

# Meeting minutes

| Meeting 4: MR               | L CRG 2018   |
|-----------------------------|--|
| Date:<br>Time:<br>Location: | Thursday, 29 November 2018<br>6.30pm<br>Community Information Centre, Melbourne Regional Landfill,<br>Christies Road, Ravenhall  |
| Meeting called by           | Cleanaway  |
| Type of meeting             | Melbourne Regional Landfill Community Reference Group  |
| Facilitator                 | Susan McNair, Currie Communications  |
| Notetaker                   | Sophie Clayton, Currie Communications  |
| Please read                 | Previous meeting minutes   |
| Invitees                    |  |
| Attendees                   | <ul> <li>Marlene Gormon, Community member</li> <li>Marion Martin, Community member</li> <li>Sophie Gove, EPA</li> <li>Daniel Hunt, EPA</li> <li>Jack Walker, Operations Manager, Cleanaway</li> <li>Lachlan James, Environmental Business Partner, Cleanaway</li> <li>Meldina Klehic, Regional Manager, Cleanaway</li> <li>Guy Edgar, Senior Environmental Business Partner, Cleanaway</li> </ul>  |
| Apologies                   | <ul> <li>David Anderson, Community member</li> <li>Mia Marevic, Community member</li> <li>Monika Thomas, Community member</li> <li>Melissa Westin, GM Metropolitan Remand Centre, Dept of Justice and Regulation</li> <li>Cr Bob Turner, Melton City Council</li> <li>Cr Goran Kesic, Melton City Council</li> <li>Cr Bruce Lancashire, Brimbank City Council</li> <li>Alistair Nairn, Advisor - Community and Environmental Partners, EPA</li> <li>Olga Ghiri, Stakeholder and Community Engagement Manager, Cleanaway</li> </ul> |
| Non-attendance              | <ul> <li>Sharon Lee, Community member</li> <li>Frank Alexopolous, Community member</li> <li>Bob Baggio, Manager Planning Services, Melton City Council</li> </ul>  |

### **About these minutes**

These minutes/supporting information are in line with the agreed Terms of Reference. Any concerns/queries about papers supporting the MRL CRG should be raised with the Chair/Facilitator, Susan McNair by emailing <a href="mailto:susan@curriecommunications.com.au">susan@curriecommunications.com.au</a>.

Meeting opened: 6:30pm

### 1. Community Reference Group governance

### Summary of governance provided post meeting.

## Meeting agenda and minutes governance

- Meetings held every three months
- Quorum = 5 members (including a minimum of 3 community members, 1 Cleanaway representative and the Chair)
- DRAFT minutes to be provided the community members within two weeks of meeting for comment
- Review period for DRAFT minutes is 21 days (3 weeks)
- Finalised minutes to be distributed and posted on Cleanaway website within 5 working days of finalisation.
- AGENDA items to be proposed to Chair seven working days before the next meeting.
- AGENDA and papers to be distributed five working days before next meeting.

The Chair acknowledged that the community participation was below the quorum of three, but everyone agreed to proceed with the meeting as per the agenda.



### 2. Actions items

| ACTION items   | Update  |
|--|---|
| <b>ACTION 180906_1:</b> O.Ghiri to provide S.Lee with an application form for new members, and commence a broader call for nominations if required.  | O.Ghiri provided forms and S.Lee invited M.Gormon to join the group and accepted the invitation. M.Gormon was welcomed by attendees. Complete. Remove action from agenda.     |
| <b>ACTION 180906_2:</b> EPA to provide an update on the outcome of the investigation into the litter incident on 10 August.  | S.Gove to include in EPA update. Remove action item from agenda.  |
| ACTION 180906_3: L.James to provide update on the leachate works at next meeting.  | L.James to include in the<br>Cleanaway update.<br>Remove action item from agenda.   |
| <b>ACTION 180906_4:</b> L.James to prepare information on acid sulphate soils for the next meeting, to be suitable for sharing with the community.   | L.James has developed a fact sheet<br>on acid sulphate soils. (See<br>Attachment 1).<br>Remove action item from agenda.   |
| ACTION 180906_5: D.Hunt to pass on community members' concerns about litter on Christies Road to Matt Walsh from VicRoads.   | EPA reported that he had called Matt Walsh multiple times and left a voicemail message. D.Hunt agreed to try to contact him again. Further update at 7 February 2019 meeting. |
| ACTION 180906_6: S.McNair to send S.Lee the record of Nick Simmonds' reason for why EPA lifted the methane PAN (Outlined in the meeting minutes from 28 Feb, available on <a href="Mailto:Cleanaway's website">Cleanaway's website</a> ) | Complete. Remove action item from agenda.   |
| <b>ACTION 180906_7:</b> L.James to provide leachate gauging data at 5 Dec meeting.   | L.James has compiled the leachate gauging data. (See Attachment 2).  Remove action item from agenda.  |
| ACTION 180530_8: O.Ghiri will provide an update on Cleanaway's MRL Community Fund at the next meeting on 5 December  | S.McNair noted O.Ghiri had been on leave and this update has been postponed until the next meeting.   |
| ACTION 180530_9: L.James to provide community members with contact details for the Cross Yarra Partnership community relations team. Details provided since the meeting: Metro Tunnel Project 24hour Information Hotline – 1800 105 105  | Complete. Remove action item from agenda.   |



#### 3. Environmental compliance

S.Gove provided an environmental compliance update from the EPA, summarised as follows:

- EPA has continued to visit the Melbourne Regional Landfill site every month to conduct inspections. They meet with Cleanaway and deliver a report to them including any advice and/or actions for them to follow up on.
- EPA revoked the minor works pollution abatement notice (PAN) on 6 September 2018
- The litter monitoring program PAN was revoked on 19 October 2018 because Cleanaway provided a new litter management plan which was more comprehensive. Depending on wind strength Cleanaway will deploy different actions.
- The new litter management plan was deployed in October and the site was closed due to high winds. EPA was kept well-informed, but did not have to attend. Some litter occurred off site but it was remediated quickly. EPA sees this as an improvement. An infringement notice and fine were issued for the litter that went off site that day to the value of a penalty infringement notice of \$8,000.

A community member acknowledged Cleanaway's actions to get people out to address the litter promptly and that they closed the tip, but raised concern that the value of the penalty was too low. EPA indicated that the fine was set under current legislation, but noted that new legislation expected on 1 July 2021 would provide alternative options and harsher penalties in some cases. EPA noted that community submissions had been received and considered in the formulation of that pending legislation.

**ACTION 181129\_1:** L.James agreed to present Cleanaway's new litter management plan at the next meeting.

• EPA received an application to amend the leachate PAN on 17 September 2018 to extend the timeframe for extraction of leachate under the landfill cell until November 2021. The amendment was approved because it now allows sufficient time for the pumps to be positioned and for the leachate to be pumped out, which will allow for compliance to the best practice in environment management.



#### 4. Site operations

- L. James provided a site operations update (See Attachment 3) summarized as follows:
  - Jack Walker, new Operations Manager for the site, was introduced to attendees. He has a background in engineering and building and rebuilding landfill cells.
  - Construction of the new landfill cell 4A has been completed and reviewed and audited by the auditor and EPA. Two improvements included establishing litter control and ensuring active leachate management were established in the cell before filling commences. Construction of two new landfill cells 4B-1 and 4B-3 has also commenced. Some additional traffic would be observed.
  - Transition into cell 4A will commence in the first week of December and, as a condition of license, Cleanaway has 30 days to cover the currently active cell, cell 4B, once filling ceases there.
  - Environmental update: November groundwater monitoring event completed; both
    the Landfill Operations Risk Assessment and Landfill Environmental Monitoring Plan
    have been updated; next Environmental Audit has commenced with Anthony Lane as
    the auditor and it will take 3-4 months to complete; and installed a new set of
    horizontal gas wells to extract gases from the active landfill cell its primary use is
    to control odour.
  - Major project updates include new 12m litter nets to be completed July 2019, landfill gas (LFG) upgrades to go to tender early 2019, and planned new leachate sumps will go to tender January 2019.

L.James also reminded participants that the fact sheet on acid sulphate soils had been completed (see Attachment 2). In answering a community member question about how much acid sulphate soil is receive and how deep it is buried, L.James explained that only a small amount of the soil was received (a few hundred tonnes a year) because it costs a lot for the person delivering it, and that it was pushed into the waste mass.



#### 5. Remediation and rehabilitation

J.Walker provided an additional update on the transition out of the currently active landfill cell, cell 4B, including the approach to capping. In response to an EPA question on the timing of the vertical gas extraction wells, he noted that they would be complete around March 2019.

### 6. Other business

The Chair invited participants to raise any other business – none raised.

### 7. 2019 meetings

- Thursday 7 February 2019
- Thursday 9 May 2019
- Thursday 15 August 2019
- Thursday 14 November 2019

Summary of meeting deadlines provided post meeting

| MTG 4 2018 (29 Nov 2018)  |             |
|---|-------------|
| AGENDA items to be proposed to Chair                                | 20 Nov 2018 |
| AGENDA and papers to be distributed                                 | 22 Nov 2018 |
| Meeting 6:15pm for 6:30 PM start - 8:30 PM                          | 29 Nov 2018 |
| Draft minutes to be provided for comment                            | 13 Dec 2018 |
| Draft minute review   | 17 Jan 2019 |
| Finalised minutes to be distributed and posted on Cleanaway website | 24 Jan 2019 |
| MTG 1 2019 (7 Feb 2019)   |             |
| AGENDA items to be proposed to Chair                                | 29 Jan 2019 |
| AGENDA and papers to be distributed                                 | 31 Jan 2019 |
| Meeting 6:15pm for 6:30 PM start - 8:30 PM                          | 7 Feb 2019  |
| Draft minutes to be provided for comment                            | 21 Feb 2019 |
| Draft minute review   | 14 Feb 2019 |
| Finalised minutes to be distributed and posted on Cleanaway website | 21 Feb 2019 |

Meeting closed: 7.05pm



| New and            | ongoing action  | ns items as at | 29 Nover | mber 2018  |
|--------------------|---|----------------|----------|--|
| Reference          | Action  | Respondent/s   | Due      | Status / comment   |
| ACTION<br>180906_5 | D.Hunt to pass on community members' concerns about litter on Christies Road to Matt Walsh from VicRoads. | D.Hunt         | 5 Dec    | EPA reported that he had called Matt Walsh multiple times and left a voicemail message. D.Hunt agreed to try to contact him again. |
| ACTION<br>180530_8 | O.Ghiri will provide an update on Cleanaway's MRL Community Fund at the next meeting on 5 December.       | O.Ghiri        | 7 Feb    | S.McNair noted O.Ghiri had been on leave and this update has been postponed until the next meeting.                                |
| ACTION<br>181129_1 | L.James agreed to present Cleanaway's new litter management plan at the next meeting.                     | L.James        | 7 Feb    |  |



## Attachment 1



## **Acid Sulfate Soil Fact Sheet**

Melbourne Regional Landfill Community Reference Group

#### What is acid sulfate soil?

Acid sulfate soils are sediments that contain iron sulfides. They form under anaerobic (no oxygen), saturated conditions. The acid sulfate soils in the Melbourne region formed during the last sea level rise (about 10,000 years ago).

#### **Potential Environmental Impacts**

Acid sulfate soils do not pose any risk if left undisturbed. When these soils are exposed to air, the iron sulfides they contain react with oxygen to create sulfuric acid. The acid makes metals in the soil more soluble, therefore can become toxic to plants and animals.

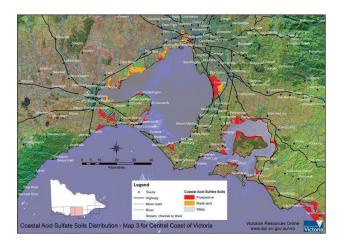
If the soil is not managed appropriately after disturbance, it can impact waterways causing environmental harm to ecosystems.



Developments and infrastructure projects around Docklands are a source of acid sulfate soil (Source: NearMap).

#### **Management of Acid Sulfate Soil in Victoria**

In Victoria, you can only dispose of or reuse waste acid sulfate soil if you have an appropriate license under the *Environmental Protection Act 1970* (such as MRL) or an Environmental Management Plan EMP approved by the EPA. (Hi-Quality – Bulla).



Acid sulfate soil distribution map (Source: Agriculture Victoria)

### **Disposal of Acid Sulfate Soil at MRL**

Removing disturbed acid sulfate soils from the environment minimizes environmental harm to aquatic ecosystems..

Acid sulfate soil is treated as a waste product at the site, and is disposed at the working face.

Landfill cells at MRL are constructed in accordance with Victorian Best Practice.

The construction of cells involves an extensive leachate collection system. The leachate collection system protects beneficial uses of groundwater to avoid any adverse environmental impact.

### **Assessing Environmental Impact**

Groundwater and leachate acidity is monitored every 6 months. The results are reviewed by an EPA appointed auditor.

#### **Further Information**

EPA (2009), Acid Sulfate Soil and Rock – Publication 655.1 July 2009

https://www.dpi.nsw.gov.au/agriculture/soils/ass https://www.qld.gov.au/environment/land/management/soil/acid-sulfate



## Attachment 2





|            | SWL (mbTOC) |      |      |       |      |       |      |      |      |      |      |      |      |      |       |      |       |       |      |       |      |      |       |      |
|------------|-------------|------|------|-------|------|-------|------|------|------|------|------|------|------|------|-------|------|-------|-------|------|-------|------|------|-------|------|
| Date       | LP01        | LP02 | LP03 | LP03B | LP04 | LP05B | LP06 | LP07 | LP08 | LP09 | LP10 | LP11 | LP12 | LP13 | LP14  | LP15 | LP16  | LP16B | LP17 | LP17B | LP18 | LP20 | LP21  | LP23 |
| 12/07/2017 | 3.99        |      | 23.8 | 25.8  | 35.8 | 29.9  | 23.4 | 17.7 | 18.6 | 17.9 | 17.3 |      |      |      |       | 28.7 |       | 31.2  |      | 19.75 |      |      |       |      |
| 27/07/2017 | 3.6         |      | 24.9 | 25.7  | 34.7 | 29.8  | 23.4 | 17.8 | 18.6 | 17.7 | 17.3 | 17.1 | 16.7 | 15.5 | 11.4  | 28   |       | 31.1  |      | 19.7  | 14.3 |      |       | 23.4 |
| 9/08/2017  | 3.67        | 3.21 | 24.9 | 25.7  | 34.4 | 29.4  | 23.4 | 17.6 | 18.6 | 17.7 | 17.3 | 17   | 17   | 15.5 | 13.8  | 28   |       | 31.5  |      | 19.7  | 15   |      |       | 23.4 |
| 24/08/2017 | 4.35        | 3.46 | 24.9 | 25.6  | 23.5 | 29.2  | 38.5 | 17.5 | 18.6 | 17.7 | 17.2 | 17.1 | 17   | 15.5 | 12    | 28   | 11.7  | 31.4  | 6.65 | 19.7  | 15.1 |      |       | 23.4 |
| 7/09/2017  | 4.49        | 3.25 | 24.9 | 25.7  | 23.4 | 26.8  | 38.5 | 17.8 | 18.6 | 17.7 | 17.3 | 17   | 17   | 15.9 | 13.8  | 27.9 | 11.8  | 31.6  | 7.65 | 19.7  | 15.1 |      |       | 23.4 |
| 20/09/2017 | 4.91        | 3.3  | 24.8 | 25.6  | 23.4 | 29.8  | 38.7 | 17.8 | 18.6 | 17.7 | 17.2 | 17   | 17.4 | 15.9 | 14.2  | 28.7 | 11.75 | 26.8  | 6.67 | 19.75 | 15   |      |       | 23.4 |
| 4/10/2017  | 4.37        | 3.26 | 24.8 | 25.7  | 23.4 | 29.7  | 35.9 | 17.7 | 17.9 | 17.4 | 17.2 |      | 15.9 | 14.5 | 11.7  | 29.2 | 11.8  |       | 6.68 | 18.4  | 15   |      |       | 23.4 |
| 17/10/2017 | 4.85        | 3.57 | 24.8 | 25.7  |      | 26.8  | 34.8 | 17.8 | 18   | 17.7 | 17.5 | 16.8 |      | 15.6 |       | 27.9 | 11.75 | 31.2  | 6.67 | 19.7  | 15   |      |       | 23.4 |
| 15/11/2017 | 4.32        | 3.46 | 24.6 | 25.9  | 23.5 | 29.25 | 37.1 | 17.8 | 17.9 | 17.8 | 17.7 | 17   | 16.6 | 15.6 | 13.2  |      | 11.8  | 31.1  | 6.71 | 19.6  | 15   |      | 16.2  | 23.4 |
| 29/11/2017 |             |      | 24.6 | 25.7  | 23.4 | 29.1  | 38.7 | 17.3 | 17.8 | 17.6 | 17.6 | 16.9 | 16.4 | 15.3 | 13.2  |      | 11.8  | 31    | 6.7  | 19.6  | 15.1 |      | 16.2  | 23.5 |
| 12/12/2017 |             |      | 24.4 | 25.8  | 23.3 | 29.2  | 34.6 | 17.8 | 17.7 | 17.7 | 17.6 | 16.7 | 16.2 | 14.7 | 11.7  |      | 11.8  | 31    | 6.7  | 18.2  | 14.9 |      | 15.7  | 23.4 |
| 28/12/2017 |             |      | 24.4 | 25.8  | 23.3 | 29.1  | 38.8 | 17.8 | 17.9 | 17.7 | 17.6 | 16.9 | 16.5 | 15.7 | 13.3  |      | 11.7  | 31.2  | 6.06 | 19.7  | 15   | 26.1 | 15.6  |      |
| 9/01/2018  |             |      | 24.4 | 25.8  |      | 29.1  | 38.8 | 17.8 | 17.9 | 17.8 | 17.6 | 16.9 | 16.5 | 15.6 | 13.2  |      | 11.7  | 31.1  | 6.73 | 19.7  | 15.1 | 26   | 15.6  | 23.4 |
| 24/01/2018 |             |      | 24.3 | 24.2  | 23.2 | 26.4  | 35.8 | 17.8 | 17.7 | 17.6 | 17.5 | 16.6 | 16.1 | 14.8 | 11.8  |      | 11.7  | 27.1  | 6.68 | 19.6  | 15   | 26   | 15.5  | 23.4 |
| 7/02/2018  |             |      | 24.3 | 25.8  | 23.2 | 29.2  | 38.9 |      |      |      |      |      |      |      |       |      | 11.7  | 31.1  | 6.73 | 19.7  | 14.9 | 25.9 | 15.4  | 23.4 |
| 22/02/2018 |             |      |      | 25.8  |      | 28.8  | 38.8 | 17.8 | 17.8 | 17.6 | 17.6 | 16.9 | 16.4 | 15.6 | 12.7  | 27.6 |       | 31.1  |      | 19.7  | 14.3 | 25.9 | 15.75 | 27.8 |
| 5/03/2018  |             |      | 24.3 | 25.7  | 23.2 | 28.8  | 38.8 |      |      |      | 17.6 | 16.9 | 16.4 | 15.6 | 13.2  |      | 11.75 | 31    | 6.74 | 19.6  | 14.8 | 25.9 | 16    | 23.7 |
| 19/03/2018 |             |      | 24.3 | 25.75 | 23.2 | 26.4  |      | 17.8 | 17.9 | 17.7 | 17.6 | 16.9 | 16.4 | 15.7 | 13.2  |      | 11.7  | 26.3  | 6.74 | 18.1  | 11.8 | 14.9 | 16    | 23.4 |
| 5/04/2018  |             |      | 24.3 |       | 23.2 | 26.5  |      | 17.8 | 17.8 | 17.7 | 17.6 | 16.7 | 16.2 | 14.9 | 12.1  |      | 11.7  | 25.75 | 6.75 | 17.4  | 11.2 | 25.8 | 16.3  | 23.4 |
| 19/04/2018 |             |      | 24.3 |       | 4.18 | 5.26  |      | 17.8 | 17.9 | 17.7 | 17.7 | 16.9 | 16.5 | 15   | 13.25 |      |       | 4.32  | 6.75 | 2.43  | 11.3 | 25.9 | 15.4  | 23.4 |



|            | RL (mAHD) |        |       |       |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |                |       |       |       |       |
|------------|-----------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Date       | LP01      | LP02   | LP03  | LP03B | LP04  | LP05  | LP06  | LP07  | LP08  | LP09 | LP10  | LP11  | LP12  | LP13  | LP14  | LP15 | LP16  | LP16A | LP17  | LP17B          | LP18  | LP20  | LP21  | LP23  |
| 12/07/2017 | 58.31     |        | 57.49 | 55.84 | 62.94 | 56.12 | 69.95 | 53.21 | 52.29 | 53.4 | 54.02 |       |       |       |       | 70   |       | 60.62 |       |                |       |       |       |       |
| 27/07/2017 | 58.7      |        | 56.39 | 55.94 | 64.04 | 56.22 | 69.95 | 53.11 | 52.29 | 53.6 | 54.02 | 53.22 | 53.25 | 53.18 | 54.76 | 70.7 |       | 60.72 |       |                | 52.03 |       |       | 55.75 |
| 9/08/2017  | 58.63     | 57.698 | 56.39 | 55.94 | 64.34 | 56.62 | 69.95 | 53.31 | 52.29 | 53.6 | 54.02 | 53.32 | 52.95 | 53.18 | 52.36 | 70.7 |       | 60.32 |       |                | 51.33 |       |       | 55.75 |
| 24/08/2017 | 57.95     | 57.448 | 56.39 | 56.04 | 75.24 | 56.82 | 54.85 | 53.41 | 52.29 | 53.6 | 54.12 | 53.22 | 52.95 | 53.18 | 54.16 | 70.7 | 81.67 | 60.42 | 68.44 |                | 51.23 |       |       | 55.75 |
| 7/09/2017  | 57.81     | 57.658 | 56.39 | 55.94 | 75.34 | 59.22 | 54.85 | 53.11 | 52.29 | 53.6 | 54.02 | 53.32 | 52.95 | 52.78 | 52.36 | 70.8 | 81.57 | 60.22 | 67.44 |                | 51.23 |       |       | 55.75 |
| 20/09/2017 | 57.39     | 57.608 | 56.49 | 56.04 | 75.34 | 56.22 | 54.65 | 53.11 | 52.29 | 53.6 | 54.12 | 53.32 | 52.55 | 52.78 | 51.96 | 70   | 81.62 | 65.02 | 68.42 |                | 51.33 |       |       | 55.75 |
| 4/10/2017  | 57.93     | 57.648 | 56.49 | 55.94 | 75.34 | 56.32 | 57.45 | 53.21 | 52.99 | 53.9 | 54.12 |       | 54.05 | 54.18 | 54.46 | 69.5 | 81.57 |       | 68.41 |                | 51.33 |       |       | 55.75 |
| 17/10/2017 | 57.45     | 57.338 | 56.49 | 55.94 |       | 59.22 | 58.55 | 53.11 | 52.89 | 53.6 | 53.82 | 53.52 |       | 53.08 |       | 70.8 | 81.62 | 60.62 | 68.42 |                | 51.33 |       |       | 55.75 |
| 15/11/2017 | 57.98     | 57.448 | 56.69 | 55.74 | 75.24 | 56.77 | 56.25 | 53.11 | 52.99 | 53.5 | 53.62 | 53.32 | 53.35 | 53.08 | 52.96 |      | 81.57 | 60.72 | 68.38 | <u>}</u>       | 51.33 |       | 52.36 | 55.75 |
| 29/11/2017 |           |        | 56.69 | 55.94 | 75.34 | 56.92 | 54.65 | 53.61 | 53.09 | 53.7 | 53.72 | 53.42 | 53.55 | 53.38 | 52.96 |      | 81.57 | 60.82 | 68.39 | Ž              | 51.23 |       | 52.36 | 55.65 |
| 12/12/2017 |           |        | 56.89 | 55.84 | 75.44 | 56.82 | 58.75 | 53.11 | 53.19 | 53.6 | 53.72 | 53.62 | 53.75 | 53.98 | 54.46 |      | 81.57 | 60.82 | 68.39 | 15 0           | 51.43 |       | 52.86 | 55.75 |
| 28/12/2017 |           |        | 56.89 | 55.84 | 75.44 | 56.92 | 54.55 | 53.11 | 52.99 | 53.6 | 53.72 | 53.42 | 53.45 | 52.98 | 52.86 |      | 81.67 | 60.62 | 69.03 | N <sub>O</sub> | 51.33 | 52.49 | 52.96 |       |
| 9/01/2018  |           |        | 56.89 | 55.84 |       | 56.92 | 54.55 | 53.11 | 52.99 | 53.5 | 53.72 | 53.42 | 53.45 | 53.08 | 52.96 |      | 81.67 | 60.72 | 68.36 |                | 51.23 | 52.59 | 52.96 | 55.75 |
| 24/01/2018 |           |        | 56.99 | 57.44 | 75.54 | 59.62 | 57.55 | 53.11 | 53.19 | 53.7 | 53.82 | 53.72 | 53.85 | 53.88 | 54.36 |      | 81.67 | 64.72 | 68.41 |                | 51.33 | 52.59 | 53.06 | 55.75 |
| 7/02/2018  |           |        | 56.99 | 55.84 | 75.54 | 56.82 | 54.45 |       |       |      |       |       |       |       |       |      | 81.67 | 60.72 | 68.36 |                | 51.43 | 52.69 | 53.16 | 55.75 |
| 22/02/2018 |           |        |       | 55.84 |       | 57.22 | 54.55 | 53.11 | 53.09 | 53.7 | 53.72 | 53.42 | 53.55 | 53.08 | 53.46 | 71.1 |       | 60.72 |       |                | 52.03 | 52.69 | 52.81 | 51.35 |
| 5/03/2018  |           |        | 56.99 | 55.94 | 75.54 | 57.22 | 54.55 |       |       |      | 53.72 | 53.42 | 53.55 | 53.08 | 52.96 |      | 81.62 | 60.82 | 68.35 |                | 51.53 | 52.69 | 52.56 | 55.45 |
| 19/03/2018 |           |        | 56.99 | 55.89 | 75.54 | 59.62 |       | 53.11 | 52.99 | 53.6 | 53.72 | 53.42 | 53.55 | 52.98 | 52.96 |      | 81.67 | 65.52 | 68.35 |                | 54.53 | 63.69 | 52.56 | 55.75 |
| 5/04/2018  |           |        | 56.99 |       | 75.54 | 59.52 |       | 53.11 | 53.09 | 53.6 | 53.72 | 53.62 | 53.75 | 53.78 | 54.06 |      | 81.67 | 66.07 | 68.34 |                | 55.13 | 52.79 | 52.26 | 55.75 |
| 19/04/2018 |           |        | 56.99 |       | 94.56 | 80.76 |       | 53.11 | 52.99 | 53.6 | 53.62 | 53.42 | 53.45 | 53.68 | 52.91 |      |       | 87.5  | 68.34 |                | 55.03 | 52.69 | 53.16 | 55.75 |

Original name LP05B Original name LP16B



Table 6.1: Leachate Levels and Compliance

| LP05A   | LP04    | LP03A   | LP02    | LP01    | Sump                             |
|---------|---------|---------|---------|---------|----------------------------------|
| 20      | 28      | 2A      | 1A      | 1A      | Cell                             |
| 86.270  | 80.280  | 81.780  | 60.890  | 62.3    | Top of Cap<br>(mAHD)             |
| 57.467  | 75.94   | 57.65   | 57.44   | 57.76   | Leachate<br>Elevation<br>(mAHD)  |
| 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | Gauging<br>Date                  |
| 53.68   | 53.8    | 54.02   | 56.7    | 57.6    | Liner RL<br>(mAHD)               |
| 53.98   | 54.1    | 54.32   | 57.00   | 57.90   | Leachate<br>Compliance<br>(mAHD) |



|         |         | Î                  | Ī        |         | П       | П       | П       |         |         |         |         |         |                                  |
|---------|---------|--------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|
| LP18    | LP17A   | LP16A              | LP15     | LP14    | LP13    | LP12    | LP11    | LP10    | LP09    | LP08    | LP07    | LP06    | Sump                             |
| 2,1     | 2,1     | 21                 | 21       | 2Н      | 2Н      | 26      | 26      | 2F      | 2F      | 2E      | 20      | 20      | Cell                             |
| 69.220  | 75.470  | 92.600             | 75.090   | 66.450  | 68.760  | 70.420  | 70.890  | 71.210  | 71.780  | 71.580  | 71.630  | 80.080  | Top of Cap<br>(mAHD)             |
| 53.7    | 55.80   | 61.13 <sup>8</sup> | 72.14    | 53.2    | 53.22   | 53.83   | 53.79   | 53.52   | 54.05   | 53.64   | 53.75   | 59.81   | Leachate<br>Elevation<br>(mAHD)  |
| 1/11/17 | 1/11/17 | 1/11/17            | 17/10/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | Gauging<br>Date                  |
| 53.03   | 53.24   | 52.79              | 52.7     | 54.14   | 54.02   | 53.89   | 53.88   | 54.06   | 54.06   | 53.83   | 53.87   | 53.04   | Liner RL<br>(mAHD)               |
| 53.33   | 53.54   | 53.09              | 53.00    | 54.44   | 54.32   | 54.19   | 54.18   | 54.36   | 54.36   | 54.13   | 54.17   | 53.34   | Leachate<br>Compliance<br>(mAHD) |



| LP26    | LP25    | LP24    | LP23    | LP22   | LP21    | LP20   | LP19    | Sump                             |
|---------|---------|---------|---------|--------|---------|--------|---------|----------------------------------|
|         |         |         | ī       |        | 2K S    | 2K S   | 2K N    | Cell                             |
| 77.62   | 79.75   | 77.49   | 79.900  | 68.670 | 69.270  | 80.550 | 90.62   | Top of Cap<br>(mAHD)             |
| 52.3    | 56.1    | 55.11   | 56.1    |        | 52.46   |        | 64.59   | Leachate<br>Elevation<br>(mAHD)  |
| 1/11/17 | 1/11/17 | 1/11/17 | 1/11/17 | æ      | 1/11/17 | T.     | 1/11/17 | Gauging<br>Date                  |
| 52.0    | 52.0    | 51.5    | 51.5    | 51.5   | 53.1    | 53.15  | 52.98   | Liner RL<br>(mAHD)               |
| 52.3    | 52.3    | 51.8    | 51.8    | 51.8   | 53.4    | 53.45  | 53.28   | Leachate<br>Compliance<br>(mAHD) |



Table 6.1: Leachate Levels and Compliance

| Sump  | Cell | Top of Cap<br>(mAHD) | Leachate<br>Elevation<br>(mAHD) | Gauging<br>Date | Liner RL<br>(mAHD) | Leachate<br>Compliance<br>(mAHD) |
|-------|------|----------------------|---------------------------------|-----------------|--------------------|----------------------------------|
| LP01  | 1A   | 62.3                 | 57.76                           | 1/11/17         | 57.6               | 57.90                            |
| LP02  | 1A   | 60.890               | 57.44                           | 1/11/17         | 56.7               | 57.00                            |
| LP03A | 2A   | 81.780               | 57.65 <sup>6</sup>              | 1/11/17         | 54.02              | 54.32                            |
| LP04  | 2B   | 80.280               | 75.94                           | 1/11/17         | 53.8               | 54.1                             |
| LP05A | 2C   | 86.270               | 57.46 <sup>7</sup>              | 1/11/17         | 53.68              | 53.98                            |



| Sump  | Cell | Top of Cap<br>(mAHD) | Leachate<br>Elevation<br>(mAHD) | Gauging<br>Date | Liner RL<br>(mAHD) | Leachate<br>Compliance<br>(mAHD) |
|-------|------|----------------------|---------------------------------|-----------------|--------------------|----------------------------------|
| LP06  | 2D   | 80.080               | 59.81                           | 1/11/17         | 53.04              | 53.34                            |
| LP07  | 2D   | 71.630               | 53.75                           | 1/11/17         | 53.87              | 54.17                            |
| LP08  | 2E   | 71.580               | 53.64                           | 1/11/17         | 53.83              | 54.13                            |
| LP09  | 2F   | 71.780               | 54.05                           | 1/11/17         | 54.06              | 54.36                            |
| LP10  | 2F   | 71.210               | 53.52                           | 1/11/17         | 54.06              | 54.36                            |
| LP11  | 2G   | 70.890               | 53.79                           | 1/11/17         | 53.88              | 54.18                            |
| LP12  | 2G   | 70.420               | 53.83                           | 1/11/17         | 53.89              | 54.19                            |
| LP13  | 2H   | 68.760               | 53.22                           | 1/11/17         | 54.02              | 54.32                            |
| LP14  | 2H   | 66.450               | 53.2                            | 1/11/17         | 54.14              | 54.44                            |
| LP15  | 21   | 75.090               | 72.14                           | 17/10/17        | 52.7               | 53.00                            |
| LP16A | 21   | 92.600               | 61.13 <sup>8</sup>              | 1/11/17         | 52.79              | 53.09                            |
| LP17A | 2J   | 75.470               | 55.80                           | 1/11/17         | 53.24              | 53.54                            |
| LP18  | 2J   | 69.220               | 53.7                            | 1/11/17         | 53.03              | 53.33                            |



| Sump | Cell | Top of Cap<br>(mAHD) | Leachate<br>Elevation<br>(mAHD) | Gauging<br>Date | Liner RL<br>(mAHD) | Leachate<br>Compliance<br>(mAHD) |
|------|------|----------------------|---------------------------------|-----------------|--------------------|----------------------------------|
| LP19 | 2K N | 90.62                | 64.59                           | 1/11/17         | 52.98              | 53.28                            |
| LP20 | 2K S | 80.550               | -                               | -               | 53.15              | 53.45                            |
| LP21 | 2K S | 69.270               | 52.46                           | 1/11/17         | 53.1               | 53.4                             |
| LP22 | -    | 68.670               | -                               | -               | 51.5               | 51.8                             |
| LP23 | -    | 79.900               | 56.1                            | 1/11/17         | 51.5               | 51.8                             |
| LP24 | -    | 77.49                | 55.11                           | 1/11/17         | 51.5               | 51.8                             |
| LP25 | -    | 79.75                | 56.1                            | 1/11/17         | 52.0               | 52.3                             |
| LP26 | -    | 77.62                | 52.3                            | 1/11/17         | 52.0               | 52.3                             |

## Attachment 3





## Cell Construction

- Cell 4A construction completed and added to the license.
- Key environmental improvements:
  - Litter management
  - Re-design of leachate sumps
- Sub grade works have commenced for Cell 4B-1









# **Operations Update**

- Screening soil bunds left by Boral
- Will begin transition into Cell 4A late this week / early next week.
- New haul constructed.
- Have begun placing intermediate capping on Cell 3B.

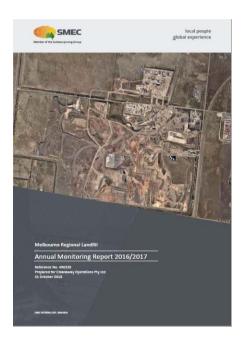






## **Environment Update**





- November groundwater monitoring event completed.
- Update to the Landfill Operations Risk Assessment & Landfill Environmental Monitoring Plan. Conditional auditor approval.
- Environmental Audit commenced.
- New set of horizontals being installed in Cell 3B
- Wheel wash repairs completed.
- Surface emission monitoring underway.



## Major Projects Update

Major works scheduled in the next 12 months

- **12 m Litter Nets:** Geotechincal works commencing once suitable permits have been issued for drilling (approval required from Department of Mining). Current expected completion July 2019.
- **LFG Upgrades:** Design of new LFG ring main going out to tender in December 2019. Construction design for new vertical extraction wells in Cell 2M also going out to tender early in 2019.
- Leachate Sumps: Will go to tender January 2019 for the development of Leachate Riser Construction Quality Assurance Plan and subsequent construction of new leachate risers.

