitation, weed management and maintenance across the AGL development site and any areas disturbed during development. These are to be prepared in accordance with section 5.32 and 5.33 of the Ecobiological report prior to issue of the construction certificate.
  - c. Pre-clearing surveys, soft-felling, fauna translocation and nest-box installation are to be undertaken across the development area in strict accordance with the methodologies described in section 5.2 of Ecobiological report dated May 2011. A report from the overseeing ecologist/s shall be submitted describing how and when these measures were undertaken, prior to issue of the occupation certificate.
  - d. The pipeline route shall avoid impact on Vegetation Community 1 and 12 (EECs Alluvial Tall Moist Forest and Swamp Mahogany-Paperbark Forest) in the vicinity of Old Punt Road north by having all pipeline laying done by Horizontal Directional Drilling or Horizontal Boring.



- e. The pipeline route shall avoid impact on Vegetation Community 10 and 12 (EECs Saltmarsh and Swamp Mahogany-Paperbark Forest) in the section north of the Hunter River by having all pipeline laying done by Horizontal Directional Drilling or Horizontal Boring.
- f. The clearing for the gas pipeline and alternative access road along the northern edge of Lot 5 DP1125747 shall be limited to 20m, and at the edge of the clearing there shall be protection of hollow-bearing and significant trees. Avoid severing roots or impacting roots of such trees.
- g. Take all measures possible to avoid removal of hollow-bearing trees in the pipeline area, roads, asset protection zone area and adjacent to other development areas.
- h. Replant at least 100 *E. parramattensis subsp. decadens* in an acceptable biodiversity offset location and replant at least 50 Swamp Mahoganies on site to replace trees and koala habitat removed. The trees shall be replanted to the satisfaction of Council and prior to the release of the Occupation Certificate. The replacement trees are to be maintained to maturity through use of watering and mulch where required to achieve natural height.
- i. Secure an appropriate offset/s (in accordance with OEH's 'BioBanking Assessment Methodology' and 'Principles for the Use of Biodiversity Offset in NSW'). Develop a Vegetation Management Plan and provide a bond (\$X00,000) to ensure restoration of the offset area prior to issue of the construction certificate.

*\* Note if the above condition is imposed it is considered that the Department, as determining Authority, should nominate the appropriate figure for the bond payable.*

- j. A Vegetation Management Plan for the Offset area shall be prepared to Council's satisfaction, and a \$X00,000 bond lodged to ensure restoration in accordance with the VMP. The VMP is to set out designated zones and implementation stages, with a detailed schedule of works and costing estimate for each zone. This is required prior to issue of the Construction Certificate. The schedule of works should describe bush regeneration work on the site commencing from the issue of the construction certificate for at least a five year period. The bond will provide security of \$X00,000 for the on-ground works to achieve weed management and restoration of the offset area.

*\* Note if the above condition is imposed it is considered that the Department, as determining Authority, should nominate the appropriate figure for the bond payable.*

- k. 250 mixed-sized nest boxes shall be attached to trees on Lot 105 DP 1125747 or a neighbouring property where they will not be removed in the future. They are to be positioned at a suitable height off the ground. The boxes shall be installed and certified by a fauna ecologist. A copy of the certification must be submitted to the Principle Certifying Authority (PCA) prior to issue of the Construction Certificate.
- l. Weeds present on site include Lacy Ragweed, Pampas Grass, African Lovegrass, Coastal Morning Glory, Fireweed, Alligator Weed, Bitou Bush, Lantana, Spiny Rush, Patersons Curse, Crofton Weed, Red Natal Grass and Whiskey Grass. During the construction phase development must provide:
  - i. Management and ongoing suppression of weeds by professional bush regenerators as per the Vegetation or Weed Management plan;
  - ii. Controls to prevent the spread of weeds on machinery including a disposal and wash down area;
  - iii. An area for storage of weed-contaminated spoil that is separate from clean material;
  - iv. Certification that any soil, mulch and plants brought onto the site is free of weeds and weed seeds; and
  - v. For all sites, including the roadside pipeline work sites, site inductions which include directives on weed management practices are required for all personnel and visitors. Signs must be placed at the site entry. Written confirmation that the above has been undertaken must be submitted to the Principal Certifying Authority prior to issue of the Occupation Certificate.
- m. Development shall be prohibited in the future within all areas identified as Preferred or Supplementary Koala Habitat or Habitat Linking Areas or Buffers except where the current approved development footprint occurs. Within these areas, there will be no clearing or trenching for services, importation of fill, stockpiling, storage of any materials, mixing of materials, disposal of liquids, vehicle/machinery parking, positioning of offices or sheds, nor planting of non-indigenous vegetation without prior written agreement from Council.
- n. Rabbit and fox control must be undertaken across the subject property prior to issue of occupation certificate, in co-ordination with NPWS/OEH and HCRCMA.
- o. Minimise the threat posed to koalas from traffic by restricting motor vehicle speeds on new roads associated with the development to 40 kph or less and by installing koala crossing signage on roads, with local fauna rescue service numbers visible.



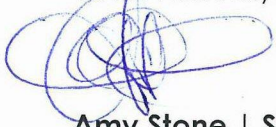
- p. Landscaping and associated plantings onsite must include koala feed tree species. Koala feed trees include *Eucalyptus robusta*, *Eucalyptus tereticornis*, *Eucalyptus parramattensis* subsp. *decadens*, and *Melaleuca quinquenervia*. Selection of species must be appropriate for the vegetation existing or previously existing onsite.
- q. Lighting associated with the development and access roads shall be limited to the minimal level to reduce any adverse effects upon behaviour of light-sensitive fauna.
- r. Any fencing associated with the development should not compromise the potential for safe movement of koalas across the site. The preferred option for minimising restrictions to safe koala movement is that there be no fencing, however suitable fencing may include:
  - i. fences where the bottom of the fence is a minimum of 200 mm above ground level that would allow koalas to move underneath;
  - ii. fences that facilitate easy climbing by koalas; for example, solid style fences with timber posts on both sides at regular intervals of approximately 20m; or
  - iii. open post and rail or post and wire (definitely not barbed wire on the bottom strand).
- s. There shall be no future development in breach of any Vegetation Management Plan, Weed Management Plan, Koala Management Plan, or Habitat Management Plan developed for the site.

## Conclusion –

Thank you for the opportunity to comment upon the proposed 'Newcastle Gas Storage Facility (10\_0133)'. The above comments and recommendations are provided in response to the details and information submitted to Council and should be taken into consideration during both the determination and development of the proposed works. It is requested that Council be provided confirmation in writing that the above recommendations will be included in any approval granted.

Should you require any further information regarding this matter, please contact Amy Stone of Council's Development and Building Section, on (02) 49 800 369.

Yours faithfully



**Amy Stone | Senior Development Planner | Port Stephens Council**  
**P (02) 49800 369 (9.00am – 12.00 noon)**  
**Email: [amy.stone@portstephens.nsw.gov.au](mailto:amy.stone@portstephens.nsw.gov.au)**