

# Remediation, Operation & Monitoring, Community Working Group Meeting Minutes Meeting 8 – Sitewide Odour Study 26 June 2023



<b>Project</b>	Remediation, operation and monitoring, Community Working Group (CWG)	<b>Date</b>	26 June 2023
<b>Venue</b>	Ampol Fuel Terminal, 2 Solander Street, Kurnell Training Facility – SOB meeting room 7	<b>Time</b>	6.30pm-8.30pm
<b>Purpose</b>	Meeting 8 CWG: Sitewide Odour Solutions		
<b>Attendees</b>	<i>Isabelle Moss, Chair (WSP)</i> <i>Robyn Heagney, resident</i> <i>Brett Lobwein, resident</i> <i>Sarah-Jo Lobwein, resident</i> <i>Joanne Oldfield, resident</i> <i>David Zaharija, resident</i> <i>Rob Stanley-Jones, resident and President Kurnell Progress and Precinct Residents' Association</i> <i>Damien Davidson, Remediation Specialist, Ampol</i> <i>Beatrice Hobson, CWG Secretariat (WSP)</i>	<b>Apologies</b>	<i>Joanne Oldfield, resident</i> <i>Cr Leanne Farmer, Sutherland Shire Council</i> <i>Daniel Scully, Community Relations, Ampol Kurnell</i>
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	<i>Subject Matter Expert</i> <i>Michael Assal, Operations Manager, The Odour Unit</i>		
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	<i>Stakeholders to receive minutes/agenda:</i> <i>Leanne Mariani, Sutherland Shire Council</i>		
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Item	Notes/actions
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## Welcome

- The meeting commenced at 6:43pm.
- The Chair welcomed all and gave an Acknowledgement of Country.
- The Chair noted apologies from Joanne Oldfield, Cr Leanne Farmer and Daniel Scully.
- The Chair noted that the purpose of the meeting was to understand the sources of odour within the terminal and the actions being taken by Ampol to address the odour.
- The Chair introduced Michael Assal from The Odour Unit to present the findings of the Sitewide Odour Study.

## Investigation conclusions

- Michael presented the conclusions of the study including the three identified sources of odour and the corresponding recommendations:
  - o Separator vents: recommendation → install modular carbon filters and/or air extraction system. As air passes through it is treated by the carbon filter.
  - o Fuel storage tanks 102, 103, 104: recommendation → treat/prevent vapour emissions, vegetative buffer.
  - o Landfarm: recommendation → Continue Landfarm management until all removed.
- Michael noted that there were also indigenous odours identified in the ambient environment including the National Parkland and Wetlands.

## Ampol actions

- Damien outlined the key actions already taken by Ampol and the actions that are to be implemented.
    - o Damien noted that carbon filters were installed on the separator vents in April 2023. These will be monitored in an ongoing way to confirm their effectiveness. This monitoring will determine if the carbon filters are a long term solution or if there are other more effective solutions which can be implemented such as an extraction system.
    - o Damien explained that Ampol had cleaned the oily water sewer downstream of the fuel storage tanks to improve drainage of oily water away from the area. He noted that they are trialling other improvements including putting covers on the drains and flushing the drain with fresh water. He noted that while the engineers are looking at other measures, it is complex, so there are incremental gains that will be achieved over time.
    - o Damien noted that about 85% of the material from the Land Farm has been removed from the site and it is expected to be complete around August 2023.
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## Investigation journey

- Michael outlined the journey which involved a team of four to five people and over a number of months. He outlined the key steps including:
    - o Determining where the odour comes from
    - o Determining where odour appears in the community
    - o Analysing odour data to make the connection between the two
    - o Verifying the source of the odour from the Terminal
    - o Providing recommendations and solutions
  - Michael noted that there is a good understanding of the science of the odours from fuel, including how to remove them. He noted that carbon filtration is a common method employed to reduce odour and noted that there are a series of other tools used to mitigate the odour.
  - Michael explained that the techniques used to detect and quantify odour is scientific, measureable, repeatable and allows them to form robust results which assists them to find the source of the odour.
  - Michael noted that it was a very substantial study area with multiple sources of odour that can vary temporally and spatially. He noted that different methods are employed to sample different locations. For example the Land Farm is sampled in a different way to the separators.
  - Using the tools, the odour experts distilled it down to odour characters including petroleum (oily, diesel, petrol, bitumen) and indigenous (rotten egg, compost, muddy, vegetative cabbage, chimney smoke).
  - Michael explained that they identified 19 potential areas where odour could be created through terminal operations and public locations. The study investigated both up wind and down wind odour and then refined the locations down to 10 sampling points. They used a number of instruments to locate the odour, more specifically including:
    - o Point source sampling
    - o Area source sampling
    - o Liquid odour measurement
    - o Dynamic olfactometry
  - Michael noted that the results from the samples taken, aligned with the results from the Wharf Drain Study results which further reinforced the rigour and accuracy of both studies.
  - A CWG member asked if this study had data from the area where the Wharf Drain Study identified potential odour.
  - Damien noted that Michael's study did not go into the drains but was related to outside air.
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- The Chair further clarified that the Wharf Drain Study looked at the drain so it was investigating drain air, Michaels study focused on outside air.
  - A CWG member asked whether there was any data captured immediately following a community report of odour.
  - Michael noted that they did a number of field surveys some of which correlated with community complaints. He noted that there were odour unit specialists on site when there were complaints about the separators. He noted that they were able to correlate their samples with the off site detection. He noted that responding directly to community complaints is a different kind of study and it is often a futile exercise because odour can appear for 10 second and then disappear.
  - Michael continued explaining that there were 113 measurement location points. The total measurements across those location points amounted to 3000 sniffs in the community. From these sniffs there is a seven point scale system to rank the odour. The sniffs picked up distinct, weak or very weak.
  - A CWG member asked about there being both petrol and diesel odours, they asked whether those odours would be coming from the same source and whether community members are likely to pick up the differences?
  - Michael responded that petrol has a high vapour pressure which means it wants to go from a liquid to a gas, this means that they could link it back to being associated with the separator vents. Diesel has a lower vapour pressure. Petrol and diesel have different tones allowing the odour specialists to indicate where the odours are coming from.
  - A CWG member asked about how the carbon filters are being monitored.
  - Damien responded that a PID instrument is used. It can test the level of hydrocarbon both before and after the filter to notice a difference.
  - Michael concluded that there are both terminal and non-terminal related odours in Kurnell. He noted that Ampol can manage terminal odours but not the non-terminal odours. From the measurements collected the odour unit has linked odour sources to three key areas, the separators, fuel storage tanks and the landfarm.
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#### Discussion

- A CWG member noted that there should be more education for the community around indigenous odours so that people can identify when the odour is likely to be Ampol and when it is likely to be indigenous.
  - The Chair noted this feedback would be provided to Ampol around creating an awareness campaign across the broader community to help people understand when odours may be related to the terminal and what may be external to the terminal.
  - A CWG member asked when the odour samples were taken.
  - Michael replied that they were taken in the morning, middle of the day and late evenings. Michael noted that the conditions are best to measure the odour in the mornings and late evenings.
  - A CWG member noted that they thought the study was thorough, but they wanted more detail from Ampol on around the solutions being implemented.
  - The Chair thanked the community for providing this feedback and noted that they will take this away and determine the best way to update the community.
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#### Close

- The Chair stated that the next meeting will be for the ecological study: as it is longer than the other studies, the next meeting may be in October. The Chair explained that the report must get to the EPA first and noted that an update will be provided on the likely date of that meeting as soon as they have further information.
  - The meeting ended at 8:34pm.
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