# Remediation, Operation & Monitoring, Community Working Group Meeting Minutes Meeting 6 – Validation Report 6 December 2022



### Pre-reading material: validation pre-read

### ltem

### Welcome

- The meeting commenced at 6:36pm.
- The Chair welcomed all and gave an Acknowledgement of Country.
- The Chair outlined the agenda for the meeting: page turn on the pre-reading material and the results and findings from the validation report as shared by Nivari. The Chair noted that at the end of the meeting there will be the offer of a follow-up meeting to answer any additional questions.
- The Chair outlined the goals for the session was for CWG members to walk away with:
  - o Confidence the overflow incident has been resolved
  - o Evidence remediation work is complete
  - o Understand there are no health impacts
- The Chair commenced a page turn of the pre-reading material.
- A few questions of clarification on the pre-reading material were raised by CWG members and answered by Nivari.

**Notes/actions** 

- The Chair introduced Nivari to present the results and findings from the report. The Chair noted that there would be time at the end of each section for questions.

Presentation of validation report results and findings

- Nivari outlined that this CWG meeting is about presenting the outcomes of the remediation and validation program that followed the incident on the 7<sup>th</sup> of April. Nivari noted that these outcomes are being documented in a report called the validation report. The report documents the objectives, processes, methods and results of the remediation and validation work.
- Nivari outlined that the validation report has been written and is in the internal review stage, it will then be provided to Ampol and the EPA and will then be made available to the public. Nivari noted that the CWG members are getting information in advance of the official publication.
- The presentation was structured into three sections:
  - 1. Initial assessment findings
  - 2. Remediation and validation findings
  - 3. Summary findings

#### Initial assessment findings

- Nivari noted that most of the initial assessment work happened on the 7<sup>th</sup> and 8<sup>th</sup> of April immediately following the incident. WSP field scientists tested soil and water where visual or odour signs of impact were noted.
  - A map was shown presenting locations with high soil concentrations in the initial assessment
  - Testing water helped understand how the oily water flowed on the day of the incident and where it is likely to have settled.
  - In addition, sediment samples were obtained from Marton Park and Quibray bay. Levels were not indicative of impacts from the oily water.
- WSP tested air on 22-23<sup>rd</sup> of April and results showed the concentrations of compounds in the air were below health criteria.
- A discussion around air quality ensued, some key points to clarify questions included:
  - Nivari explained that air quality can be determined from the water quality. The odour experienced in the initial days was likely to come from particular compounds present in the oily water. However, whilst these compounds could cause an odour, they were not present in water (as measured through the initial assessment) at concentrations high enough to result in concentrations in air that could be a risk.
  - Nivari noted that gas detectors (PIDs) were used initially for air monitoring on the 7<sup>th</sup> of April.
  - David commented that on the night of the incident gas testing for LELs was carried out which was looking for flammability. The results from this testing showed no LELs.
- A discussion around wildlife took place. Nivari noted that WSP sought information from relevant rescue agencies to obtain official records of animals that may have been adversely impacted and collected or handed over to these authorities.
- Nivari noted that the initial findings were based on three steps:

Step 1. Using senses including sight and smell to identify the contamination. For example: sheen on footpath, discoloured grass, stormwater drains, odours. Teams were in the area mapping out contamination based on what was seen and smelt.

Step 2. Taking samples of the soil and water where teams observed impacts. Sediment samples were also taken at Marton Park and Quibray Bay. Water samples were collected, including puddled water, surface water from creeks and tributaries as well as stormwater.

- Nivari explained that there is substantial rigour that goes into each sample: each sample has an ID and a date, and there is a short description of each photo taken throughout the process. The photo is a summary of pages of field notes that the Field Scientists take when they do the field work.
- A CWG member asked why no soil samples were taken at a particular point where the creek runs close to Tasman Street.
- Nivari responded that if they did not take a soil sample it was because they did not observe contamination or because water samples were taken instead.

Step 3. Consolidating the above information to map the areas impacted by the oily water. This is important because it informs the next phase of work which is the remediation work.

- Nivari provided the results of the initial assessment. Higher detections were found in low-lying areas.
- Nivari explained that another important aspect of the initial assessment work is the private property sampling. At the time of the incident, Ampol opened a hotline for all the Kurnell community to request sampling in private properties: 25 properties took up the offer. WSP took a range of samples (surface soil, surface water, ground water and wastewater) on these properties. All properties were provided with a report and offered one-on-one follow-up phone conversations to discuss their results.
- Nivari provided the results from the private property testing and analysis: no contamination on private property. Any minor hydrocarbons that were found correlated to high organics, for example fertilisers and organic rich topsoils used in gardens.
- Nivari noted that with the qualitative observations and the quantitative information WSP was able to locate areas impacted by oily water.
- A CWG member asked about whether the community was notified of areas impacted by oily water.
- Nivari commented that during the community meetings these areas were noted.
- Nivari explained that the area of impact was mapped based on visual and odour observations as well as measuring concentrations in soil and water. From these measurements, there were 5 sampling points where the concentrations were above the human health criteria. The human health criteria assumes a lifetime exposure to the contamination through pathways such as eating (ingestion) and direct contact. It is intentionally extremely conservative. This means that when the human health criteria is reached, it is indication that an area should be managed and further investigated, not cause for undue concern.

Remediation and validation findings

- Nivari explained that the remediation program is where soil is excavated. Following removal of impacted soil, testing is undertaken to confirm the soil remaining in the area is safe.
- Based on the impact plan developed in the initial assessment, WSP came up with targeted areas for remediation. The instruction given to the Field Scientists was that if, at any point, they observed impact from visual, odour or PIDs, they would keep excavating beyond the boundaries of the impact plan.
- Nivari explained that the process of remediation and validation begins with excavating grass and soil. A WSP Field Scientist supervises the excavation process, they use sight and smell to indicate when remediation is complete, as well as using a PID to monitor the level of impact. Once they are satisfied that no signs of contamination are present, they take samples from the walls and base of the excavation. These samples are sent to the lab for confirmation. The excavated soil gets disposed of to an approved landfill. The contractors then fill the excavation with clean, imported soil and lay grass over the top.

- Nivari explained that the EPA provides guidance on the number of samples to be taken when assessing soil. WSP took more samples than required by the EPA. Nivari explained that they took the EPA's most stringent guideline for the number of sample points required, and multiplied this by 10. WSP did this because they wanted a high level of confidence in making the conclusion that the remaining soil was clean.
- A CWG member asked why the waterway was not sampled.
- Nivari explained that the waterways were sampled for water but solid matter in waterways are "sediment" samples. This will be further evaluated through the ecological study.
- Nivari presented the results from the remediation work including where contamination was identified and where it was remediated.
- A CWG member asked what PPE contractors wear during remediation.
- Nivari explained that as with any work in an excavation zone, PPE is required such as steel capped boots, high vis long sleeve shirt and long pants.
- Nivari concluded that during the remediation phase there was a high sampling density and a low occurrence of contamination above health criteria. Where there were occurrences of contamination above the health criteria, the soil was removed, disposed of and clean soil backfilled. From the low occurrence of contamination, WSP concluded there are no long-term health impacts to people through exposure to soil.
- A CWG member asked what happened with the soil which was removed.
- Damien explained that in the first instance, the soil was taken to the Ampol site. It was then tested and categorised by WSP for disposal at an approved offsite landfill.

## Summary findings

- Nivari summarised the results from each phase which included that 2 locations adjacent to creeks could not be excavated due to damage that could be caused to the creek banks and creek communities. These two areas will be further evaluated as part of the ecological risk assessment. Nivari also noted one of the locations, adjacent to a tree near the foot bridge, has been further sampled, and no high concentrations were identified around the original sample.
- Nivari explained that there is a high level of confidence in WSP's sampling design and remediation. The soil sampling is robust and is 10 times the density recommended by the EPA.
- There is a high level of confidence that the contamination has been identified and removed. Contamination could not be remediated in small areas which are not easily accessed by the community, so the impact does not represent a path to human exposure. These locations are going to be further evaluated in the Ecological Study.
- Nivari reinforced that the sampling carried out is so intense that it is unlikely to miss impacted locations. WSP believe there are no data gaps in the soil sampling program.
- Another CWG member asked if there are any other areas of concern for example footpaths.
- Nivari responded that WSP looked at impacts in wall samples taken adjacent to footpaths and this did not indicate that oily water had permeated the footpaths.
- The CWG member commented that Ampol should ensure this is communicated to the community.
- A CWG member asked whether the tennis courts were sampled at the Community Sports and Recreation Club, they wondered whether the tennis club got any oily water.
- David responded that the tennis courts at the Community Sports and Recreation Club were sampled separately by Ampol. Ampol was notified that there was damage to the court following the rain event. David explained that the tennis courts were exposed to two incidents on the night of the 7<sup>th</sup> of April. The retention pond which contained clean stormwater overflowed and their own sewer overflowed. The sewer caused biological contamination. Ampol decided to replace the surface of the tennis court. David explained that the oily water

from the separators went to the right side of Captain Cook Drive so did not affect the tennis courts.

The Validation Report: status and next steps

- Nivari explained that what was presented today is a summary of the document "Validation Report". The report is the official documentation containing the objectives, processes and outcomes of a remediation and validation program.
- The report for the remediation and validation work that followed the incident on the 7<sup>th</sup> of April is a substantial document. Nivari explained that the report is around 1600 pages with approximately 60 pages of written information and another 1500+ pages of attachments and lab reports. There is a large amount of quality assurance and checks which go into the document contributing to the time taken to complete the work.
- Nivari explained that the report is currently going through an internal review process within WSP.
- Nivari noted that the report will then be provided to Ampol and it will be submitted to the EPA. The EPA will then review the report which will usually take around 6 months given the volume of data. When the report is endorsed by the EPA, next steps for sharing the report with the community will be confirmed.

Close: actions and next meeting

- The Chair noted that there is the option of a follow-up meeting for CWG members which will allow time to digest and reflect on the information and then come back with any questions. The Chair noted that the Secretariat will check in with CWG members in mid-January to see if members are interested in a follow up meeting. 0
- The Chair noted that there are another three studies which are in progress and there will be further meetings next year to present the findings from those studies.
- A CWG member asked if the findings from the Ecological Study will be presented in the next meeting.
- The Chair noted that the next meeting will most likely be the results from the Wharf Drain Study, then the Sitewide Odour Study and then the Ecological Report.
- A CWG member commented that today's results had been beneficial however they are interested in having another meeting when there are results from the other studies.
- A CWG member asked when the Wharf Drain study will be concluded.
- Nivari commented that the Wharf Drain Study has a deadline in February for reporting to the EPA.
- The meeting closed at 8:44pm.

ACTION: CWG in with CWG members mid Jan regarding a followup meeting.