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David Kitto
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear David

**Re: Section 75W Modification to Mt Owen Complex Development Consent DA14-1-2004**

Xstrata Mt Owen (XMO) proposes to modify the Mt Owen Complex development consent (DA14-1-2004) under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to allow for the construction and operation of a rail re-fuelling facility to service the future Xstrata Rail (X-Rail) trains. Mt Owen Complex is an open cut coal mine located at Hebden in the Hunter Valley of NSW, approximately 20 kilometres north-west of Singleton. The location of Mt Owen Complex is shown on **Figure 1.**

The proposed rail re-fuelling facility will be located on the approved Mt Owen Rail Spur approximately 50 metres from the existing coal loading facilities. The proposed rail re-fuelling facility will not require additional rail track to be constructed. The proposed rail re-fuelling facility will include the following:

- a 100 kilolitre (kL) self bunded diesel storage tank;
- oil storage;
- sanding facilities;
- an oily water separator;
- a storage shed;
- maintenance gantry;
- water storage tank;
- an access road to the proposed re-fuelling facility; and
- ancillary mechanical and electrical equipment such as pumps and lighting.

The location of the proposed re-fuelling facility in relation to the existing Mt Owen Complex operations is illustrated on **Figure 2**.

## 1. Background

The Mt Owen Complex consists of Mt Owen, Ravensworth East and Glendell open cut coal mines. The Mt Owen Complex is managed by Thiess Pty Ltd on behalf of Xstrata Coal New South Wales (XCN). The Mt Owen Complex has development approval to process up to 15 million tonnes of run of mine coal (ROM) per annum. Product coal from the Mt Owen Complex is transported by rail to

Newcastle or in small volumes to domestic power stations via conveyor. The existing Mt Owen Rail Spur connects to the Main Northern Railway and provides access for trains for loading of product coal. Mt Owen Complex undertakes rail movements in accordance with schedule 3, condition 9 of DA14-1-2004:

> 'the Applicant shall ensure that the Mt Owen rail loading facility and rail spur do not transport more than 15 million tonnes of ROM coal a year.'

The number of trains is limited by means of the total allowable ROM production under DA14-1-2004. Mt Owen Complex currently utilises an average of approximately 3 trains per day. The trains which transport product coal from the Mt Owen Complex are diverted from the Main Northern Railway onto the Mt Owen Complex rail spur. As the trains approach the loop, they enter on the western side of the loop and traverse clockwise during the loading process. Each wagon takes approximately two minutes to load with the average loading rate approximately 4700 tonnes per hour. Once trains are loaded, they travel southwards on the Mt Owen Complex rail spur and then rejoin the Main Northern Railway where they travel to Port Waratah at Newcastle for the coal to be stockpiled prior to loading onto ships for export. The existing rail loading facility operates 24 hours per day, 7 days per week.

## 2. Proposed Approvals Path

XMO proposes to modify the Mt Owen Complex development consent DA14-1-2004 under Section 75W of the EP&A Act. Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) provides for the purposes of a modification the following development consents are taken to be approvals under Part 3A of the EP&A Act and Section 75W of the EP&A Act applies to any modification of such a consent:

> *"(a) a development consent granted by the Minister under section 100A or 101 of the Act before 1 July 1998,*
>
> *(b) a development consent granted by the Minister under State Environmental Planning Policy No 34—Major Employment-Generating Industrial Development,*
>
> *(c) a development consent granted by the Minister under Division 4 of Part 4 of the Act (relating to State significant development) before 1 August 2005 or under clause 89 of Schedule 6 to the Act,*
>
> *(d) a development consent granted by the Land and Environment Court, if the original consent authority was the Minister and the consent was of a kind referred to in paragraph (c)."*

DA14-1-2004 was granted by the Minister in 2004 under State Environmental Planning Policy No 34 – Major Employment-Generating Industrial Development. As a result Section 75W is available to the Minister for the modification of DA14-1-2004.

In addition to satisfying the above trigger for consideration of the proposed modification under Section 75W of the EP&A Act, it is our view that the proposed modification is likely to result in 'limited environmental consequence' beyond the current development consent (DA14-1-2004) as:

- the proposed rail re-fuelling facility is to be located within an area previously disturbed by the approved Mt Owen Rail Spur, does not require any additional rail track to be constructed and will not result in an increase of the disturbance footprint at the Mt Owen Complex;
- the proposed rail re-fuelling facility is to be located on land listed in the schedule of lands of DA14-1-2004;
- the proposed rail re-fuelling facility is consistent with the activities already undertaken in this area; and
- the proposed rail re-fuelling facility will not result in any changes to the current train movements at Mt Owen Complex.

Considering the above factors, it is our view that a modification to consent under Section 75W of the EP&A Act is the appropriate approval path for the proposed rail re-fuelling facility for the Mt Owen Complex. The Department of Planning (DoP) confirmed that Section 75W is the appropriate approval path by email on 30 June 2010.

# 3. Proposed Modifications

The proposed re-fuelling facility is required to provide for the planned X-Rail trains which will service the Hunter based Xstrata mining operations. The X-Rail trains will initially include three train sets which are planned to be completed in October 2010. The X-Rail trains will not be the sole source of transportation for product coal from the Mt Owen Complex. Until additional X-Rail trains are available, Pacific National will continue to transport coal to Port Waratah for the Mt Owen Coal Complex. The proposed rail re-fuelling facility will not result in any changes to the approved train movements or vehicle movements. It is expected that the initial X-Rail trains will account for approximately 25 per cent of the overall train movements from Mt Owen. If required, Pacific National trains may utilise the proposed re-fuelling facility.

The re-fuelling of the trains will occur immediately prior to the coal being loaded.

The proposed rail re-fuelling facility will be located on the existing Mt Owen Complex rail loop, refer to **Figure 2**. A conceptual layout of the proposed rail re-fuelling facility is illustrated on **Figure 3**.

The proposed rail re-fuelling facility encompasses approximately 0.5 hectares of land adjacent to the rail loop. The area has been previously disturbed by activities approved under DA14-1-2004, including the existing Mt Owen Rail Spur and existing haul roads.

A detailed outlined of the proposed rail re-fuelling facility is provided below.

## 3.1 Fuel Storage and Supply

A 100 kilolitre self bunded above ground storage tank (fuel storage tank) will provide for the supply of diesel onsite. The tank will be approximately 12 metres by 2.5 metres.

The storage tank will be constructed and operated in accordance with Xstrata's Hydrocarbon Standard and the *Australian Standard AS 1940 – 2004 Storage of Flammable and Combustible Liquids*. A spill pit will be constructed at each of the three re-fuelling points alongside the rail line to capture any spillage of diesel during the re-fuelling process. A spill pit will also be located at the tank re-fill point to capture any spills which may occur while the fuel storage tank is re-filled. Each spill pit will drain to an oily water separator. The area surrounding the re-fuelling point will also be bunded by a 150 millimetre high bund, the area between the bunds will be sealed with concrete. Any spills within this area will be captured within the bund and transferred to the oily water separator.

The diesel will be transported to the Mt Owen Complex via road transportation. A typical fuel tanker is capable of transporting approximately 50 kilolitres. On average, approximately two fuel tankers per day will be required to provide fuel to the proposed rail re-fuelling facility. The fuel tankers will utilise the New England Highway and Hebden Road to access the Mt Owen Complex. The transportation routes are consistent with the approved activities under DA14-1-2004. It is expected that the vehicle movements will also be generally in accordance with the approved vehicle movements under DA14-1-2004.

## 3.2 Access Road

Access to the proposed rail re-fuelling facility will be via a new access road which will link to existing haul roads. The access road will be suitable for use by B-double vehicles. The proposed access road is shown on **Figure 2**. The access road will be located within areas which have been previously disturbed and will be constructed as per the civil engineering design specification.

## 3.3 Sanding Facilities

To provide the trains with the required level of traction, sand is applied to the tracks to assist with braking and the movement of the train. The proposed rail re-fuelling facility will include a tank for the

storage of sand. The tank will have an approximate volume of 40m$^3$. The sand will be transported to the Mt Owen Complex by road. It is expected that approximately 80m$^3$ would be required annually.

## 3.4 Maintenance Gantry

A maintenance gantry will be constructed as part of the proposed rail re-fuelling facility to provide access to trains for maintenance purposes such as windscreen cleaning and repair. The maintenance gantry will be approximately 60 metres long and will provide all weather access. The train signals will also be located at the end of the maintenance gantry. The maintenance gantry will be approximately 6 metres high and will be constructed out of steel and green Colorbond.

## 3.5 Ancillary Facilities

Ancillary facilities which will form part of the proposed rail re-fuelling facility include oil storage, an oily water separator, storage shed and water tank.

The oil storage tank will be utilised to store engine oil for train maintenance. The oil storage tank will have a capacity of approximately 5000 litres. The oil storage tank will be bunded to capture any spills. Any water or spills captured within the bunding will be treated by the oil water separator.

The oil water separator will be located to the west of the proposed rail re-fuelling facility and will treat any water or spills captured within the spill pits and bunded areas described above. The treated water from the oil water separator will be stored in Environmental Control Dam (ECD) for use in the Mt Owen Complex mine water management system.

The proposed storage shed will be approximately 6 metres by 6 metres. The ancillary facilities will also include a 10000 litre water tank. The water tank will be supplied using existing water tankers at the Mt Owen Complex. The stored water will be utilised for train maintenance and to supply the toilet and wash system onboard the trains.

Lighting will be constructed and operated at the facility to provide a safe working environment. All lighting will comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.*

## 3.6 Construction

The construction of the proposed rail re-fuelling facility will be undertaken in a timeframe of up to 16 weeks. Construction will be undertaken between 7.00 am and 7.00 pm on weekdays and weekends (if required). The construction will involve the use of machinery such as dozers, small trucks, small excavators and cranes.

The construction process will involve site preparation works prior to the installation of the infrastructure. The site preparation works will include:

- the clearance of vegetation;
- cut and fill of the site area.

It is expected that excavation of up to 0.8 metres will be required in some areas to establish the pier foundations for the proposed rail re-fuelling facility.

The construction process will also include the installation of drainage and power infrastructure, a walkway over the rail line and the other facility components outlined above. It is expected that the proposed rail re-fuelling facility will be commissioned within 16 weeks of the commencement of construction.

# 4. Environmental Impact Assessment

XMO has engaged Umwelt (Australia) Pty Ltd (Umwelt) to prepare an environmental assessment for the proposed rail re-fuelling facility. The results of the environmental assessment are provided below.

## 4.1 Ecology

An ecological assessment of the proposed rail re-fuelling facility has been undertaken as part of this environmental assessment. The objectives of the ecological assessment were to:

- record the flora and fauna species diversity, vegetation communities and fauna habitats occurring within the proposed rail re-fuelling facility area;
- identify any threatened species, endangered populations or threatened ecological communities (TECs) listed under the *Threatened Species Conservation Act 1995* (TSC Act), *Fisheries Management Act 1994* (FM Act) or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), that occur or have the potential to occur within the proposed rail re-fuelling facility area;
- assess the potential impacts of the proposed rail re-fuelling facility on threatened species, populations and TECs in accordance with the requirements of the EP&A Act and the EPBC Act;
- develop impact mitigation measures, where necessary, to avoid or reduce any potential significant impacts of the proposed rail re-fuelling facility on ecological values.

For the purpose of this ecological assessment, it was assumed that the entire 0.5 hectare proposed rail re-fuelling facility area would be completely disturbed.

A stratified meandering transect was conducted throughout the assessment area by a qualified ecologist on 14 May 2010. The aim of the survey was to assess potential impacts on threatened species, endangered populations, threatened ecological communities (TECs) and their potential habitat known, or with potential, to occur in the assessment area.

### 4.1.1 Results

The assessment area has been previously disturbed by rail and road construction and railway maintenance, and supports highly disturbed vegetation and habitat. The vegetation within the area comprised a mix of pasture grasses, including some native species. No threatened species, endangered populations, TECs or their potential habitats were recorded in the assessment area.

There will be no significant impacts on threatened species, endangered populations, TECs or their potential habitats as a result of the proposed rail re-fuelling facility at Mount Owen Complex.

Sediment and erosion controls will be implemented prior to construction to reduce the impact to the water quality in the ECD. No further mitigation or offsets are recommended.

## 4.2 Aboriginal Cultural Heritage

The Mt Owen Complex Rail Spur has been the subject of a previous archaeological assessment conducted by ERM Mitchell McCotter Pty Limited in 1995 for the Mount Owen Rail Project Statement of Environmental Effects. This assessment identified two sites, both artefact scatters. These sites are not located within the proposed rail re-fuelling facility area.

A search of the Department of Environment, Climate Change and Water (DECCW) Aboriginal Heritage Information Management System (AHIMS) database was conducted on 26 May 2010 over an area of one kilometre by one kilometre (MGA E320165-3201165 N6412660-6413660) surrounding the proposed rail re-fuelling facility. No registered sites were present within the proposed rail re-fuelling facility area.

A site inspection of the proposed rail re-fuelling facility area was undertaken by a qualified archaeologist on 28 May 2010. The majority of the proposed rail re-fuelling facility area was heavily grassed with the exception of an existing vehicle track exposure within which sub-surface materials were exposed. Visible soils within the proposed rail re-fuelling facility area consisted of mid-dark grey brown clays with inclusions of chitter material and fractured overburden rock. It is difficult to determine whether the exposed soils represent a former natural surface over which imported material has been distributed as colluvium from the road or whether the soil is entirely imported. If there are any in-situ soils remaining, based on the soil composition and colour it is likely that they represent former waterlogged areas.

Due to the very high level of disturbance and modification of the proposed rail re-fuelling facility area, it is not possible to determine the original landform or the range of resources that may have been available. Based on topographic mapping, it is likely that the proposed rail re-fuelling facility area was located on a spur or level slope that may have been associated with minor drainage lines but was approximately 100 metres from the main channel of Swamp Creek.

There were no Aboriginal objects identified within the site of the proposed rail re-fuelling facility during the inspection on 28 May 2010. Based on the highly modified nature of the proposed rail re-fuelling facility area, it is assessed as having low archaeological potential as disturbance is likely to have redistributed artefacts (if any were present) from their deposited locations, resulting in site disturbance or destruction. Consequently, there is a low likelihood that construction of the proposed rail refuelling facility will result in impacts to Aboriginal objects.

## 4.3 Surface Water

The proposed rail re-fuelling facility will be located within the Mt Owen Complex mine water management system. Water within the mine water management system is captured within dams and utilised onsite. As outlined in **Section 3.1**, the re-fuelling points at the proposed rail re-fuelling facility will be located within spill pits or will be bunded. Any water or spills captured within the spill pits or the bunded areas will be treated by the proposed oil water separator prior to being stored in ECD. Water from ECD is re-used within the Mine Water Management System. The operation of the proposed rail re-fuelling facility is expected to have minimal impact on surface water.

Prior to site disturbance erosion and sediment controls will be established and approved by the Mt Owen Complex Health, Safety, Environment and Community (HSEC) Manager in accordance with *Managing Urban Stormwater – Soils and Construction* (Landcom, 2001) and the Mt Owen Coal Complex Erosion and Sediment Control Plan. Sediment and erosion control measures during construction will include:

- silt fences;
- applying water to earthworks areas and stockpiles where necessary to minimise wind blown dust; and
- minimising disturbed areas where possible.

Following the implementation of these controls, the construction of the proposed rail re-fuelling facility is expected to have minimal impact on surface water.

## 4.4 Noise

The proposed rail re-fuelling facility will result in only a minor change to the existing operations at the Mt Owen Complex. As no additional stopping of trains will be required the operation of the proposed rail re-fuelling facility is not expected to generate noise levels which would result in any variation in the noise levels which currently occur as a result of the rail loading activities. Mt Owen Complex will continue to operate in accordance with the noise criteria outlined in schedule 4, condition 2 of DA14-1-2004. Noise generated by the Mt Owen Complex operations, including the rail spur is monitored in accordance with the Mt Owen Coal Complex Noise Monitoring Program.

It is expected that some noise will be generated by the construction of the proposed rail re-fuelling facility. The nearest private residence to the Mt Owen Complex is approximately 4 kilometres to the

east. The existing noise environment is affected by the approved mining operations at the Mt Owen Complex. Given the existing noise environment and the distance to the nearest private residence, it is expected that construction noise will be inaudible at all sensitive receptors.

## 4.5 Air Quality

The operation of the proposed rail re-fuelling facility is not expected to generate additional levels of dust. Mt Owen Complex will continue to operate in accordance with the air quality criteria outlined in schedule 4, condition 21 of DA14-1-2004. Dust generated by the Mt Owen Complex operations including the rail spur is monitored in accordance with the Mt Owen Coal Complex Air Quality Monitoring Program.

Construction activities may generate dust as a result of cut and fill activities and the transportation of equipment on existing haul roads. To minimise the level of dust generated during the construction of the proposed rail re-fuelling facility, the following mitigation measures will be undertaken:

- minimise areas to be disturbed by construction activities;
- watering of road surfaces and excavation areas with water carts, where required; and
- prompt rehabilitation of exposed surfaces following the completion of the construction activities.

Dust generated by the construction activities will be monitored in accordance with the Mt Owen Coal Complex Air Quality Monitoring Program.

## 4.6 Traffic

The proposed rail re-fuelling facility will require the transportation of diesel. The existing route of the New England Highway and Hebden Road will be utilised by the vehicles accessing the proposed rail re-fuelling facility.

As outlined in **Section 3.1**, it is expected that on average, approximately two fuel tankers a day will be required to provide fuel to the proposed rail re-fuelling facility. The Environmental Impact Statement prepared for the Mt Owen Operations in 2003 (2003 EIS) outlined the existing traffic volumes for the New England Highway and Hebden Road. The 2003 EIS outlined that approximately 8 heavy vehicles entered the Mt Owen Complex between 6:30 am and 7.00 pm and 4 heavy vehicles entered the Mt Owen Complex between 6:30 pm and 7.00 am during the week prior to DA14-1-2004 being granted. These numbers reduced to 4 heavy vehicles between 6:30 am and 7.00 pm and 4 heavy vehicles between 6:30 pm and 7.00 am on the weekends. The 2003 EIS concluded that the Mt Owen Complex operations would not significantly impact on the existing traffic movements.

The additional heavy vehicle movements per week required for the fuel delivery is not likely to impact on the existing traffic movements along the New England Highway and Hebden Road. It is expected that the traffic movements will be consistent with the existing traffic movements generated by the Mt Owen Complex operations.

## 4.7 Visual and Lighting

The proposed rail re-fuelling facility will be located adjacent to the existing coal loading and ROM facilities. The 2003 EIS assessed the potential visual impact of the ROM facility from viewing points to the west on New England Highway and to the east on Falbrook Road. The assessment concluded that the ROM facility would be totally obscured from view from the New England Highway by the Ravensworth East overburden dump and from Falbrook Road by the West Dump overburden emplacement area. The proposed rail re-fuelling facility will not be visible from any public view points within the area.

It is expected that the lighting which will be operated at the facility will not be visible from any public view points in the area.

To minimise the potential visual impact on site, the gantry and storage shed will be constructed using green colorbond which is consistent with other facilities onsite.

### 4.8 Hydrocarbon and Waste Management

As outlined in **Section 3.1**, a number of hydrocarbon and waste management measures will be implemented to minimise the potential impact of the proposed rail re-fuelling facility, these measures include:

- the use of a self bunding above ground storage tank for the storage of diesel fuel;
- the installation of an oily water separator which will drain treated water to the ECD for re-use in the Mine Water Management System;
- spill pits at each re-fuelling point which will drain to an oily water separator and
- a spill pit at the tanker fuel loading point which will drain to an oily water separator.

All fuel and oil storage will be managed in accordance with the requirements set out in the Xstrata Hydrocarbon Standard, and the *Australian Standard AS1940 – 2004 Storage of Flammable and Combustible Liquids.*

### 4.9 Decommissioning and Rehabilitation

The proposed rail re-fuelling facility will be decommissioned and rehabilitated as part of the overall mine closure process. The decommissioning and rehabilitation of the area will be undertaken in accordance with the Mt Owen Complex Landscape Management Plan.

## 5. Justification and Benefits

As outlined above, the environmental impacts of the proposed rail re-fuelling facility are expected to be minimal. The proposed rail re-fuelling facility will provide an important service to the planned X-Rail trains. Alternatives to the proposed rail re-fuelling facility considered included mobile re-fuelling and an offsite re-fuelling location, however both these options were considered to be impractical.

The primary benefits of the proposed rail re-fuelling facility are:

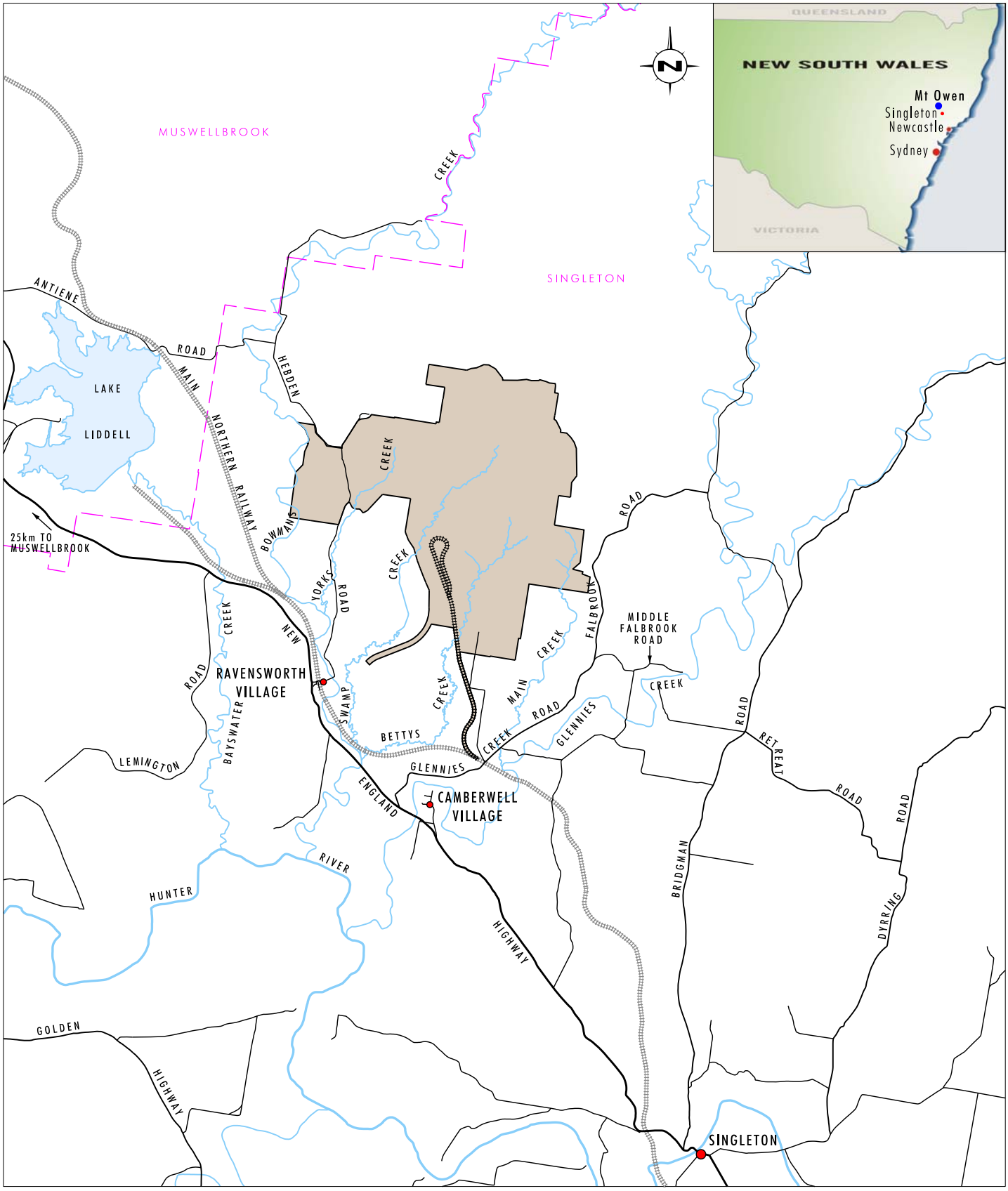
- locating the proposed rail re-fuelling facility in an area which has been previously disturbed and which would result in minimal environmental impact;
- locating the proposed rail re-fuelling facility where existing rail track and loading facilities provide for easily obtained access for re-fuelling; and
- providing for optimum efficiency by re-fuelling during coal loading.

Given that the proposed rail re-fuelling facility involves limited environmental consequences beyond the current development consent DA14-1-2004, we seek a modification to DA14-1-2004 under Section 75W of the EP&A Act to allow for the proposed activities outlined in this letter.

Your earliest consideration of this matter would be greatly appreciated. If you would like any further information, please don't hesitate to contact either myself or Allison Sharp at Umwelt on (02) 4950 5322.

Yours faithfully

Michelle Kirkman
Associate




Source: LPI NSW, 2000

0 1 2 4 8km
1:150 000

## Legend

- Mt Owen Development Consent Area
- Road
- Rail
- River / Creek
- Shire Boundary

FIGURE 1

**Locality Map**


Source: Mt Owen 2010

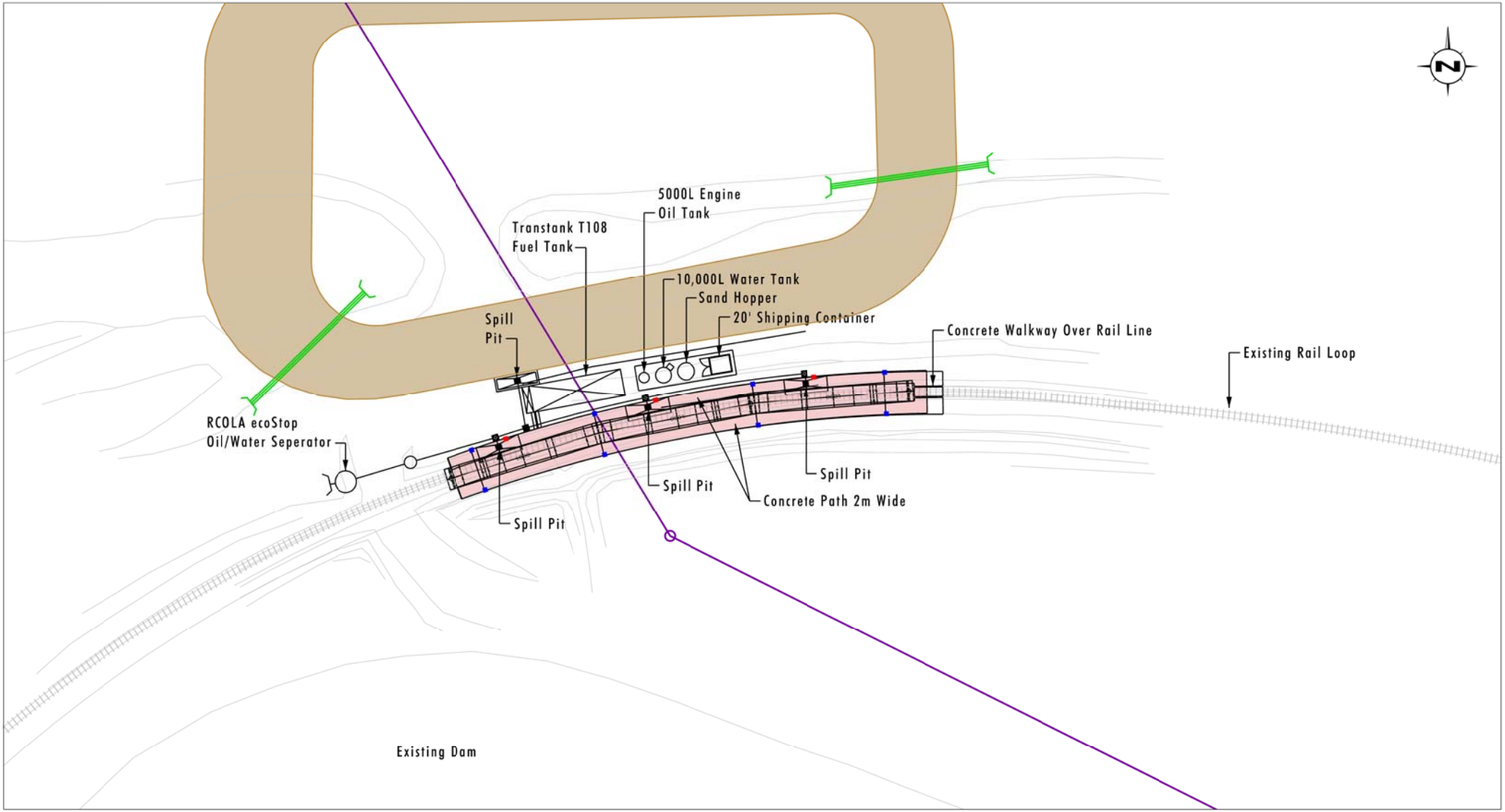
0 25 50 100m
1:2000

**Legend**

- Refuelling Station
- Proposed Access Road
- Pipe Culvert
- Existing Power Line

FIGURE 2

**Location of Proposed Rail Refueling Facility**




Source: Mt Owen 2010 and Google Earth 2010

0 10 20 40m
1:750

## Legend

- Refuelling Station
- Proposed Access Road
- Pipe Culvert
- Existing Power Line
- Fuel Fill Point
- Sanding Outlet

FIGURE 3

Conceptual Layout of Refuelling Facility

File Name (A4): V1/2812_005.dgn