



**GREENWICH COMMUNITY ASSOCIATION INC  
SUBMISSION TO THE ENVIRONMENT PROTECTION AGENCY NSW**

**ENVIRONMENT PROTECTION LICENCE 661  
GORE BAY TERMINAL – VIVA ENERGY AUSTRALIA PTY LTD  
LICENCE REVIEW DUE DATE 29 NOVEMBER 2015**

This submission is made in response to the invitation dated 22 September 2015 extended to the Greenwich Community Association Inc by Mr Greg Sheehy, A/Director Metropolitan Branch, NSW Environment Protection Agency.

### Status of Greenwich Community Association Inc

Greenwich Community Association Inc (GCA) is an incorporated association. The GCA has been established for over 71 years.

The objects of the GCA are as follows:-

*"The Association is established for community service purposes to do all things possible to further the interests of Greenwich and the Local Government Area of Lane Cove and to maintain and enhance the amenity of all residents and owners of property in Greenwich. The Association will not stand candidates for election to public office. It will not campaign for changes to the law or to government policy except where such activities are incidental to its primary object to enhance the amenity of Greenwich residents and owners."*

The GCA holds annual elections for its committee.

Public meetings are held every alternate month and are open to all residents.

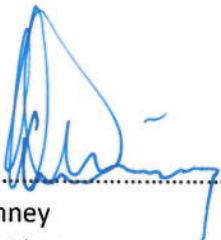
The GCA maintains a website and distributes a newsletter to over 2000 households prior to each public meeting.

On 21 October 2015 the following resolution was passed at a general meeting of the GCA:-

- *that the Greenwich Community Association Gore Bay Terminal Sub-committee be authorised to prepare a draft submission to the NSW Environment Protection Agency (EPA) in respect of the review of EPA Licence 661*
- *that the draft submission be presented to the GCA Committee for approval and, when approved, be forwarded to the EPA by 13 November 2015*
- *that a copy of the finalised submission be placed on the GCA website.*

The following submission has been approved by the GCA Committee in accordance with this resolution.

In this submission, the licence holder, Viva Energy Australia Pty Ltd, is referred to as "Viva" and Shell Refining Australia Pty Ltd as "Shell".



Alan Winney  
Vice President  
Greenwich Community Association Inc

09 / 11 / 2015



Merri Southwood  
Vice President  
Greenwich Community Association Inc

7 / 11 / 15

### Context of the Review

It is submitted that the EPA must address the significance and relevance of the following matters before undertaking a review of Licence 661.

1. The last review date for the licence was 29 November 2010.
2. On 15 August 2011 Shell Refining Australia Pty Ltd (Shell) announced that it was to close its refinery at Clyde and that Gore Bay would become an import terminal for refined petroleum product.
3. From 16 November 2011 Shell has advised the community that it was unlikely that petrol would be stored at Gore Bay.
4. In January 2012 Shell lodged with NSW Department of Planning a Scoping Report for State Significant Development 5148 (SSD 5148) for major works at Gore Bay Terminal.  
<https://majorprojects.affinitylive.com/public/6e6d0e3975725e7ac3fbc75d2818a679/EIS%20Scoping%20Report.pdf>

Reference Table 1 on p 2 of the Scoping Report

Crude oil (class 3 PG I)	63.0%	0%
Fuels Oil	14.7%	14.5%
Automotive Gas Oil	10.6%	26.8%
Jet A-1 (class 3 PG II)	0.0%	22.4%
Slops / Waste product	0.0%	2.1%
Redundant tanks	11.7%	34.2%

\*Note: Ultimate volumes of final product planned to be stored at Gore Bay still to be determined

Current (as at January 2012) storage volumes are listed in the first column, proposed volumes are listed in the second column.

It is noted that Table 1 shows that neither jet fuel nor petrol were stored at Gore Bay when the Scoping Report was prepared.

It is also noted that it was not proposed that petrol would be stored upon completion of the major works.

5. On 22 May 2012 the Shell Project Manager confirmed at a meeting of the Shell Gore Bay Terminal Reference Group that the Environmental Impact Statement for SSD 5148 would be lodged on the basis that there would be no petrol stored at Gore Bay.
6. On 26 June 2012 the Shell Project Manager confirmed at a meeting of the Shell Gore Bay Terminal Reference Group that Shell did not intend to store petrol at Gore Bay during interim terminal operations or at completion of the Terminal Modification Project.

Several statements to the effect of those detailed above have since been made by Shell and Viva personnel.

Refer Attachment 1 for a summary of Shell's statements in relation to storage of petrol.

7. On 28 August 2012, the GCA advised the Minister for the Environment of community concern in relation to the impact of the changes in the operations at Gore Bay. Community concern included, but was not limited to, the health impacts of the product change and the risk of storage of petrol at the site.
8. On 26 September 2012 Mr Barry Buffier, Chair and CEO of the EPA, responded to the GCA as follows:-

*The EPA has been advised by Shell that in October 2012, it intends to cease the importation of crude and instead import finished product (petrol). As part of this transition, the EPA has held preliminary discussions with representatives of Shell. The EPA understands that less fuel will be stored at Gore Bay and no petrol will be stored on the premises .....*

*In response to the proposed changes, and as part of the development application assessment process, the EPA will review the current conditions of Shell's licence to ensure that the conditions are adequate for the proposed future operations to be carried out at the premises.....*

*The EPA understand the community's concern about possible health effects from activities at the Gore Bay Terminal. Any potential health impacts associated with Shell's proposed changes will be considered in the environmental assessment that will accompany its development application. However, until a development application is submitted, it is not possible for the EPA to comment on these aspects.*

Refer Attachment 2 for copies of the correspondence referred to in 7 and 8 above

9. In October 2012 the operational mode of the facility changed significantly with the closure of the Clyde Refinery. Importation of crude oil ceased. Importation of petrol became a permanent operational mode, in addition to importation of jet fuel, fuel oils (marine fuel) and automotive gas oil (diesel).  
Verbal assurances were provided by Shell personnel in public meetings that no petrol was being stored at Gore Bay. It is understood that no jet fuel was stored at the terminal.
10. This operational change in October 2012 occurred without review by any relevant planning authority or comprehensive review by the EPA of the conditions of Licence 661.
11. Following the implementation of changed operations at the terminal the GCA and other community members raised with the Minister for the Environment or the EPA, either directly or through public meetings, concerns about known impacts of the changed operations and concerns that health and safety impacts not readily apparent to the community had not been adequately explained to the community or regulated.

Refer Attachment 3 for copies of this correspondence.

12. On 28 August 2014 the GCA wrote to the Minister for the Environment seeking urgent review of Licence 661 in the light of the extent of operational change since the last review date.
13. On 30 September 2014 Mr Barry Buffier, Chair and CEO of the EPA, responded as he had two years earlier, as follows:-

*"The EPA understands the community's concerns about possible health effects from activities at the Gore Bay Terminal. Any potential health impacts associated with Shell's proposed operational changes will be considered in the environmental assessment that will accompany its development application."*

Refer Attachment 4 for copies of correspondence referred to in 12 and 13 above.

By this stage, the operational changes were not "proposed" – they had occurred two years earlier, in October 2012.

14. In mid- August 2014 100% of the shareholding in Shell was acquired by Vitol (a private company) in conjunction Abu Dhabi Investment Council.  
The name of Shell Refining Australia Pty Ltd was changed to Viva Energy Australia Pty Ltd.
15. On 14 January 2015 the NSW Planning Assessment Commission granted consent to SSD 5147, being an application by Viva to carry out works at Clyde following the closure of refinery operations at the site.  
The Commission did not find that the Clyde works would have an impact on the Gore Bay Terminal but it was noted on p 6 of the Determination Report that:-  
*".....the Proponent has publicly committed that gasoline will not be stored at the Gore Bay Terminal"*.  
<http://www.pac.nsw.gov.au/Projects/tabid/77/ctl/viewreview/mid/462/pac/438/view/readonly/myctl/rev/Default.aspx>  
The following comment is noted on p 5 of the Report:-  
*"The Commission was advised that a separate SSD application will be submitted in early 2015 by the proponent for planned works at the Gore Bay Terminal."*
16. On 27 May 2015 Viva announced that it had withdrawn SSD 5148. As a consequence the Environmental Impact Statement (EIS) to be lodged by Viva in support of State Significant SSD 5148 would not be made available to the public.  
This has meant that the community does not have access to the extensive range of data that it expected to have to assist in making this submission.
17. At the community meeting in which this decision was announced Viva representatives announced that jet fuel would not be stored at Gore Bay Terminal and it was the intention that petrol would not be stored at the terminal.

18. The EIS, the trigger that the EPA has been waiting on to conduct the substantive review of terminal operations, has now been withdrawn.

We have now passed the third anniversary of the new operational mode and there has been no substantive review in an operational sense of the new operations and no inspection to assess these operations.

## Submission of the GCA

### Overview

At the outset it is important to set out the significance of the licensing task for which the EPA has responsibility and is currently considering.

There can be no doubt that the transportation, transfer and storage of petroleum products (including petrol and jet fuel) that takes place at Gore Bay Terminal is a dangerous activity.

This activity is particularly dangerous to the environment around it which includes the harbour, bushland, the air, and a densely populated residential area.

The EPA carries significant responsibilities in ensuring, in reviewing the licence for that operation, that the operation is being conducted in a manner which is acceptable in terms of its risk profile to the standards required under the Protection of the Environment Operations Act 1997.

Were a disaster to occur at the terminal, questions would be asked as to the nature of the enquiries and investigations conducted by the EPA before it granted the licence.

This underscores the pivotal role that the EPA must play when discharging its responsibilities and determining the review of the licence. The EPA has a role here to safeguard the surrounding environments from harm. That is its statutory responsibility.

It is also important that the EPA focus on the specific nature of the activities and operations which are being carried out at Gore Bay and then conduct an investigation of those activities/operations and license those activities or operations.

In this respect, two things are important:

1. The licence holder (with both previous and current shareholders) has categorically said that the storage of petrol and jet fuel at the Gore Bay Terminal is no part of its activity or operations and is not intended to be. Accordingly, that is the end of the matter. The licence for the storage of petroleum products at the landside operation at Gore Bay Terminal must be limited to only the range of products that the licence holder stores or intends to store. We expand on this submission below in Submission 1. However, we say that, as a matter of law, that is the position.
2. Secondly, the current licence permits conduct of an activity characterised as “shipping in bulk”. Such an operation obviously involves tankers and ancillary vessels at berth at the terminal. In granting a licence to conduct a “shipping in bulk” activity, the EPA has a responsibility to ensure that the tankers and other vessels berthed at the wharves and associated facilities and acting as storage containers pose no risk to the safe operation of the shipping in bulk activity or the environment. We are concerned that the EPA has conducted no investigation at all of the threats to the

environment arising from the tankers and ancillary vessels themselves, their docking at Gore Bay Terminal and remaining there for days.

It is our submission that the vessels at the terminal are engaged in petroleum products storage and are therefore conducting a scheduled activity within the terms of Schedule 1 of the Protection of the Environment Operations Act 1997. These vessels must be licensed by the EPA in respect of this activity.

The licence regulating the above activity must be drafted to apply accordingly – and before such a licence can be given the EPA must conduct appropriate investigations to discharge its statutory responsibilities and be satisfied of the matters in respect of which it is required to be satisfied under the Protection of the Environment Operations Act 1997.

We expand on this submission below in Submission 3.

These propositions are self-evident from a proper reading of the Protection of the Environment Operations Act 1997. If the EPA does not agree with these submissions then we ask:

- that the EPA take appropriate legal advice; and
- that the EPA notify us of the circumstances where it disagrees – so that we can give further legal submissions to satisfy the EPA. We believe these issues are clear on any plain reading of the legislation.

In conclusion, there seems to be a disconnect at the moment between the activities and operations at the Gore Bay Terminal and what EPA Licence 661 allows. It is the role of the EPA at the time of licence review to correct such a disparity, particularly when it is drawn to its attention. We call on the EPA to discharge its statutory functions and undertake this work.



## Submission 1

The current or proposed land-based (landside) operation of the terminal, which is currently the only part of the Gore Bay Terminal regulated under EPA Licence 661, does not include and is not intended to include storage of petrol or jet fuel.

It is not appropriate for the EPA to licence activity or work that does not exist or is not proposed to exist.

The licence must limit the Scheduled Activity described as Chemical Storage to only those products that stored or are proposed to be stored ie fuel oils, automotive gas oil and slops/waste products.

Section 45 of the Protection of the Environment Operations Act 1997 requires the EPA take into consideration impacts of "activity or work"

We submit that:-

- The EPA must assess EPA Licence 661 in the context of the current or proposed operation of the terminal only.
- As outlined earlier, the landside operation of the terminal has not previously included storage of petrol or jet fuel.
- The licence holder has confirmed on numerous occasions that there is no intention to store petrol and, more recently, no intention to store jet fuel.
- Landside storage of petrol and jet fuel is not work or activity currently undertaken or proposed to be undertaken by the licence holder and should not be included in the licence.

These propositions are underpinned by some strong legal principles:

- The EPA has no right or power as a matter of law to license activities which are not current or proposed.
- This follows from the wording of Sections 45, 48-50 of the Protection of the Environment Operations Act 1997.
- There is simply no legislative mandate to grant licences for activities which have not been conducted and are **not** proposed.
- One of the obvious reasons why this is so is that no review of the nature required by Section 45 can be conducted for theoretical activities.
- Moreover, the licensing procedure is not hypothetical or theoretical – it is for actual activities.

Accordingly, the EPA must not license any landside storage activities at Gore Bay other than for fuel oils, automotive gas oil and slops/waste products.

It simply does not have the legal power to do so. Such conduct would be ultra vires or beyond power.

## Submission 2

**The right to store petrol and jet fuel at the landside operation of the terminal must be excised from the licence on the grounds of public health and safety.**

Section 45 of the Protection of the Environment Operations Act 1997 requires the EPA to take into consideration

(c) the pollution caused or likely to be caused by the carrying out of the activity or work concerned and the likely impact of that pollution on the environment

(d) the practical measures that could be taken:

(i) to prevent control, abate or mitigate that pollution, and

(ii) to protect the environment from harm as a result of that pollution.

Section 6(1)(b) of the Protection of the Environment Administration Act 1991 lists as an objective of the EPA:-

to reduce the risks to human health and prevent the degradation of the environment, by means such as the following:

- adopting the principle of reducing to harmless levels the discharge into the air, water or land of substances
- promoting community involvement in decisions about environmental matters
- ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry ....

We submit that:-

- As previously discussed, the licence holder has consistently stated that it will not/ does not intend to store petrol or jet fuel at the terminal.
- The EPA is aware of the high level of community concern around storage of petrol at such close proximity to residential properties, waterways and bushland. Given the cancellation of the SSD 5148 for the terminal, tanks adjacent to residential properties will not now be removed and only selected upgrade works within the scope of SSD will be carried out. With significantly reduced tank storage at Clyde, it is of concern that Gore Bay Terminal may offer the capacity for back up storage of petrol and jet fuel.
- EPA officers have advised that they have no power to regulate in terms of the non-environmental hazards of storage of dangerous goods. We understand that this comment relates to risks of explosion, fire etc.
- As has been demonstrated by Buncefield, a “non-environmental” incident such as explosion or storage is likely to cause consequential environmental harm, often of significant proportions.

- It is the duty of the EPA under Section 6 of the Protection of the Environment Administration Act 1991 to ensure that it does not license an activity or work without a full assessment of the scheduled premises by all appropriate regulatory authorities to determine if the premises are consistent with world's best practice for storage of petrol and jet fuel. It is only by doing this that the EPA can be satisfied that it has taken all steps to prevent control, abate or mitigate pollution, and to protect the environment from harm as a result of that pollution.
- Assessment must be undertaken in respect of the premises in its current state.
- The EPA must not rely on data prepared prior to the changed operations in 2012.
- The EPA must not rely on documentation that may have been prepared in support of SSD 5148 as the scope of the current operation differs from that outlined in the Scoping Report for the SSD.

### Submission 3

**The tankers and other vessels at berth at Gore Bay must be classified as scheduled premises and regulated by a licence issued by the EPA.**

**In the alternative, the activity conducted by the tankers and other vessels must be classified as scheduled activity and regulated by licence by the EPA.**

It is noted in a letter dated 22 July 2015 that the EPA stated as follows:-

*"Vessels at Gore Bay are considered to be "non-scheduled premises", as the licensed premises at Gore Bay is limited to the landside terminal. As such they are not regulated by a licence issued by the EPA".*

The tankers and ancillary vessels such as the bunkering vessels at berth at Gore Bay pose potentially the greatest environmental risks within the terminal operation.

It is inappropriate to exclude them from the requirement to secure an appropriate licence from the EPA. Indeed the EPA has, on at least two recent occasions, acted in respect of matters arising from the vessels at berth:-

- On 2 November 2012 the EPA issued Notice Number 1507423 requiring the licensee to implement a Pollution Reduction Program to address the noise from shipping vessels docked at Gore Bay
- On 30 January 2013 the EPA issued Notice of Preventive Action 1511517 in respect of odour associated with the barge "Whitnavigator".

The tankers and associated vessels are engaged in petroleum products storage and, as such, conduct a scheduled activity within the terms of Schedule 1 Part 1 of the Protection of the Environment Operations Act 1997.

The tankers at berth are effectively storage premises or containers until all product has been pumped from them. They may be so characterised for a period of up to 48 hours (and longer, on some occasions) whilst at berth adjacent to residential communities.

It is noted that a vessel may be classified as "premises" within the terms of the Dictionary to the Protection of the Environment Operations Act (NSW) 1997 or a container.

Accordingly, there is no doubt that the EPA is required under the legislation to license the activity conducted by the tankers and associated vessels as either a scheduled activity (premises - based) or a scheduled activity (not premises-based).

This efficacy of any controls around the current licensed shipping in bulk activity is effectively negated unless the vessels that are an integral part of the "Shipping in bulk" are appropriately licensed.

#### Submission 4

The relatively new entry into Australia of the acquiring shareholder in the licence holder, consequential changes in management, lack of financial information and uncertainty around future ownership/control of the licence holder require strong regulatory controls in the licence and prudent determination of risk level.

Section 45 (f) of the Protection of the Environment Operations Act 1997 requires the EPA to take into consideration whether the person is a fit and proper person (as referred to in section 83).

1. Given the 100% change of shareholder control in the licence holder in 2014 and the subsequent change of directors, the EPA must consider the record of environmental compliance of the any director or person concerned with management of the licence holder.

Section 83(2) permits the EPA to take into consideration, inter alia:-

- (c) the person's record of compliance with the environment protection legislation
- (d) if the person is a body corporate, the record of compliance with the environmental protection legislation of any director or other person concerned with the management of the body corporate

- Given the 100% shareholder change of the licence holder in the last 12 months there is no basis for assessing whether Viva has a record of compliance with the environment protection legislation
- Given that all the directors now running Viva are new, there is no knowledge of their record of their compliance with the environment protection legislation
- Vitol has announced recently that there will be a public offering of shares in assets it now controls. There has been no subsequent announcement about which assets are to be sold to a public company and how it will be managed and by whom. The same issues of experience and compliance will be relevant in the event that Gore Bay Terminal is included in the public float.
- (Note: The assets controlled by Vitol/ADIC are "Shell" branded service stations, Gore Bay Terminal, Clyde Terminal, the pipeline from Gore Bay to Clyde, Geelong refinery)
- This announced sale of assets to a public company gives rise to questions as to who will control the assets in the immediate future – from both a shareholding and director perspective and their financial structure and capacity.

- 2. Given the 100% change of shareholder control in the licence holder in 2014 and the subsequent change of directors, the EPA must consider whether they are satisfied that the authorised activities or work at the licensed premises will be handled by a technically competent person.**

Section 83(2) permits the EPA to take into consideration, inter alia:-

(e) whether, in the opinion of the appropriate regulatory authority, the management of the activities or works that are or are to be authorised, required or regulated under the relevant licence are not or will not be in the hands of a technically competent person,

Given the above changes in control and management of the licence holder it is impossible to assess if this test of technical competence is being met and will continue to be so.

- 3. Given the 100% change of shareholder control in the licence holder in 2014 and the subsequent change of directors, the EPA must consider whether they are satisfied that a director or other person concerned in the management of the body corporate is of good repute, having regard to character, honesty and integrity.**

Section 83(2) permits the EPA to take into consideration, inter alia:-

(g) if the person is a body corporate, whether, in the opinion of the appropriate regulatory authority, a director or other person concerned in the management of the body corporate is of good repute, having regard to character, honesty and integrity

In the absence of knowledge about past experience and performance, it is impossible to determine if a director of Viva or other person concerned in management has these characteristics.

4. **Given the 100% change of shareholder control in the licence holder in 2014, the EPA must consider whether Viva has demonstrated to the EPA the financial capacity to comply with the person's obligations under the licence or the proposed licence.**

Section 83(2) permits the EPA to take into consideration, inter alia:-

(m) whether the person has demonstrated to the EPA the financial capacity to comply with the person's obligations under the licence or the proposed licence.

- The financial standing of Viva and its parent (Vitol/ADIC) are unknown as audited financial statements are not produced either in Australia or overseas for public consumption. This information was sought by the GCA from the Foreign Investment Review Board when Vitol was seeking approval to acquire the shares in Shell but it was not forthcoming
- Whilst Vitol's global turnover numbers are advised, much of the parent's activity is of a trading nature. It is what is called in the literature as a "Commodities Trading Firm".
- Globally, the company is reportedly owned by some 300 employees
- Vitol is new to midstream and downstream petroleum activities in Australia and overseas and its performance in respect of the concomitant obligations for environmental compliance is unknown or tested
- Viva's insurance arrangements are not known nor its financial capacity in the event of a major financial disaster with its business in Australia
- GCA submits that the EPA should require Viva to disclose to the EPA details of its financial statements and insurance arrangements. It is noted that banks would have access to Vitol's and Viva's accounts for the purposes of assessing financial risk. The same information source should be available for assessing their ability to manage environmental risk – which is even less quantifiable than financial risk.
- In the absence of direct evidence, this risk could be achieved by the licence holder providing a bank guarantee for say \$100m to cover its obligations under the licence
- Refer also earlier comments re a public float and how that may change the financial standing of the owner of the Gore Bay Terminal were it to proceed.

## Submission 5

An amendment to noise limits and reporting is requested in particular around noise limits at night, taking into account revised World Health Organisation Night Noise Guidelines (2007), NSW EPA Draft Industrial Noise Guideline (2015) and advice from NSW Health.

Section 6(1) (b) of the Protection of the Environment Administration Act 1991 lists as an objective of the EPA "to reduce the risks to human health and prevent the degradation of the environment, by means such as.....adopting minimum environmental standards prescribed by complementary Commonwealth and State legislation and advising the Government to prescribe more stringent standards where appropriate".

The GCA refers to the following guidelines and advice in relation to this submission:-

**1. WHO Night Noise Guidelines** (Ref: European Centre for Environment and Health, Night Noise Guidelines for Europe, WHO 2007) reports:

"A causal relation has been established between exposure to night noise and a health effect." The working group agreed that there is sufficient evidence that night noise is related to self-reported sleep disturbance, use of pharmaceuticals, self-reported health problems and insomnia-like symptoms.

Effects of night time outside noise:

<30dB: no substantial biological effects

30-40dB: some effects notes. Greater in vulnerable population

40-55dB: sharp increase in adverse health effects. Vulnerable groups severely affected

>55dB: dangerous for public health.

**2. NSW EPA Draft Industrial Noise Guideline (2015)**

**Intrusive Noise Levels**

The guideline provides data on typical background noise for Suburban Residential Environment, and indicates that a noise >5dB above the typical background noise is considered intrusive (Section 2.3, p8).

From Table 2.2, P11 (with added data on calculated intrusive noise levels)

Time of Day	Suburban Residential: Typical Background Noise	Intrusive Noise Level (Typical Background Noise +5dB)
Day	<45dB	50dB
Evening	<40dB	45dB
Night	<35dB	40dB



### **Maximum Noise Levels during Night time period**

The EPA Draft Industrial Noise Guideline also indicates that Maximum Noise Level Assessment (Section 2.8, p13; NSW EPA Draft Guideline) is recommended if night time project noise levels exceed LAeq,15minutes 40dB(A) or LAmax 52dB, due to the potential for sleep disturbance above these levels.

For noise levels above these trigger points, the EPA draft report indicates that all feasible and reasonable noise mitigation measures should be considered; with a goal of achieving noise levels below these trigger levels.

### **3. Advice from NSW Health**

Advice from NSW Health in correspondence 28 July 2015 to the EPA (from Dr Michael Staff, Director, Public Health, Northern Sydney Local Health District) indicates that

“The site generates noise that has distinctive tonal and frequency characteristics and because of the intrusive nature of this noise it is likely to impact the amenity of adjacent residential communities. A noise condition addressing tonal and frequency noise characteristics, a limitation on noise emissions from the site, ongoing noise monitoring and a noise management plan detailing measures to mitigate adverse noise effects should be included in the licence.

The review should also consider noise impacts from future modifications to existing operations on the site and include noise conditions to identify changes in background sound levels that may affect adjacent residential communities.”

**Based on these documents we request the following amendments to the licence:**

1. Requirement for regular monitoring and reporting of noise – including reporting to Community.
2. Monitoring to occur within 1metre of residential boundaries, at sites to be determined by EPA with input from community.
3. 5dB(A) must be added to measured noise levels if the noise is tonal or impulsive in nature.
4. **Use of Project Noise Triggers appropriate for suburban area as per EPA Industrial Noise Guideline 2015:**
  - a) An LAeq,15minutes noise emission criterion of 50dB(A) (0700 to 1800), Mon-Sat
  - b) An LAeq,15minutes noise emission criterion of 50dB(A) (0800 to 1800), Sun
  - c) An LAeq,15minutes noise emission criterion of 45dB(A) (1800 to 2200), Mon-Sun
  - d) An LAeq,15minutes noise emission criterion of 40dB(A) and LAmax noise emission criterion at night of 52dB at all other times

Note: request for longer night time criteria for Sat night/Sun morning (consistent with EPA Draft Industrial Noise Guideline definition of “Day” – See Glossary, P39)

5. Requirement for noise mitigation measures if noise levels are above Project Noise Triggers appropriate for suburban environment.
6. Requirement to document noise mitigation measures and to monitor these measures to ensure that they continue to occur.
7. Consider restricting night time operations if noise levels remain consistently or frequently above night time Project Noise Triggers, despite mitigation measures.

We note that the NSW Industrial interface assessment allows for additional 5dB noise levels where residences are close to existing major industry. However, we request that Project Noise Triggers be set at those appropriate for suburban areas (particularly at night time), with a requirement for reporting and mitigation if measured noise is above these noise triggers, in order to decrease the impact of night time noise on sleep disturbance.

## Submission 6

**The licence must be amended in respect of the levels, monitoring and reporting of emissions.**

Section 6(1) (b) of the Protection of the Environment Administration Act 1991 lists as an objective of the EPA “adopting the principle of reducing to harmless levels the discharge into the air..... of substances likely to cause harm to the environment” and “ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry or public authority”.

### Overview

The current licence conditions on monitoring and reporting of emissions do not meet community expectations.

Technically it addresses possible groundwater and water discharge. It does not however adequately require monitoring and reporting of vapour emissions, noise pollution and odour controls to harmless levels.

The risks associated with high volume/high pressure transfer of volatile refined products through a site in very close proximity to residences appear to be ignored.

Prior to reviewing the licence the EPA should conduct detailed site risk assessments to take into account the change in terminal operation to the high volume transfer of refined products to Clyde, most of which are volatile.

### Emissions

We note the below related to emissions;

- There is a history of odour complaints. Some of these have occurred after cessation of crude oil importation. From around February 2013 Viva commenced using deodorisers to mask odours. This may prevent community detection of an odour/emission event.
- The current licence has no emissions monitoring specified other than the July 2015 addition for monitoring discharge of VOCs from the VECS plant to check for carbon bed exhaustion.
- Allowable benzene emission loads shown in the licence are unchanged from historical levels. This is despite various Pollution Reduction Programs for VECS in 2007 (PRP6) and 2010 (PRP8 and PRP9). The changes associated with the abandoned SSD 5148 had proposed substantial reductions in benzene emissions.
- Improvements proposed as part of the SSD 5148 such as upgrades to Buncefield recommendations, including state-of-the-art control systems such as electronic valve control with feedback and tank level device checking systems, may now not be adopted.

- The facility does not meet requirements for classification as an MHF facility and as such SafeWork NSW MHF risk audits will not be undertaken. There is no requirement for notification of storage of the higher volatility products such as petrol and jet fuel until a threshold level of 50,000 tonnes above ground storage (approximately 70 million litres of petrol or 60 million litres of jet fuel) is reached.
- The large crude oil spill estimated as 250 to 300 tonnes which occurred in Gore Bay on August 3<sup>rd</sup> 1999 is evidence that the site and its unloading operation is at risk from significant events.
- Emissions which could occur from direct pumping of petrol, diesel and jet fuel to the Viva Clyde distribution terminal appear to be ignored in the current licence. Pumping to Clyde remains at very high pressure and of volumes similar to those previously for crude oil.
- Emissions may be increased by potential contributions of fine particulates, sulfur dioxide and nitrous oxides from combustion in product supply tankers. The EPA has indicated that maximum sulfur content of combustion fuels is 1.5% (DOC15/383487 Mark Gifford to GCA of 19.10.15). The licence ignores this potential contribution to air pollution. The EPA claims that vessels berthed at Gore Bay cannot be included in the scope of the licence yet Section 56 of the Protection of the Environment Operations Act has provision to include vessels as part of the Licence. For example see section A2 of Licence No. 12095 which applies to White Bay.
- Following GIPA applications Viva has blocked access to the Health Risk Assessment Report which analyses some 150 chemical compounds associated with Gore Bay Terminal activity.
- Dr Michael Staff a director of Northern Sydney Local Health district in his letter to the EPA of 28 July 2015 has recommended on-going emissions and odour monitoring at consistent locations at the site boundary in view of the close proximity of residential properties adjoining the site. This monitoring is proposed to supplement point source emission measurements. Monitoring is recommended to include "odour and ambient air levels of Polycyclic Aromatic Hydrocarbons and Volatile Organic Compounds (VOC)."
- In the GCA community meeting 21<sup>st</sup> October 2015 the EPA raised doubts about the efficacy of ongoing boundary monitoring as readings can be thrown out by emissions from other sources. This should not be a valid reason not to monitor air quality. Results can be evaluated against surrounding sites as was done for White Bay studies. Monitoring of the VECS only presupposes that this is the only emission point.
- Recently the EPA have commented that Viva desire to reduce Leak Detection and Repair monitoring from an annual to biannual event.

**We request the following Emissions Monitoring, Reporting and Control amendments to the licence**

### **1. General Emission Monitoring and Control**

A thorough air contaminant monitoring program should be determined by the EPA and introduced to the licence. It is recommended, similar to sampling that has been conducted at White Bay, that sampling be of appropriate hydrocarbons, fine particulates, sulfur dioxide and nitrous oxides. The program should initially commence as a 12 month program, sampling 6 times per year for each emission type over a 48 hour period. Sampling periods would be date scheduled by the EPA and allow coincidence with the full supply tanker unloading operation as well as daily load (and unload if applicable) operations of the Destine or its replacement. Three sampling points should be at site

boundary locations, close to residences. Weather conditions, ship fuel sulfur levels and a summary of operational activities should be recorded. Results are analysed and reviewed within 3 months of completion of the 12 month period, prior to publication. Monitoring program amendments may be made depending on results. Comparisons should be made to the Protection of the Environment Operations (Clean Air) Regulation 2010 and WHO Standards.

**2. Emissions from Filling of Transfer Vessel (currently Destine)**

Requirement to be incorporated into the licence is for the licence holder to complete trials and install an appropriate vapour removal system for vapours displaced from vessel filling. This would be incorporated into the licence as a project with specified milestones and completion date.

**3. Deodoriser Usage**

For deodorisers apply a condition that the licence holder report what chemicals are used, when and usage level. When being used this is to be signposted at the site entrance. The licence holder should also be required to log reason, start and stop time of usage plus usage level for quarterly reporting to the EPA to be made available as a public document.

**4. VECS Emission Monitoring**

The current licence outlines EPA requirements. There appears to be no provision for public reporting of VOC emission and site load contributions. It is sought that VECS Emission Monitoring results be made quarterly to the public on the EPA website.

**5. Reduction of Allowable Benzene Load**

In meeting the intent of a sustainable reduction in all site emission levels, the actual benzene load should be made publicly available at least annually. The licence should also state targets for medium term reduction targets to harmless levels.

**6. Process Management and Control Auditing**

Add a licence condition for a Critical Plant Control and Audit Schedule including tank level device checks, operational emergency situations (bund levels, hydrocarbon vapour sensing etc) and operational control for Gore Bay/Clyde transfers. This process should be documented as part of an annual review and made public to foster community confidence.

**7. Leak Detection and Repair Monitoring**

No change to the current annual audit schedule by EPA of this program, unless a superior more frequent auditing system is to replace it. The GCA would welcome the EPA's support in being provided detail of this monitoring program and its audits.

**8. Petrol/"Oil" Spillage**

Introduce reference to Marine Spill Prevention Procedures into the licence, pertinent to the currently imported products. The behavior of crude oil versus that of petrol or jet fuel in marine

spill scenarios would be different. It is accepted that changes may already be in place but the licence does not reflect these.

**9. Complaints Analysis and Public Availability**

Require complaints events to be listed along with licence holder cause analysis and corrective actions. This should be made available to the public monthly as part of a new EPA Licence condition. Personal details of the complainant would of course need to be omitted. Should there be no complaints then this is positive for both the licence holder and the community. The White Bay EPA Licence 12095 for provides far more detail on complaints information.

## Submission 7

The licence must be amended to require maintenance of an emergency management plan for the terminal to world's best practice.

The EPA to confirm that there is in place a single emergency plan integrating responses of all relevant authorities and which is communicated to affected communities.

Section 45 of the Protection of the Environment Operations Act 1997 requires the EPA to take into consideration

(c) the pollution caused or likely to be caused by the carrying out of the activity or work concerned and the likely impact of that pollution on the environment

(d) the practical measures that could be taken:

- (i) to prevent control, abate or mitigate that pollution, and
- (ii) to protect the environment from harm as a result of that pollution.

Section 6(b) of the Protection of the Environment Administration Act 1991 lists as objectives of the EPA:-

- to reduce the risks to human health and prevent the degradation of the environment, by means such as the following:
- adopting the principle of reducing to harmless levels the discharge into the air, water or land of substances
- promoting community involvement in decisions about environmental matters
- ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry ....

- A significant incident at Gore Bay could be a catastrophic environmental event for Sydney.
- It is submitted that the EPA should ensure there is in place an emergency management plan for the terminal to minimise, as far as possible, environmental impacts of events at the terminal. There is no such provision in the current licence.
- The licence should therefore include a condition that the facility and its operator maintain world's best practice in emergency management and that emergency plans be subject to regular review.
- World's best practice in emergency management - developed after disasters at similar facilities around the globe (including Buncefield) - calls for a single integrated emergency plan headed by the government at Ministerial level which coordinates the responses of facility operators, marine environment, local government and emergency services, and for the integrated plan to be transparent and communicated to the affected community.
- The current emergency and disaster plans include a series of non-specific plans at council level which only cover some of the adjoining communities, a confidential emergency plan

covering the site only and the sub-plans of the Sydney Harbour marine emergency plan, none of which are specific to Gore Bay.

- The lack of contemporary emergency planning communicated to the affected community presents as a potential environmental threat which should be addressed as part of the licence review process.



## Submission 8

### The licence to require reporting and monitoring of sulfur levels in fuel used by vessels at berth at Gore Bay Terminal

Section 6(b) of the Protection of the Environment Operations Act OEA Act lists as objectives of the EPA:-

- to reduce the risks to human health and prevent the degradation of the environment, by means such as the following:
- adopting the principle of reducing to harmless levels the discharge into the air, water or land of substances
- promoting community involvement in decisions about environmental matters
- ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry ....

- Data prepared for the EPA has demonstrated the risk to human health of sulfur in marine fuel. The recent amendments to the Protection of the Environment Operations (Clean Air) Regulation 2010 have strengthened the level of regulation in respect of cruise ships in Sydney Harbour. There is no planned date for similar regulation in respect of sulfur levels in marine fuel used by tankers and other vessels at berth at Gore Bay.
- Viva has advised the EPA that it requires vessels at berth at Gore Bay to use Marine Gas Oil with low sulfur levels and that oil used now has a sulfur content within the range of 0.001% to 1.5%.
- We request the EPA to include in the licence a requirement that the licence holder advise the EPA of the sulfur content of marine fuel used by each tanker, the Destine and any other vessel prior to berthing at Gore Bay. Given the level of community concern around sulfur, we request the EPA to report this data on its website and to conduct regular compliance checks to verify the data provided by the licence holder.

## **Submission 9**

### **EPA licence to include conditions to require compliance of the licence holder with the requirements of the Contaminated Land Management Act 1997**

It is noted that the Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 2015 published by the EPA state that Section 60 of the Act requires that anyone whose activities have contaminated lands must notify the EPA as soon as practicable after they become aware of the contamination.

We note that contamination is defined as “the presence in, on or under the land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.”

Given that the Gore Bay Terminal petroleum products storage operation has been in existence for many decades, we suggest that products associated with the operation may be present in, on or under the land at the terminal.

In the absence of data about the site, the community is not in a position to assess if this is the case. Nor is it a position to determine if any such presence may constitute a risk of harm to human health or any other aspect of the environment.

It is hoped that the ability of the personnel managing the terminal, including their experience, qualifications and training (refer Item 2.6 of the Guidelines), will equip them to determine if there is a presence of contaminated land.

However, given that the products handled at the terminal have acknowledged impacts on human health, we look ultimately to the EPA to ensure that are both the reviewed licence conditions and EPA monitoring of the site generally ensure that land contamination is reported within the terms of the relevant Act and managed in accordance with required protocols.