



Tuesday 3 December 2013

To: Sam Haddad
Director General
Department of Planning & Infrastructure

From: Tweed Shire Council

Subject: Greenhouse Gas and Energy Management - Part 3A
Approval No 08_0068

Reference: Eviron Road Quarry and Landfill Project

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Under Tweed Shire Councils Part 3A (Application no 08_0068) the following conditions need to be met prior to commencement of works. These include Schedule 3 (12) requiring;

The Proponent shall implement all reasonable and feasible measures to minimise:

- (a) Energy use from landfill operations; and
- (b) Greenhouse gas emissions from landfill operations

To the satisfaction of the Director General.

Schedule 3(13) also requires that:

The proponent shall prepare and implement a Greenhouse Gas Abatement investigation Report to the satisfaction of the Director General. The report must:

- (a) Be submitted to the Director General by 31 December; and
- (b) Examine opportunities to flare or reuse greenhouse gas emissions from landfilling operations.

Schedule 3(14) requires that;

The proponent shall prepare and implement an Energy Saving Action Plan for the project to the satisfaction of the Director General. This plan must:

- (a) Be prepared in accordance with the Guidelines for Energy Saving Action Plans (DEUS 2005, or its latest version);
- (b) Be submitted to the Director General by 31 December 2013; and
- (c) Include a program to monitor the effectiveness of measures to reduce energy on site.

The attached plan shows how Council currently manage landfill gas emissions and outlines proposed energy management strategies to be used during the construction and operation of the new landfill and quarry. A statement as to how greenhouse gas abatement will be managed at the landfill once the new site has been constructed and is in operation is also included.

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Schedule 3(12)(a)

The current landfill is equipped with a landfill gas management system with landfill gas being used to generate power. This power is fed back into the grid.

All power, fuel and landfill gas emissions at the current site are monitored and reported back to the Clean Energy Regulator (CER) under the National Greenhouse and Energy Reporting scheme. The emissions profile at the landfill has been estimated previously by accredited firm Mike Richie and Associates, and it has been determined that Council's waste emissions sit well below the reporting threshold of 25,000 t of CO₂e, however Council do report voluntarily to the CER.

The new quarry and landfill when constructed will be incorporated into our current reporting and it will be in Council's interest to ensure emissions are minimised. Council will do this by ensuring that;

- Installing equipment that is appropriately rated to ensure energy efficiency whether based on fuel or energy consumption,
- Continuing to pursue opportunities to minimise and manage waste by providing services that redirect waste away from landfill and by removing organic material from the waste stream,
- If viable to do so install landfill gas capture equipment at the site to flare or harvest landfill gas for power generation,
- Incorporate solar (photovoltaic) power into our operations to provide renewable energy in the office areas where possible.

This will ensure the site is operated in the most energy efficient manner.

Schedule 3(13)

As stated above Council is already signed up to and reporting to the Clean Energy Regulator on the emissions of Council with reporting including the fuel and power used at the current landfill, as well as the quantity of gas captured that is converted into green energy. The new site will benefit from being built as a best practice landfill and from having organics and garden waste diverted away from landfill. Council will continue to reduce the overall quantity of waste being disposed of into landfill through initiatives such as;

- The establishment of front end collection points for hazardous waste and e-waste,
- On site operation of a salvage operator to remove reusable and recoverable items from the waste stream,
- Resource recovery for items such as ferrous and non-ferrous metals, wood, brick and tile and fill,
- Infrastructure to allow the capture and management of landfill gases, and
- By educating our customers to allow them to help us to divert waste from landfill.

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Council is in the process of adopting a new Integrated Waste Strategy. One of the key pillars of the new strategy involves the introduction of a full household organics and garden waste collection service based on the best practice model of service as proposed by the NSW State Government, that is, with the weekly organics service and a fortnightly residual waste and recycling services. This will further limit the disposal of organic material into landfill. Also contained in the Integrated Waste Strategy is investigation on providing a front end sorting capacity at the landfill with the intent of capturing additional material that been placed in the residual bin. This recommendation involved running the commercial waste stream through this sorting facility if viable to do so to further remove material for this waste stream.

Landfill gas management will be incorporated into the design of the proposed landfill.

Schedule 3(14)

With this being a new site Council does not have the ability to implement an Energy Saving Management Plan (ESMP). Council does not have a current base load at the site as the site is a green field site. As such no ESMP is proposed at this stage and Council is seeking to have our approval amended to remove Schedule 3(14) as they are not applicable.

As stated previously, energy consumption will be a key consideration in the design and procurement phases of the project. These will be used as key criteria when tendering the project and the use of gas management options that produce power will be incorporated once viable.

Should you require any further information regarding this letter, please contact me on 02 6670 2659.

Yours faithfully

A handwritten signature in blue ink, appearing to read "Rod Dawson".

Rod Dawson
Coordinator Waste Management

