Brooklyn Community Representative Group EPA Update: 15 August 2012

A briefer presentation has been presented at the BCRG meeting 15 August 2012. These notes offer greater detail of recent developments at EPA in the Brooklyn precinct.

ODOUR

Offensive odours & EPA actions

- Odour reports down 23% on 2010/11 Financial Year.
- All recent reports are only alleging the one source Australian Tallow.
- Reports from two locations at Blackshaws Road in Altona North and Geelong Road west of Burgess Street in Brooklyn account for the majority of all reports received in Brooklyn for the last 3 months.
- Odour monitoring has not identified any other sources.
- Reports indicate that odour is probably coming from an elevated source.



COMPLIANCE INSPECTIONS

- Compliance inspection conducted for Australian Tallow in July.
- Minimal odours were detected at ground level and site has shown **significant** progress in addressing odour issues at the site.
- Source odours experienced at Blackshaws Road and Geelong Road (west or Burgess Street), suspected to be from to odours venting from roof level of the plant.
- Australian Tallow have committed fix this issue.
- EPA is confident once this issue is rectified there should be minimal impact from odours from this site.

ODOURS IN DRAINS

- Australian Tallow was the suspected source, but this was not confirmed
- EPA identified some potential stormwater issues at the site and will be working with Australian Tallow to correct these.

DUST

Monthly PM₁₀ data for Brooklyn

These results are for PM_{10} which are particles above 10micron in size generally indicating levels of dust. 2011/12 saw 20 exceedences compared to 19 in 2010/11. Roads are primary cause of exceedences in Brooklyn although in 2011/12 we saw 5-6 exceedences that could be partially attributed to fuel reduction burns.



EPA has nearly reached the limit of what we can do to reduce dust from the industrial facilities themselves. The current focus is to approach all sites with mud and dust track out issues and put notices on these sites that require engineered solutions to fix these issues

Because the level of direct EPA influence is not increasing, the PM_{10} levels are now fluctuating almost solely due to changes in the weather. During the past few months the Brooklyn region has experienced an increase in the number of dry days with persistent northerly winds and this is why we've recorded an increase in the number of PM_{10} exceedences.

One extra thing to note is that there has been an increase in the frequency of poor air quality during the night-time hours across the past couple of months. Of the seven PM_{10} exceedences recorded since the start of May, one was solely caused by a night-time source, while another two exceedences were recorded as a result of a late night spike in PM_{10} levels. An early evening increase in PM_{10} is consistent with smoke from wood heaters, however the source of the PM_{10} spike during the early (2-3am) hours of July 25 is not as easy to pinpoint.

There won't be another significant reduction of PM_{10} levels in Brooklyn until the roads are tackled and the issue of vehicle generated dust is solved. When this happens, PM_{10} levels in Brooklyn are expected to become similar to the rest of Melbourne.

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Roads Modelling in Brooklyn.

EPA commissioned Netbalance to model roads emissions in Brooklyn and to model various solutions to determine the next steps in reducing dust emissions in Brooklyn.

They determined that a minimum of 50% and potentially up to 83 % of particle (PM_{10}) emissions are from roads.

Emissions are primarily associated with Bunting and Somerville Roads, and to a lesser degree with McDonald and Jones Roads.

The main sources of the road emissions are caused by:

- Direct stirring up of dust on unpaved roads and verges,
- Dust track-out from unsealed sites,
- Re-mobilisation of dust/mud tracked out onto sealed roads.

Netbalance recommended the following options in mitigating dust emissions from roads:

Seal Bunting Road

Bunting Road is the single largest source of road dust within the precinct. Sealing the road surface has the potential to result in a 47% reduction in PM_{10} emissions from Bunting Road (roughly 10% of total precinct road dust emissions), and will also help reduce emissions from McDonald Road due to track-out.

Minimise dust track-on via wheel washes at problematic facility exits

Installation of wheel-washes at facility exits has the greatest potential to reduce road dust emissions from the precinct (up to 40% of total precinct road dust emissions). However, due to cost and logistics issues, it is unlikely that this technology can be applied across the entire precinct. As such, it is recommended that the installation of wheel washes target specific facilities (with known track-out issues) along the most problematic roads. Priority roads include Bunting (once sealed), Somerville, Jones, McDonald and Old Geelong Roads.

Periodically wash roads and clear build-up from gutters targeting areas of track-out

Periodic washing of roads has the potential to provide an overall reduction of 23% of total precinct road dust emissions. It is recommended that road washing targets Somerville and McDonald Roads, as well as Bunting Road (once sealed) and Old Geelong Road (once verges are sealed).

Targeted sealing of road verges

Sealing of road verges along the western end of Old Geelong Road, as well as at a number of facility exits along Somerville and McDonald Roads is recommended in order to minimise dust track-out. It was noted that vegetation on such road verges cannot presently be sustained due to frequent vehicle movements.

Full copies of the reports have been uploaded to the Brooklynip website.