



TLCCG

Tullamarine Landfill Community Consultation Group

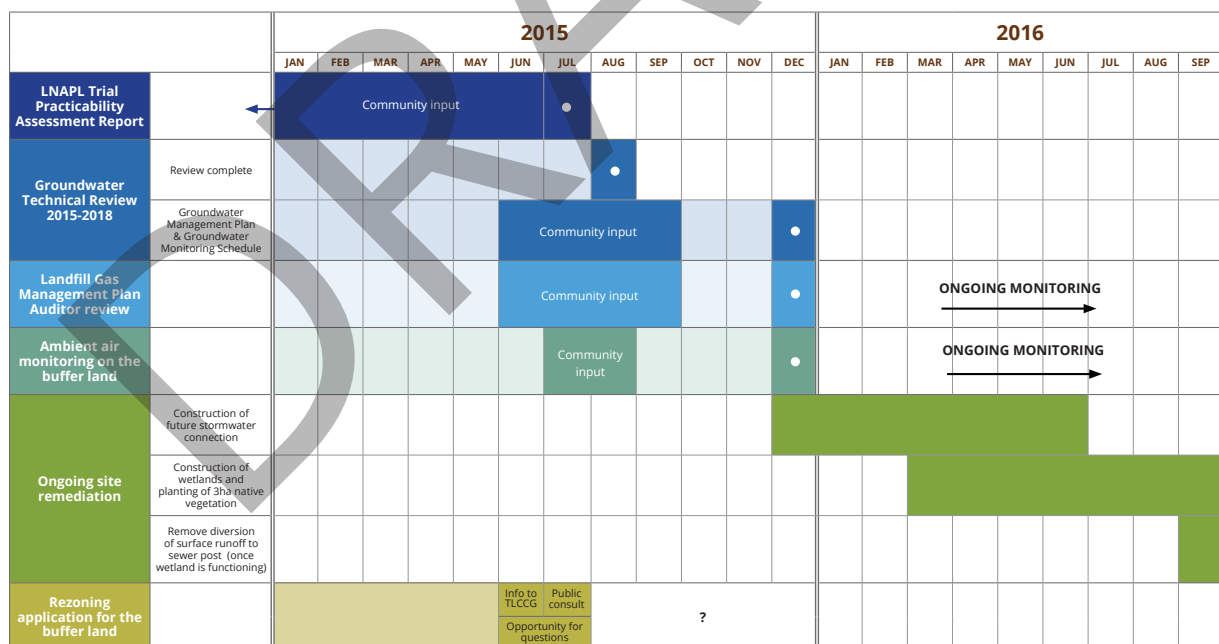
OUR PURPOSE: to foster collaboration between the community, Transpacific and EPA Victoria, and ensure community concerns and aspirations regarding the closed Tullamarine Landfill and adjoining land form part of the decision making process.

AUGUST 2015 MEETING SNAPSHOTS

This meeting focused on the site rehabilitation including landfill gas and groundwater monitoring.

Kieren McDermott, Transpacific Cleanaway (TCL) gave an overview of the timeline for the landfill site rehabilitation in 2015/16. The groundwater, landfill gas and ambient air monitoring programs are running to schedule.

TULLAMARINE LANDFILL SITE REHABILITATION ROADMAP



Ambient Air Sampling - Testing is planned for the ambient air i.e. the air around the landfill site. TCL and Ektimo are working on which sites and chemicals should be tested - noting that many of the compounds are difficult to test or new tests have to be investigated. The community representatives were very keen that testing occur on the buffer land and close to the existing homes.

We were joined by Environmental Engineer, Mark Walker, who gave a broad overview of two reports being undertaken by Kleinfelder.



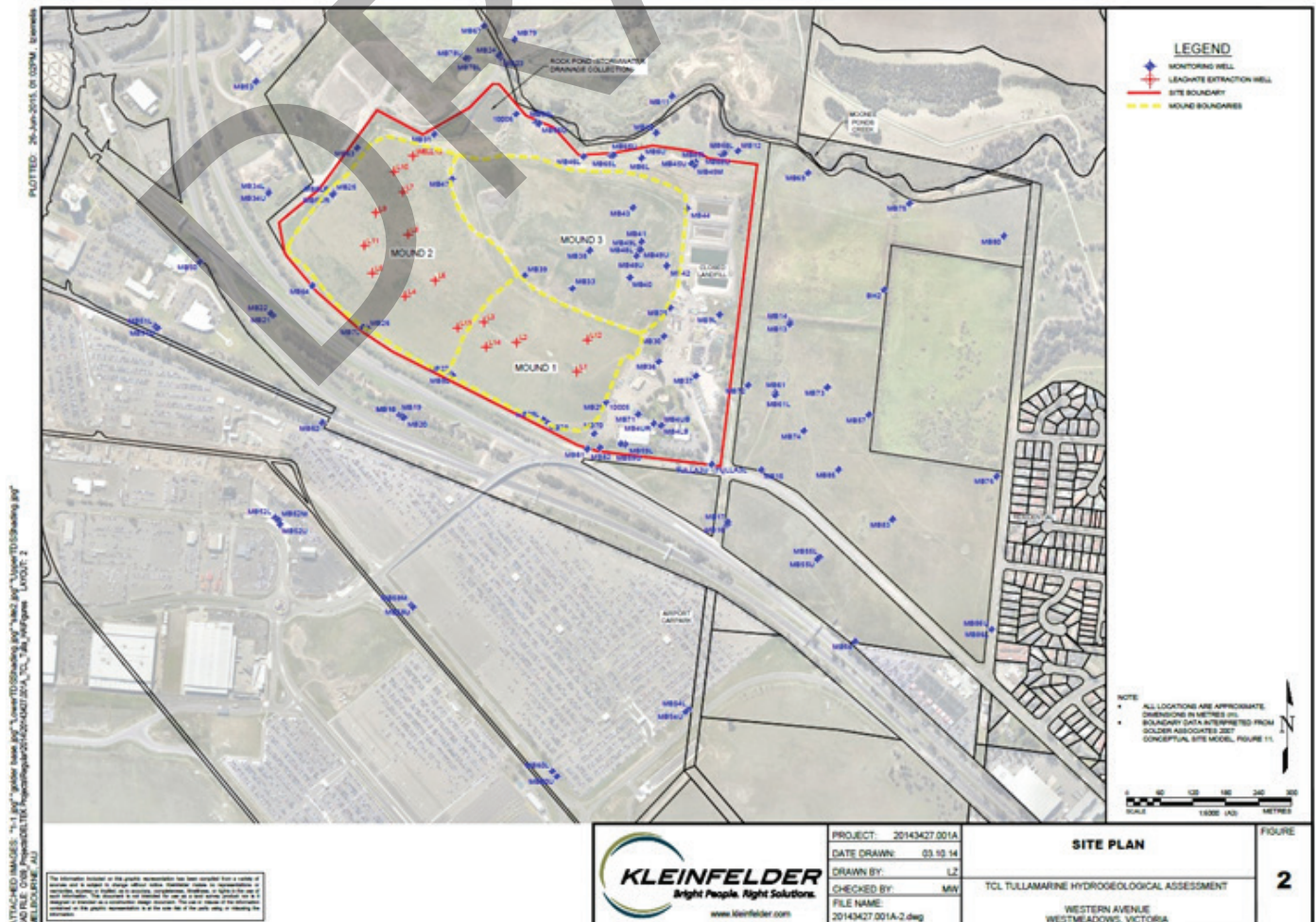
1. Hydrogeological Assessment update

The Hydrogeological Assessment is a desktop study of topographic, geological and hydrogeological data; groundwater quality data; leachate and groundwater level monitoring data and the Golder Associates 2007 Groundwater modeling. Its purpose is to determine the maximum allowable leachate levels in order to minimise impacts to groundwater while considering effective Landfill Gas (LFG) management.

Maximum Leachate Levels are determined on considerations including:

- The Tullamarine landfill has no base drainage layer and as such, the EPA requirement is for leachate levels that ‘..do not pose an unacceptable risk to the groundwater’.
- Determined levels were based on the modelled changes in surrounding groundwater elevation and Moonee Ponds Creek elevation (86 to 91 mAH, metres with respect to the Australian Height Datum).
- Modelling suggests stabilised groundwater elevation is not likely to be observed until 30 years post landfill capping (c. 2041);
- Proposed interim levels are to be met between now and 2041.

Works Undertaken:



Monitoring and Leachate extraction wells at Tullamarine Landfill

2. Landfill Gas risk assessment update including flare emissions & ambient air testing

Mark summarised the methods used and the results from the landfill gas assessments and the draft risk assessment for the landfill.

The purpose was:

- To install LFG bores suitable to assess the potential for LFG to migrate from the waste mass beyond the site boundaries (north, south east and west).
- To identify potential risks posed by LFG to potential receptors located both on and off site.
- To identify potential risks posed by vapours from groundwater to potential receptors located within and beyond the Buffer Land.

The outer eastern borehole Risk Assessment showed:

- No methane detected at the landfill site boundary.
- No risks detected which would require further preventative actions.

Soil vapour assessments of the buffer land concluded there were:

- No unacceptable risks from vapours coming from groundwater.
- No risks detected which would require further preventative actions.

For the landfill gas, draft risk assessments:

- Conclusions will be provided on potential risks at and beyond each site boundary identified.
- Recommendations will be provided regarding additional works.

Flare Emissions Sampling Program and Considerations



At the June TLCCG meeting the results of the flare emissions testing were presented by Mark Walker from Kleinfelder. At this meeting Melissa Reddan, Compliance Manager from Ektimo explained the many issues that had to be overcome to undertake the monitoring of the flare stack gases including:

- The high temperature required specialised equipment and affected the state of many of the compounds
- The first tests were taken in hot conditions and the gases were sampled from the stack at 1050°C. Future testing, particularly if the temperature of the stack gas is reduced to under 950°C, would change the way testing is undertaken.
- Utilising new technology as this would be the hottest of ~5 stacks in Australia and this is the first time Ektimo have tested for many of the analytes e.g. dioxins.

Results of Flare Emission Testing can be seen in the June 2015 meeting notes on the website

<http://www.transpacific.com.au>

Concerns raised by community members:

- The problem was not with the raw data from the flare emission testing itself as shown at the June meeting but the realisation that the promised guaranteed level of 99.99% destruction of gases inside the flare stack hadn't been met.

Response: *TCL agreed that they need to satisfy community concerns and that there needs to be more work done to understand what is happening to the flare stack gases.*

- It is important to continue sampling for compounds even after negative results.
- There are problems with the interpretation of the data not the level of accuracy with the testing itself. The conclusion that there is no need for concern is not substantiated by the data being presented, and the level of certainty that it is safe to develop the buffer land is not justified. There is no accounting for any potential errors in the system and this issue is apparent in many of the reports being presented.

Response: *EPA and TCL are investigating further the monitoring reports and the conclusions that have been drawn from the data presented to date.*

- Why is the rezoning application still going to council when the testing results are not yet conclusive that it is safe to develop the buffer land?

Response from TCL: *The flare stack testing has opened up many questions but the dispersion modelling showed that this testing was not necessary. The decision to proceed with the rezoning was based on that modelling.*

Landfill Gas Audit process

Warren Pump from Earth Resources Management is an accredited independent Auditor for EPA Victoria.

He explained that the Auditor's report will be an independent review of the works being undertaken in regard to the landfill gases so as to protect the environment in line with EPA legislation, and considering the needs and expectations of workers and the community.

The report will be completed once all the test results have been collected, around the end of the year. It will advise on priorities and include a list of recommendations to TCL. Warren will continue to work with TCL to ensure all questions are clarified before the report is finalised. Once the report is complete, the auditor's role is finished.

Rezoning application, Olga Ghiri

The rezoning application for the buffer land is currently on public exhibition by Hume City Council <http://www.hume.vic.gov.au> until September 11, 2015. Since the last public exhibition process that occurred a couple of years ago, a number of things have changed in TCL's application. Therefore, previous submissions should be updated.

NEXT MEETING:

The next meeting will be on 25 November 2015.

See the meeting notes at www.transpacific.com.au/content/tullamarine.aspx for a full account of discussions at the meeting.

TLCCG is supported by Transpacific in order to support good communication and relations with the community.

