

2 Albert Street  
Greenwich 2065  
22 December 2013

## **Submission to SSD-5147**

Dear Sir/Madam

I object to the EIS SSD-5147 for the following reasons:

- (1) There is no guarantee that highly flammable gasoline (petrol) will not be stored at the Shell Gore Bay Terminal whether in an emergency or non-emergency basis. At the same time Clyde petroleum product storage volumes are proposed to substantially decrease.
- (2) The EIS ignores the Gore Bay to Clyde pipeline and Shell Gore Bay Terminal. Risk assessment for the pipeline is not documented and from risk the data presented for the pipeline in this EIS within the Clyde facility fire/explosion risks to residents would appear to be unacceptable. Moreover residents along the pipeline have not been notified that highly flammable products are now being transferred.
- (3) Project justification totally ignores the increased risk of carrying gasoline through the pipeline and increased movements of ships carrying gasoline in Sydney Harbour. This is a critical omission from the EIS.
- (4) There is no commitment/assurance specified that Shell will apply world best practice from Buncefield and similar learnings.

Overall it would appear that changes to the Clyde site taken as its own entity are beneficial. There is strong concern however that this EIS does not deal with the consequential changes relevant to the refined product importation process. The scope of the EIS covers only the Shell Clyde operations; however this facility is connected by an 18km pipeline passing through residential suburbs to the Shell Gore Bay Terminal at Greenwich. This pipeline since October 2012 has carried refined products such the highly flammable gasoline where previously the operation was primarily for the transfer of crude oil. This physical and operational interconnection by pipeline requires a total operational assessment, particularly given that the Gore Bay Terminal is situated in very close proximity to residences. From a risk assessment view there is no transparency as to whether the total operation has been properly assessed for handling products such as gasoline.

Concerns over risk management are also raised in relation to what specifically is being implemented in response to the recommendations of Buncefield and similar incidents.

### Storage Reduction

The petroleum product storage reduction from 638 to 264 ML significantly reduces fire and explosion risks at Clyde. The question must be addressed as to whether Shell has configured the storage so that in event of some supply chain disruption there will be absolutely no storage of highly flammable products such as gasoline at Gore Bay. Shell personnel responsible for Gore Bay are verbally saying there will be no storage of gasoline at Gore Bay but there is nothing in writing.

### Appendix F - Preliminary Hazard Assessment – Consequence Assessment

I refer to this appendix as the risks associated with this operation are clearly critical to public safety. Section 1.3 states "*The consequence assessment found that offsite impact could occur due to.....*

(d) *Pipe track pool fires*

(e) *Pipe track leaks (medium/large leaks) leading to flashfire/vapour cloud explosion."*

Section 2.3 Scope of study did not include the Gore Bay to Clyde pipeline on land outside of the Clyde facility. However Table 7.5 Pipe Track Pool Fires shows a 50% chance of fatality for a pool fire caused by a 20mm pipe leak within a 44 metres of the fire centre (pumping pressure 20bara). Pipe Track Vapour Dispersion as shown in Table 7.6 extends 46 metres for the D5 case with a 20mm leak. The risks may also be in reality much higher as this analysis was conducted with a pumping pressure of 20 bara compared to a maximum pipeline pressure of 65 bara (6500 kpa (g)).

Section 3.4 states "*The pipeline is regulated by a NSW WorkCover License (rather than the Pipelines Act) and is compliant with Australian Standard 2885 (an AS2885 risk assessment is in place)*". When was this risk assessment conducted? Did it apply to gasoline instead of crude oil? Did it cover risk for fire, heat radiation, explosion and in particular a vapour cloud explosion event?

Both the Shell Company of Australia who control what is in the pipeline and its maintenance and the licensee WorkCover NSW have a duty of care to persons who could be affected by a significant event along the pipeline. If the risk assessment is inadequate or there are significant risks that have not been notified to those who could be affected, this may be considered negligent. Risk to property also needs to be considered. The pipeline is 18 kilometres long holding a volume of 1,385,000 litres of refined petroleum products. The risks are significant.

#### Project Justification

Project justification (p32 of Executive Summary) states: "*The Project is justified from a number of perspectives including social and economic benefits to the New South Wales economy through a robust fuel supply chain for New South Wales including Sydney Airport, and in terms of environmental performance improvements to heavy industry in the Western Sydney region* "

This justification totally ignores increased risk of carrying gasoline (petrol) through the pipeline, increased movements of ships carrying gasoline in Sydney Harbour and possible increased risk to residences in the vicinity of Gore Bay due to importation of gasoline versus crude oil. The SSD must be assessed on the total impact of the changed import operation.

#### Consultation and Operational Independence to Gore Bay

The Gore Bay and Clyde operations are claimed to be independent (p36 of Executive Summary). As outlined above they are not. Project consultation (p25 of Executive Summary) excludes any discussion/notifications to those who would be affected by the Gore Bay to Clyde pipeline.

#### Appendix F - Preliminary Hazard Assessment– Incorporating Lessons from the Buncefield

This section of the Preliminary Hazard Assessment describes the Shell risk minimisation processes but does not critically evaluate or audit it. An independent assessment of this process needs to be undertaken. To date it appears that the learnings of the Buncefield Incident which occurred in December 2005 have not been applied to Clyde or to the Gore Bay Terminal.

Yours sincerely



Ian Meller