



# Tullamarine Landfill Community Meeting

24 May 2017

# Recent Activities

- ▶ MB61L sampling report completed
- ▶ Groundwater sampling at new wells completed
- ▶ Snap shot of In Situ parameters on all groundwater boreholes completed
- ▶ Groundwater sampling, all boreholes, commenced
- ▶ Review of Bore Network Depths, commenced
- ▶ Evaluation of stormwater connection nearing completion

# Tullamarine Planned Activities

- ▶ New Groundwater Well Sample Results Report [Underway]
- ▶ Ambient Air Testing [Underway]
- ▶ Develop Stormwater Concept Design with the Assistance of Community [Underway]
- ▶ Install Landfill Gas Extraction Wells on Mound 3 [Late 2017]
- ▶ Next groundwater technical review [Late 2018 / Early 2019], Technical Review for Auditor Review [TRAR]

Grey = task underway; Blue = task commencing

# Groundwater Assessment

*NEW DATA AVAILABLE FOR MB61L*

- ▶ Extra data provides greater certainty on trends.
- ▶ Sampling in 2014 indicated possible upward trend
- ▶ The 2 extra samples show no upward trend
- ▶ Stable and downward trends evident
- ▶ Further sampling is planned

*Thank you to Graeme for requesting an update*

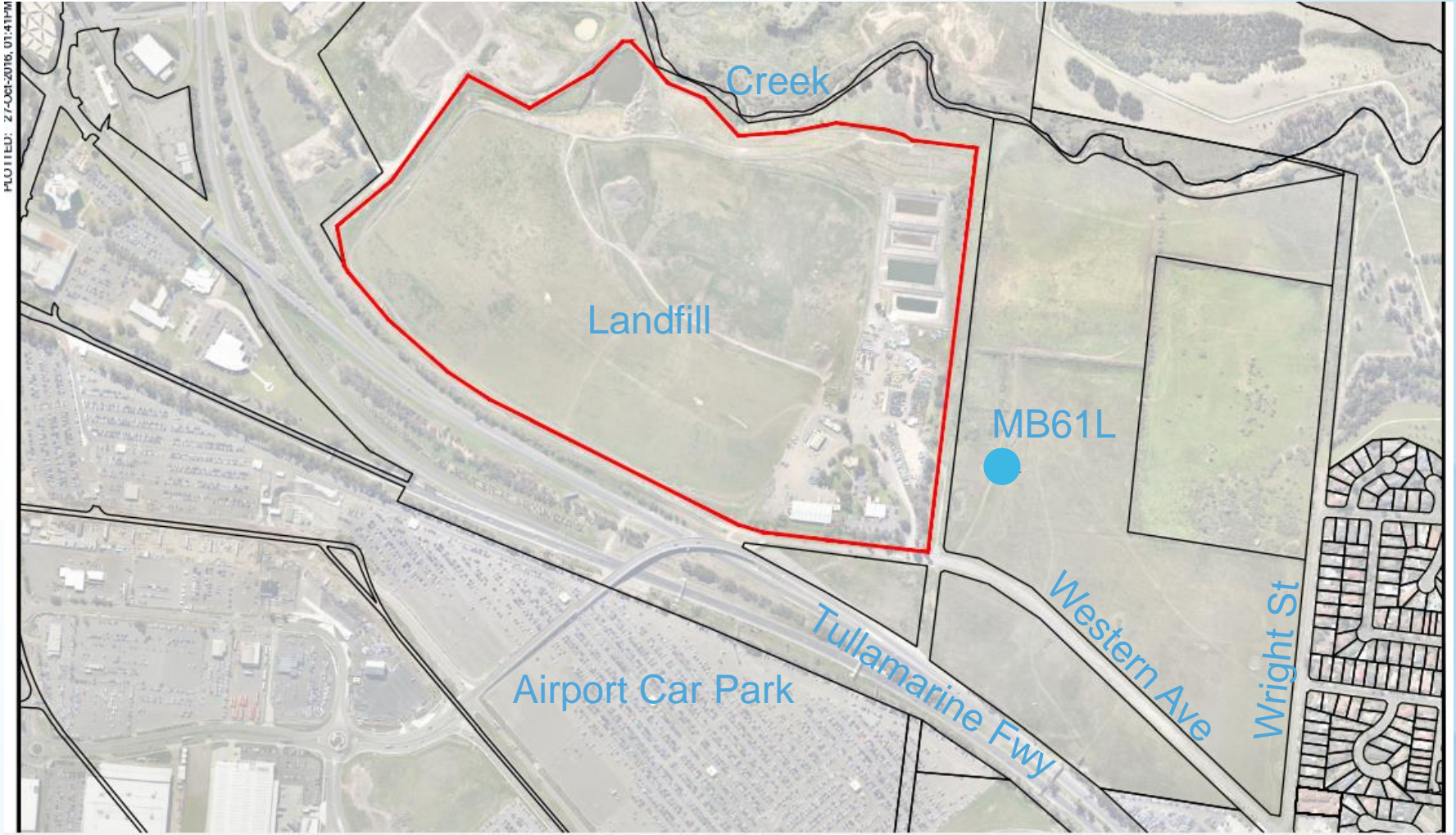
# MB61L Trend [1,2-DCE]



## Monitoring Results for 1,2-Dichloroethane

Date	1,2-Dichloroethane mg/L
20-Mar-13	0.09
17-Sep-13	0.13
22-Oct-13	0.13
06-Jul-15	0.11
10-May-16	0.016

# MB61L Location





# Leachate Trial Follow Up Question

*Transmissivity value in MB40 in upper end of marginal range.*

*Why not keep pumping?*

# Transmissivity Values Used

- ▶ Pumping is viable if T value is greater than 0.074
- ▶ Pumping may/may not be viable if T value is between 0.0093 and 0.074
- ▶ Pumping not viable if T value is less than 0.0093
- ▶ MB40 result, T value = 0.027

T value = m<sup>2</sup>/day



# MB40 Test Results Continued..

- ▶ Approx 2.1 litres was extracted from well during pumping.
- ▶ No evidence of LNAPL from waste during pumping.
- ▶ MB40 took 6 days to recover 83% of original thickness.
- ▶ Approx 1.7 litres entered the well from waste over a 6 day well period.

# MB40 Findings

The findings indicate it is not practical to pump the LNAPL at MB40,..

..however Cleanaway plans to test again Jul/Aug 2017

# References

API, 2012. *LNAPL Transmissivity Workbook: A Tool for Baildown Tests Analysis and User Guide*. American Petroleum Institute. (API, 2012).

ASTM E2856 – 11, 2012. *Standard Guide of Estimation of LNAPL Transmissivity*.

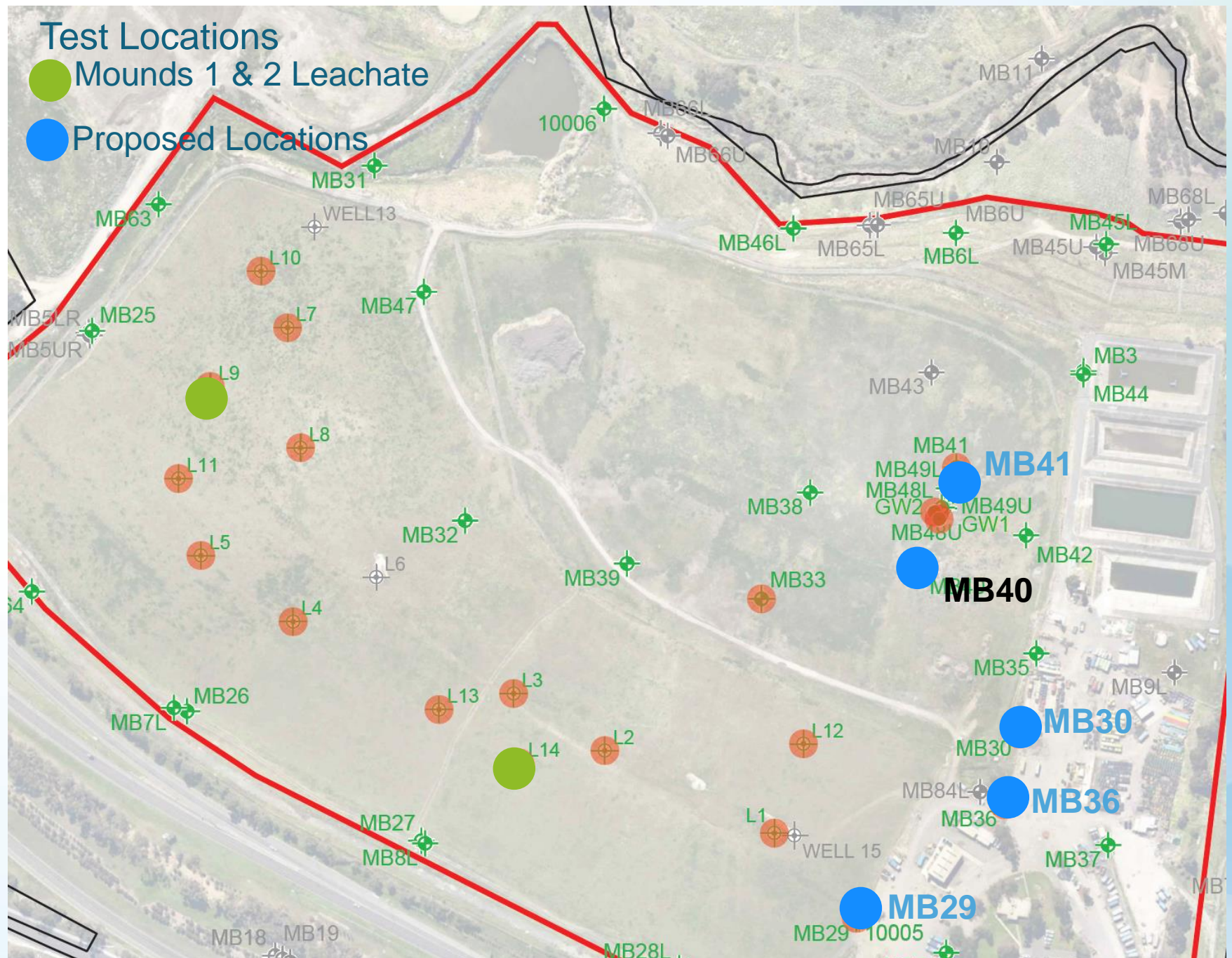
ITRC (Interstate Technology & Regulatory Council). 2009. Evaluating LNAPL Remedial Technologies for Achieving Project Goals. Washington, D.C.: Interstate Technology & Regulatory Council, LNAPLs Team. [www.itrcweb.org](http://www.itrcweb.org).

Test Locations

- Mounds 1 & 2 Leachate
- Proposed Locations



● Proposed Locations



Thank you for your time.

Questions?