

Remediation, Operation & Monitoring, Community Working Group Meeting Minutes Meeting 7 – Wharf Drain Study 18 April 2023



Project	Remediation, operation and monitoring, Community Working Group (CWG)	Date	18 April 2023
Venue	Ampol Fuel Terminal, 2 Solander Street, Kurnell Training Facility – SOB meeting room 7	Time	6.30pm-8.30pm
Purpose	Meeting 7 CWG: Wharf Drain Study		
Attendees	<i>Isabelle Moss, Chair (WSP)</i> <i>Robyn Heagney, resident</i> <i>Sarah-Jo Lobwein, resident</i> <i>Joanne Oldfield, resident</i> <i>David Zaharija, resident</i> <i>Damien Davidson, Remediation Specialist, Ampol</i> <i>Dr Nivari Jayasinghe, Technical Executive - Environment Scientist, Contaminated Land Management (WSP)</i> <i>Roderick Zhang, Senior Environmental Engineer (WSP)</i> <i>Beatrice Hobson, CWG Secretariat (WSP)</i>	Apologies	<i>Brett Lobwein, resident</i> <i>Rob Stanley-Jones, resident & President, Kurnell Progress and Precinct Residents' Association</i> <i>Cr Leanne Farmer, Sutherland Shire Council</i> <i>David Peninton, National Operations Manager, Ampol</i> <i>Helen Stanley, Community Relations, Ampol</i>
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Pre-reading material: Wharf Drain study

Item	Notes/actions
Welcome	
- The meeting commenced at 6:42pm.	
- The Chair welcomed all and gave an Acknowledgement of Country.	
- The Chair noted apologies from Brett Lobwein, Rob Stanley-Jones, Leanne Farmer, Helen Stanley and David Peninton.	
- The Chair noted that the meeting would provide the results of the Wharf Drain Study which investigates odour at the Wharf Drain and that the following meeting, the Sitewide Odour Study, would provide results from the investigation of odour from within the terminal.	
- A CWG member asked whether a date had been decided for the next meeting.	
- The Chair responded that a date had not been decided yet however it was expected to be in June.	
- The Chair introduced Nivari and Rod, both environmental scientists and outlined the agenda for the meeting.	
- Nivari outlined the purpose of the study: <ul style="list-style-type: none"> o To understand observations by community members reporting odours and appearance of a “sheen” or “dark” colour in the water discharging from the Wharf Drain at Silver Beach. To assist Ampol to develop measures that could improve the stormwater system with the intention of resolving concerns raised by the community. 	
- Nivari outlined the goals of the meeting which were for CWG members to walk away with an understanding of the:	

- Source of odour and how WSP came to their conclusions
 - Study facts on odour, sheen and dark water colour
 - Actions kicked off by Ampol to resolve odour
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Investigation conclusions

- Nivari outlined the study objectives and conclusions
 - Provide an explanation for the odours
 - Identify problem areas
 - Present recommendations
 - Understand human and ecological health risks
 - Assess water quality
 - Identify the catchment inputs
 - Nivari presented on the WSP findings. She summarised the results which included the Wharf Drain was visited on 81 occasions across 35 days. Odour was monitored on all 81 occasions by a qualified Odour Assessor as required by the EPA guidelines. On 1 out of the 81 occasions an odour of petroleum character was observed with a weak intensity within 5m of the Wharf Drain. WSP found that the experience of odour at the Wharf Drain was infrequent and weak.
 - A CWG member asked over what period the odour was tested.
 - Nivari responded that the study was undertaken between mid-August to the end of November.
 - Nivari explained that as well as odour, the investigation focussed on the appearance of sheen and dark colour reported by the community at the Wharf Drain.
 - Nivari explained concentrations of hydrocarbon were found at the Wharf Drain however the concentrations measured at the wharf were too low to cause a sheen from a petroleum product. Nivari continued that it is common for stormwater systems to have natural sheens which comes from plant and animal decay and chemical processes such as iron forming iron oxides. The study concluded that the sheen/dark colour reported by the community is the result of natural processes.
 - Nivari noted that it was not immediately clear to the team how the odour was occurring as the low concentration of hydrocarbon in the water is insufficient on its own to cause an odour. Further investigation was required to understand the factors that caused the odour.
 - Nivari noted that the results showed that to experience odour at the Wharf Drain you needed a detectable concentration of hydrocarbons in the stormwater as well as external factors including certain tide conditions, certain wind conditions and agitation. All of these factors had to occur at once to experience odour.
 - Nivari noted that as part of the investigation into the cause of the odour, a particular area of interest, a section of the stormwater system within the terminal, was identified.
 - Nivari noted that Ampol has started work to understand the areas of interest and put in place measures to mitigate the issue. Nivari handed over to Damien to present on the key tasks that are currently underway from Ampol to address odour.
 - Damien explained that the area of interest had been identified through the results of the Study.
 - A CWG member asked whether the area of interest that WSP identified was the same place where they observed odour during the Site Tour.
 - Damien confirmed that this was the case.
 - Damien continued that to determine what could be causing the odour, they would need to visually inspect the drain. This is done with cameras. Damien noted that to put a camera into the drain is a complex process as built up sediment and water needs to be removed to provide access. Actions to be able to put a camera in the drain started prior to Easter and are ongoing.
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- Damien explained that visual inspection of the drain will provide insight into the condition of the drain and help develop solutions such as relining of the stormwater sections, additional filtration or creating negative air pressure.
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Investigation journey

- Nivari explained that the final Wharf Drain Study report had been issued to the Environmental Protection Agency (EPA) and is currently being reviewed by the EPA. The EPA is looking at the findings and conclusions and will provide feedback on the study.
 - Nivari outlined that the next section of the presentation would take CWG members into more detail of the Study and how the conclusion was reached.
 - Nivari stated that the starting point was looking at the stormwater system and asking questions on how the water and air travel through the system and the external factors that could impact the stormwater system. These questions then informed the sampling plan for the study which had to be endorsed by the EPA.
 - Nivari outlined the role of the EPA in the study included interrogating the work and conducting verifications on site. There was also weekly meetings with the EPA in the first four weeks of the study and regular visits from the EPA during the sampling process. The findings from the data were presented to the EPA on the 16th of February with the draft report submitted on the 17th of March.
 - Nivari explained that the sampling included stormwater, drain air and odour sampling. When assessing odour, the qualified Odour Assessor looks at the character, smell, frequency and hedonic tone of the odour.
 - Nivari presented that typically a petroleum site assessment would look for 10-20 compounds. In this assessment across water and air they measured 192 compounds. This level of detail helped the team to observe patterns or match similarities between locations and compare concentrations to health criteria.
 - Nivari explained the rigour in the sampling process and explained how comprehensive the sampling process is.
 - Nivari summarised the results found for odour, hydrocarbons in water and hydrocarbons inside the drain air.
 - Nivari concluded that the concentrations of hydrocarbon found in air and water at the Wharf Drain were less than the human health criteria.
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Investigation challenge

- Rod outlined that because the observation of odour was rare, understanding the cause of the odour was challenging. The study determined the reason for the odour by looking at the results from the stormwater, drain air and odour sampling, and linking this with external variables.
 - Rod outlined the steps of the investigation challenge covering the stormwater system (stormwater, drain air), and external variables (agitation, tide and wind). As a result of the findings from the investigation WSP were able to reach a conclusion.
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Putting the puzzle together

- Rod concluded that to experience odour at the Wharf Drain there needs to be a number of conditions which occur at the same time. These are:
 - o Detectable hydrocarbons in stormwater
 - o Agitation of stormwater
 - o Low tide
 - o The correct wind direction and favourable wind speed.
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- Nivari summarised the study noting that it began with community observations made around sheen and odour at the Wharf Drain. The EPA then drove an investigation of the Wharf Drain.
- Nivari noted that there is no risk to human health or the environment, the air and water coming out of the Wharf Drain is safe. The sheen is most likely due to natural causes.

At the end of the presentation, questions from CWG members were taken and a discussion ensued.

Discussion

- A CWG member asked what Nivari meant by safe and whether the water at the Wharf Drain outlet is safe for drinking.
- Nivari responded that as this is water at the Wharf Drain, the health criteria used is for recreational purposes such as swimming, not drinking the water. Nivari confirmed it is safe for swimming.
- A CWG member noted that Ampol need to communicate this in a way the community can understand, rather than using scientific terms and amounts.
- Nivari agreed that context is important when communicating with the community.
- A CWG member noted that in April, May and June last year they observed that there was bad odour at the Wharf Drain. They acknowledged that it had reduced since this time.
- A CWG member noted that they have been experiencing odour at the Wharf Drain for a long time, they noted that even if the level of hydrocarbon present is not enough to be harmful to humans or the environment, it still impacts on the community by impacting on the amenity of the area.
- Damien agreed and noted that this was something Ampol was committed to resolving. The community reports as well as the Wharf Drain study will assist with their further investigation and resolution.
- A CWG member commented that they appreciate the amount of work that has gone in and are impressed by the results found. They noted that it is important how the results are communicated to the broader community. They asked for a follow up meeting in three months to update the CWG members on the outcome of Ampol's further investigations.
- Damien commented that the next meeting will also address broader solutions to resolve other odour that comes from the terminal and noted that Ampol has already started implementing those solutions.
- A CWG member noted that it would be useful to have some of the presentation slides in the pre-reading to give CWG members more time to understand the data prior to the meeting. The CWG member noted that for CWG members who were unable to attend the meeting today it would be useful for them to have some of the diagrams. Taken on notice.
- The Chair thanked the CWG member for their feedback and noted that the report is still being reviewed by the EPA. WSP will need to consider what can be communicated and when it can be communicated given the report is still with the EPA.

ACTION: WSP to advise what can be communicated.

Chair's addendum: the purpose of the CWG meetings is to present the findings, where in person explanations can be provided to promote understanding. As such, data will not be provided in advance as there is a risk of misunderstanding and misrepresentation.

- A CWG member asked whether the report will be published.
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- Nivari noted that the report is under review with the EPA, they will scrutinise the report and ask WSP questions. We will know after this what the status of communication will be.
 - Nivari noted that herself and Rod are happy to have one on one meetings with people who were unable to attend the meeting today or people who have more questions about the study.
 - A CWG member asked how the report would be communicated to the broader community. They noted that it could be a good news story.
 - Daniel noted that Ampol has a number of ways the results can be communicated. They have monthly updates which go to the whole community, the resident's association and they can have one on one conversations with people if requested. Daniel noted that the work Damien is doing in investigating may be a program of work which will take some time.
 - A CWG member noted that it is a good news story, that it confirms the complaints of the community have been heard and that Ampol is committed to making improvements as a priority.
 - Nivari thanked the CWG members for listening and thanked them for their feedback on how this can be communicated to the broader community.
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Close: actions and next meeting

- The Chair stated that the next meeting will be in June for the Sitewide Odour Solutions. CWG members will be contacted closer to the time to schedule a date.
 - The meeting ended at 8:38pm.
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