

7 July 2011

NSW Department of Planning 23-33 Bridge Street, Sydney NSW 2000

Attention: Christine Chapman

Streamlining the Project Approval for the Construction and Operation of a Resource Recovery and Recycling Facility, file No. S03/03614

Dear Christine,

Transpacific Refiners wish to amend and streamline the consent and licensing conditions on our site at 11 Kyle St, Rutherford.

Briefly we wish to:

- Increase the particulate emission limit from discharge point 19 from 10 mg/m³ to 50mg/m³.
- Align the approval with the Environmental Protection Licence (EPL).
- Remove monitoring requirements for dust and monthly ground water dipping.

These changes will streamline relations between TPR and both the Department of Planning (DoP) and the Office of Environment and Heritage (EOH), by removing duplication and redundant monitoring requirements.

OVERVIEW OF THE APPROVED AND CURRENT OPERATIONS

Currently the refinery operates under Project Approval Application No. 05_0037, in accordance with the EAR as amended by the preferred project Report (Resource Recovery and Recycling Facility, Kyle Street Rutherford Preferred Project) Report dated May 2006, Statement of Commitments (SOC) prepared by Parsons Brinkerhoff dated 19 May 2006 and the approval itself.

The preferred project included the following items:

- Manufacture of lube oils to base lube oil specification by hydrogenation.
- Onsite laboratory.



- Industrial cleaning services depot.
- Environmental recovery services depot.
- Truck wash bay.
- Transport vehicle depot.

A further modification was approved on the 16th May 2006 in accordance with the Environmental Assessment for Transpacific Refiners Modifications to Existing Development, 12 April 2007. The purpose of this modification was to include:

- Installation of an additional 3 x 450kl storage tanks to ensure there is sufficient storage to allow continued production whilst catering for the logistics requirements of the market.
- Installation of an additional 3 x 90kl process tanks to enable hydro treated material to be stored prior to being directed to the FPCC for flash point correction.
- Installation of the FPCC to remove the remaining light fractions from the hydro-treated base oil to ensure it conforms to the base oil specification. The FPCC is a 26 metre tall column that operates under vacuum to assist the removal of light fractions from the oil and ensures it has a final flash point of no less than 205°C.
- Installation of a gas fired heater and a thermal oil system to heat the hydro-treated oil in the FPCC to a sufficient temperature to achieve final flash point specification.
- Installation of an additional cooling tower to cool the oil after it has been processed through the FPCC.

For various reasons the following were not installed and are no longer required:

- Industrial cleaning services depot.
- Environmental recovery services depot.
- Truck wash bay.
- Transport vehicle depot.

Figure one in Appendix A shows the original proposed location of these areas.

The industrial cleaning services depot is marked as Industrial Solutions Depot and was to house the truck wash, while the transport vehicle depot and environmental recovery services depot are marked as such.

Reference to these can now be removed, the area marked as Vehicle Workshop is now a general workshop for the refinery.



PROPOSED MODIFICATION COMPONENTS

1 <u>Increase the particulate emission limit from discharge point 19 from 10</u> mg/m³ to 50mg/m³.

We request a modification to section 2.6 of the Modification Approval dated 16^{th} May 2007, in relation to the particulate emission concentration from the Fired Heater stack. The current limit is 10 mg/m^3 and we wish to raise this to the Regulatory limit of 50 mg/m^3 .

Justification for this request is provided in the PAE Report (Air Quality Impact Assessment and Mitigation Study, 1 Sep 2010, section 3.4, p8 :Appendix B):

The licence limit of 10 mg/m3 would be applicable to a natural gas fired heater or boiler but is not considered to reflect best practice levels of emission from a heater operated on fuel gas and exhausting via an SOx scrubber. (It is noted that the natural gas fired equipment on-site would meet a level of 10 mg/m3 for solid particle emissions.) Overall it is considered that the levels of combustion particles emitted are likely to be low and consistent with best practice, however the complicating factor of having to test for particulate matter in the outlet of a SOx scrubber makes measurement unreliable. There appears to be a strong case to alter or remove the solid particle license limit for this emission point.

Table 3.1 of the report contains previous test results for the plant and shows that the particulate matter from the Fired Heated Stack is consistently under the Regulation limit of 50 mg/m^3 .

This report, together with an application to vary the EPL with OEH has been submitted to the OEH. The response was that varying the EPL would be inconsistent with the development approval and as such we would need to resolve the issue with the DoP first, letter attached Appendix C.

It is for these reasons that we request the particulate limit for the Fired Heater by raised to the regulatory limit of 50 mg/m^3 .

2 <u>Administrative amendments to the Project Approval to align the approval</u> with the EPL

As can be seen above, currently the Refinery is regulated by both the DoP and OEH in overlapping areas. Both the Project Approval and the EPL have conditions on air emissions and operation of the flare as below:



Stack emissions:

Modified Project Approval Section 2.6 set stack emission limits, EPL section L3 also sets stack emission limits, section M2 also set test frequency and method type.

Flare:

Project Approval Section 2.11 and 2.12 set operating conditions for the flare EPL Sections O8 and M7 of the EPL duplicate these conditions.

Thus we request that these items are modified to refer directly to the EPL, such that any further issues can be addressed directly by the OEH and their branch of Air Quality Experts if required. Subsequent changes to the EPL would be communicated to the DoP via the Annual Performance Report required by section 5.2 of the project approval.

3 Monitoring requirements for Dust and Monthly Ground water dipping.

The SOC covers many issues relating to the construction of the refinery and are now redundant, some issues in the SOC are written such that they require on going compliance which we feel is not necessary, these relate to ground water and dust monitoring.

Ground water:

Section 27 of the Statement of Commitments prepared by Parsons Brinkerhoff dated 19 May 2006, requires monthly measurement of groundwater levels to determine if there is any seasonal variation in the water table and determine the groundwater flow direction.

The Phase 1 & 2 Environmental Site Assessment: Transpacific Refiners, Kyle Street, Rutherford, NSW by ENSR in July 2008 report No. N4079503_ Phase 1&2 8 July 08, shows that the ground water moves towards the South West see Appendix D.

Appendix D, also contains graphical representation of the ground water levels and shows little seasonal variation.

The monitoring bores were changed in August 2010 as a result of a licence variation with the OEH, the purpose of this was the focus the monitoring on the area known to be contaminated, appendix D also contains a copy of this variation.

Ground Water levels are also recorded in the bi annual Ground Water report required as part of the EPL, thus we feel that ongoing monthly measurements are no longer required and wish to remove this requirement.



Dust:

Section 36 e, of the SOC requires dust monitoring to assess dust levels during construction and operation of the facility.

TPR have been conducting monthly dust monitoring according to this clause for a number of years. See Appendix E, which contains the May 2010 and May 2011 dust monitoring reports. These reports contain the past two years of data demonstrating that dust levels are well below DECCW guideline criteria.

From the reports:

2.0 Assessment Criteria

The Department of Environment, Climate Change and Water (DECCW) publication *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DEC 2005) defines the guideline value for insoluble solids as 4 g/m².month, reported as an annual average (refer to Table 1). Dust levels at or above 4 g/m².month may pose a nuisance resulting from dust fallout on adjacent properties. Guideline criteria have not been established for remaining parameters; however this data is used as an aid in the characterisation of dust fallout.

Table 1: Ambient Air Quality Assessment Criteria

Dust Deposition as Insoluble Solids Annual Average	4.0	g/m ² .month	
Analyte	Criteria	Unit	1

Given the results and that this type of monitoring is generally used during construction, we feel that it now has become onerous. Furthermore, the monitoring results consistently show that the plant is not a contributor to dust and is not impacting the local environment. Thus we would like to remove reference to the SOC.

We trust the information contained in this application is sufficient for the Department to assess. Please have no hesitation in contacting the under signed for any additional information.

Regards

Ray Carson

Appendix A

Preferred plan 2007



Figure 1

Appendix B

PAE Report Air Quality Impact Assessment and Mitigation Study, 1 Sep 2010 and application to vary EPL limits for point 19.

Appendix C

Letter from OEH referring change of Particle limit on Point 19 to the DoP.

Appendix D

Ground Water Direction, Ground Water Bore levels and EPL Variation.



Inferred groundwater contours derived using the groundwater elevations generally indicated that the groundwater gradient on the Site was relatively flat, with a flow to the south-east towards the Stony Creek, which is located to the south-east of the Site and flows in a south-easterly direction. Groundwater elevations, inferred groundwater contours and flow direction are presented on Figure 4.

Historical Ground Water Data



Monthly ground water dipping shows that there is no notable variation in Ground Water Levels. Note the bores being monitored changed in August 2010 as a result of a licence change with the OEH, the purpose of this was the focus the monitoring on the area known to be contaminated.

See attached licence variation.

Appendix E

Dust monitoring reports