

Meeting minutes

Meeting 2 - MRL CRG 2022		
Thursday 18 August 2022	6:15 for 6.30pm – 8.30pm	Community Information Centre, Melbourne Regional Landfill, Christies Road, Ravenhall
Meeting called by	Cleanaway	
Type of meeting	Community Reference Group meeting	
Facilitator	Susan McNair, Currie	
Notetaker/Timekeeper	Laura Jade, Currie	
Please read	Previous meeting minutes	
Attendees		
Community	Marlene Gorman, Gary Mullan, Michael Baker	
Local Government	Simon Temple, City of Melton Cr Bob Turner, City of Melton	
EPA	O'shea Gill-Benton, Environmental Protection Officer Viranga Abeywickrema, Team Leader, Environment Protection	
Cleanaway	Olga Ghiri, Stakeholder & Community Engagement Manager Alaa Abou-Antoun, Engineering Manager Kate Sims, Environmental Specialist	
Apologies	Michelle Mullan, Community member Sharon Lee, Community member Cr Bruce Lancashire, Brimbank City Council Bob Baggio, City of Melton Cr Steve Abboushi, City of Melton Gary Laidlaw, EPA Stephen Lansdell, EPA Jesse Parsons-Jones, Department of Justice Meldina Klehic, Cleanaway Bruno Pronesti, Branch Manager Vic Post Collections	

Time	Agenda Topic	Topic lead
6.40 – 6.50pm	Welcome <ul style="list-style-type: none"> • CRG Governance (incl. online meeting format) • Previous minutes and action items 	Susan McNair
6.50 – 7.15pm	General site operations	Alaa Abou-Antoun & Kate Sims, Cleanaway
7.15 – 7.35pm	Environmental compliance update	O'Shea Gill-Benton, EPA
7.35 – 7.45pm	Community engagement/awareness	Olga Ghiri, Cleanaway
8.00pm	Meeting closed	Susan McNair

About this Agenda

We will manage agendas/minutes/supporting information 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 susan@curriecommunications.com.au

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.

Meeting opened: 6:40pm

1. Welcome

S. McNair opened the meeting, welcomed participants and explained how the meeting would proceed.

S. McNair reminded participants that the meetings are intended to be respectful, constructive and open. Participants are encouraged to listen and participate in the conversations and are expected to take information discussed during the meeting back to their respective networks, peers, and organisations.

All participants introduced themselves.

Past minutes were accepted. Summary of progress on actions in Attachment 1.

2. General site operations

K. Sims provided an update on general site operations (see Attachment 2 for slides)

Landfill gas collection update:

- Newly installed gas infrastructure – Stage 1 (completed last year, earlier this year).
- 12 new vertical extraction wells.
- Currently being flared, will be hooked up to the main gas system this month (August).
- Installation of gas extraction well works in stage 4 - 4B1 has been completed.
- Header line extension, north of 4C-1 and 4C-2 is approx. 50% complete.
- Works to be completed by beginning of September.
- Rectification works of offline LFG wells in Stage 1 complete and Stage 2 80% complete – to be completed post capping (due to be complete mid-November).

Gas plant expansion:

- In discussion with Powercor.
- Install 8 new landfill gas generator modules and flares as required.
- Plan to install new leachate line.
- Double power generating capacity to 68,600MWh of electricity per year.
- Mitigate over 220,000 tonnes of greenhouse gas emissions per year.
- Approvals: Works Approval Granted and Cleanaway currently reviewing options.
- Cleanaway currently exploring options for the expansion.
- A new 3000m3 flare has been ordered (likely to arrive in December) to maintain compliance with LFG volumes.

Leachate update:

- Cleanaway has completed all 15 leachate redrills, all successfully installed.
- Gas extraction to maintain environmental control.
- Leachate in stage 2 continues to be drawn down, however, “equilibrium” has been reached.
- Compliance levels have been agreed with EPA and OL amendment is in progress.
- There is one leachate redrill that is not operating as it should, so Cleanaway is monitoring closely. Anticipates new leachate line will solve issues.

Working face and odour update:

- Weekly in-house drone fly overs currently in progress.
- Daily odour inspections (perimeter and site). Also do third-party odour inspections, most recently in July.
- Face measurements – using handheld GPS and drone.

- WF Management Plan in place – Live document (will need to be updated to include tarpomatic).
- Odour curtain – Northern nets 4C-1 & 4C-2.
- Odour cannons.

K. Sims responded to questions from attendees

O. Gill-Benton: Can you confirm the pump is currently non-compliant?

K. Sims: It's been fluctuating a lot, more than it should with the rainfall we've had. So the pump LP41 has been compliant and then we're getting some weird readings. What we think is happening is the pump keeps turning. So we've had to pull the pump out three times. Until we install that leachate line, I want to be sure that everything is operating correctly before I report that.

Action 220818 01: K. Sims to check the past four weeks of data and tell O. Gill-Benton how much pump LP41 has been fluctuating.

K. Sims continued presentation

Working face prosecution:

- In July 2022 Landfill Operations Pty Ltd (LOPL) pleaded guilty to 2 wound up charges relating to licence breaches for failing to limit the size of the tipping face, not covering all waste at the end of day's operations and failing to immediately notify EPA of non-compliance with licence conditions at the Melbourne Regional Landfill in Ravenhall, Victoria.
- These offences occurred on 19 and 22 May 2020 and 19 and 31 August 2020, and largely related to bails of additional waste received at MRL as a result of SKM Recycling going insolvent.
- There were no odour or litter complaints made to the EPA during the time of offending and no environmental harm was alleged to have occurred.
- Since the offences occurred, LOPL has engaged external consultants to update its Working Face Management Plan, which has subsequently been auditor verified, and now undertakes working face measurements three times daily (when practical).
- There is increased vigilance within LOPL's operations regarding working face management and size, and LOPL has adopted a policy of stopping all landfilling at MRL if there is a working face size exceedance.
- An aggregate fine of \$20,000 was imposed, plus EPA costs of \$7,344. No conviction was recorded.

Overview of applications:

- WGT rock re-use application – Cleanaway in discussions with EPA. Not finalised.
- Tarpomatic – EPA has granted permanent approval for the use of the tarpomatic.
- Working face trial – Cleanaway is planning to submit a working face trial application via a Pilot Project Trial.
 - Cleanaway has identified by looking at the options that this is the best pathway.

- A pilot project trial would involve us submitting an application, which is likely to be done at the end of this month.
- The application would document risk management and details including the requested size of the face and trial duration.
- Cleanaway aims to demonstrate to the EPA and community, via this trial that there will be no off-site impacts of odour or litter by having a larger working face.
- Temporary disposal of clinical waste via deep burial – EPA issued two s157 Authorisations of Discharges or Disposal (ADD) for the temporary disposal of clinical waste via deep burial at MRL as an emergency provision. EPA has placed strict compliance conditions and Cleanaway has engaged experienced internal personnel and external contractors to ensure that the conditions are complied with until the temporary permissions expire. This is PPE from nursing homes.

K. Sims responded to questions from community members

M. Baker: Is this the only site that is accepting this waste?

K. Sims: It was going to a Veolia site but that permit expired and they didn't continue it. It was going to Cleanaway Dandenong site but the equipment is not working, so that is why it is coming, temporarily, to MRL.

K. Sims continued presentation

Working face trial – benefits

- Safety – exclusion zones (especially when we have higher volumes)
- Truck swept paths to facilitate movement and volume
- Spread and trim for daily cover
- Compaction – ability to compact thinner layers
- Turnaround times – essential service to ensure pick up times are met across Melbourne
- Cleanaway would like to demonstrate to EPA and the community that an increased tip face size will not result in any off-site impacts
- Would like opportunity to demonstrate no off-site impacts of odour or litter by having a larger working face. Cleanaway would conduct its own odour monitoring plus third-party.

K. Sims responded to questions from community members

G. Mullen: What time of year will this trial happen?

K. Sims: We are hoping for spring, but it depends on approval from EPA.

G. Mullen: If you want to find our odour impacts, then summer would be best.

K. Sims: 100% I agree. That's why we have a third party odour survey in December each year, because it's worst case scenario.

M. Baker: How big are you proposing the trial working face would be?

K. Sims: Right now we have an 1800 square meter face, we are proposing a 3000 square metre face. This is not a number we've plucked out. This is based on a

calculation of how to we reach maximum compaction and density while also maintaining exclusion zones, and that number has given us 3000 square metre face that would balance those demands.

M. Baker: Are you going longer and/or wider?

K. Sims: It's a square, so both.

M. Baker: I'm assuming when you say you can compact it better, that will mean less will fall off the edge. Because it's harder to try to compact the same volume in a smaller area. I'm just picturing what I'm hearing.

K. Sims: Correct

M. Gorman: It remains to be seen. The only concerns are historical, and that is hot and humid days, larger tip face, more possible odour. That to me would be the biggest problem as a resident that I would see.

K. Sims: Yes, that's why we want to do a trial, with those third party odour monitors. And we will do it in summer, in worst case scenarios. And if EPA wants to request a second trial, we're happy to do that because we want the opportunity to demonstrate that it doesn't have negative impacts.

M. Baker: If you were to do it in spring and it wasn't bad, it could be an ease-in and then you could apply for another trial in summer to evaluate it again.

K. Sims: Agree, we would expect to seasonal variation.

A. Abou-Antoun provided an update on the landfill plan and construction (see Attachment 2 for slides)

Landfill fill plan update:

- Stage 4 approx. 2,000,000m³ remaining airspace (gets us to March or April next year based on current rates).

Construction update:

- Cell 4C3 Licenced early May 2022.
- For cell 4C3, the following are complete (100%): Boral bulk out, subgrade works, compacted clay liner, GCL/geomembrane, geotextile cushion, leachate drainage, geotextile filter.
- Cell 1 construction commenced June 2022. First half to be licenced February 2023, second half July/August 2023.

A. Abou-Antoun answered a question from the community members

B. Turner: Will the working face trial with the 3000 square meters be in the current stage or on a new stage?

A. Abou-Antoun: It will likely be in the next phase.

K. Sims: It will be where we're filling when the trial is approved.

A. Abou-Antoun continued his presentation

- Cell 1 progress:
 - Boral bulk out: 100% complete

- Subgrade works: 100% complete – Stage 1A, 20% - Stage 1B
- Compacted clay liner: 5%
- Geosynthetics: Delivery of materials currently underway and sampling to begin
- Cell 3C construction set to start in October 2022 and it will be licensed June 2023. This cell is an irregular shape but it is important for continuous capping, part of rehabilitation plan. It's a small cell so it will be filled by smaller trucks.

MRL steepening of slopes

- Steepening of the batters offered the following landfill optimisation:
 - Increased airspace capacity for same fixed licensed area and peak height
 - Airspace gain less than 10%
 - Minimises settlement on batters
 - Promotes quicker runoff of stormwater off the landfill (i.e. reduced leachate generation)
 - Steepened site contours endorsed by Melton City Council
 - Environmental Auditor has verified proposed cap design and steepened contours have no impact to environment or stability of landfill and capping profile.

A. Abou-Antoun answered questions from community members

B. Turner: Does steepening of the slopes mean the base is wider?

A. Abou-Antoun: The gradient of the batten changes. The cell (floor) area is fixed, the maximum height is fixed, the base level is fixed.

M. Gorman: Did you tell us how much extra air space this gave?

A. Abou-Antoun: The batter optimisation yields approx. 4 cu.m of airspace.

M. Baker: Can the steeper batters impact stormwater generation?

A. Abou-Antoun: Yes, it can. It will increase velocity of water which could promote erosion. EPA asked us to address this in our detailed design. As part of that risk measure, the capping design implemented diversion swales to intercept and slow down the storm water back to a safe velocity that is not going to promote erosion on the batters.

A. Abou-Antoun continued his presentation

- What does steepening of slopes mean for the site life?
 - The batter optimisation yields approx. 4 cu.m of airspace which equates to 18 months based on 180K tpm and 0.9 density on-site.
 - The original Works Approval had no time limit, but an estimate of 13 years life based on 130K tpm.
 - The added airspace from steepened batter currently does not extend the site life because the tonnage throughput is at 180K tpm whereas the Works Approval assumed 130K tpm.

- As such, Cleanaway confirms the Southern expansion life will not exceed 2036 based on current site operations.

O. Ghiri added to discussion about site life

An update was emailed to the group providing further clarification about the potential impact on the site life based on operational factors such as increased tonnages, waste compaction, daily cover and waste settlement.

A. Abou-Anton and others from Cleanaway answered questions from attendees

O. Gill-Benton: In the previous update, when you advised that it was adding an additional two years to that cell? Is that right?

A. Abou-Anton: It's to the southern expansion over a 13 year lifespan based on current tonnage throughput.

O. Gill-Benton: So this steepening of slopes, have you applied for each cell that is currently being filled or just the southern expansion?

A. Abou-Anton: This is just for the southern expansion.

O. Gill-Benton: You no longer think there is going to be any additional time that you'll have of active land-filling at this site, based on these figures. Is that what you're saying?

A. Abou-Anton: The original Works Approval predicted a site life of 13 years for the southern expansion, that is likely to be the same, because we're accepting additional waste. If we don't get the additional air space, we estimate a site life of 11 years.

M. Baker recapped the discussion about site life and batten steeping. How quickly did it change from the predicted 130K tpm to the 180K tpm?

A. Abou-Anton: It was pretty quick. We felt it during 2018 and 2019, the site went from 130-140K tpm to 170-180K tpm straight away. That's why we've applied to open new cells.

M. Baker: So will the volume of waste continue to climb?

O. Ghiri: It's hard to say, Melbourne's population continues to grow. Some landfills have closed such as in Clayton and so maybe that's had an impact..

B. Turner: What's the maximum you can take in a month?

A. Abou-Anton: It depends on the face size, and the operating hours. At the moment, most comes 9-4 but real peak 10-2. If we could get more waste out of those hours, we could take more but at the peak, we're at our limit.

O. Ghiri: There's no limit on our licence as to how much we can take, but we do have to set a limit based on our operational capacity and compliance.

B. Turner: Can you take trucks 24/7?

A. Abou-Anton: We can but the face size drops in the southern expansion after 6pm.

M. Baker: Is there an upper limit, like could you double the amount of waste you take?

A. Abou-Anton and K. Sims indicated the daily volume was likely at capacity because of safety and other issues including transport and the rate which Boral is quarrying.

B. Turner: Could you work on multiple faces in the future?

A. Abou-Anton: I don't think so, for cell construction, this is as fast as we can go. It would become a traffic management issue as well.

M. Baker: Do you see any concerns with compaction when the battens are steeper? Or any issues with the final cap?

A. Abou-Anton: Good questions, it needs to be done properly. So we need to compact the layers carefully to fill it up as good horizontal layers as we go up. And then shape the battens, rather than push them all from the top.

This is another reason why we want to trial a bigger working face, as Kate described in her presentation. It would have multiple benefits in the site.

M. Baker: Have similar slopes been done at other sites?

A. Abou-Anton: Yes, other sites have internal battens that are even steeper. But a 1:3 gradient is optimal, and allows future mowing.

M. Baker: Why didn't you do it this steep from the beginning?

A. Abou-Anton: And when we do the Works Approval, it sets the major dimensions like site size and maximum height, but as we operate the site and learn where we could optimise things, we apply for changes with detailed design.

A. Abou-Anton continued his presentation

Proposed leachate pond

- New leachate pond construction is pending Boral Land Release (ERR Excision). Pond construction is expected to commence September 2022.
- Cleanaway requires this to be constructed for Cell 1 to be licensed to operate

Southern expansion perimeter litter net project

- Clear and grade works: 100% complete
- Footings: (3 of 86) 4% complete
- Post installation: 0% complete
- Litter net installation: 0% complete
- Practical completion date: 31 December 2022

Entrance road upgrade

- This site has struggled with tracking mud onto Christies Road. Currently we're adding sweeping to manage it
- Geotechnical investigation
- Site specific pavement design – to suit heavy vehicle volumes
- Service location and depth verification of existing services along alignment
- Detailed design of road alignment
- Investigation into wheel wash and remedial action required
- Site masterplan and realignment of internal haul roads to permit yellow gear access around the proposed asphalt haul road

- Internal planning for project – the programming of the proposed works severely impacts customers using the landfill as it requires multiple weekend shutdowns (additional scope required to complete as part of project)
- Procurement of long lead items such as drainage pipe and pits, culverts, and trafficable end walls
- Original works plan was due 30 August, but Cleanaway submitted extension of time with EPA to confirm road construction timing will most likely occur over summer period and delivered by May 2023.

Cap update

- REA Submitted and Approved
- Preferred supplier chosen
- Subgrade works: 100%
- GCL/Geomembrane: 100%
- Geotextile Cushion: 100%
- GCD:100%
- Subsoil: 40%
- Topsoil: 0%
- Practical completion date: 3 November 2022

Landfill remediation plan

- Detail design has been approved by EPA Environmental Auditor
- EPA Approved granted
- Next phase of capping (western half of Stage 2) going out to tender in October 2022.
- Continuous capping year on year to be expected at MRL

A. Abou-Antoun responded to questions from the community

B. Turner: Is the soil used on the cap from the next cell that you are constructing?

A. Abou-Antoun: No, it's taken by Boral when they quarry out the cell.

3. Environmental compliance update

O. Gill-Benton provided an update on compliance (Attachment 3: EPA presentation):

Heat maps of odour complaints received.

O. Gill-Benton answered a question from an attendee

O. Ghiri: Do you have the numbers of complaints that are shown in those red areas?

O. Gill-Benton: No, I can find them out and provide them out.

O. Gill-Benton resumed presentation

Odour reports between May and August 2022

- Two pollution reports have been received since the last MRLCRG on 19 May 2022 alleging Landfill Operations Pty Ltd within a 5km radius.
- One report was received on 21/07/2022, alleging a rotting garbage odour at the Christie's Road roundabout.
- One report was received on 26/06/2022, alleging a putrid scent of rotting garbage, reporter was in Deer Park. The wind direction at the time of the report was a westerly.
- These were individual reports, not clusters, so EPA doesn't investigate them.

Compliance and enforcement – inspections

- EPA has conducted a Licence Compliance Assessment inspection since the last CRG meeting:
 - A range of non-compliances were identified during assessment
 - Some of these non-compliances are already subject to compliance and enforcement action
 - EPA is formalising further compliance and enforcement action to address additional non-compliances identified during inspection
- EPA has conducted 1 drone survey since last CRG meeting:
 - One exceedance in tipping face size reported
 - EPA considering further compliance and enforcement action regarding the breach
 - Looking at the tip face trail discussed earlier, it is a concern of EPA that there has been an additional exceedance of the tipping face size and there has also been a self-reported breach separate to this.
 - If we're having these exceedances still, it is a concern of EPA that we may need to address this with further compliance and enforcement action
 - Increasing the working face size when we still haven't found the root cause of the issue with the smaller tip face, is a very big concern for the EPA.

O. Gill-Benton answered questions from attendees. Attendees discussed working face breaches.

K. Sims: We self-reported a breach two weeks ago, are you saying there was another tip face exceedance that we're not across?

O. Gill-Benton: Yes, on 2 July.

K. Sims: Could Cleanaway please request information about that exceedance.

O. Gill-Benton: Yes. It was 2147 sqm.

Action 220818 2: O. Gill-Benton to provide information to Cleanaway about EPA-identified tip face exceedance

K. Sims: Cleanaway wants to acknowledge and accept that we have a few exceedances. We maintain that transparency with the EPA. We want EPA and the community to understand

that these exceedances have had no off-site impact. With the trial, we want to demonstrate that would continue. We hope that EPA will consider that when considering our application.

M. Baker asked clarification from the size of the exceedance.

O. Gill-Benton: It was 2147 sqm m, so 347 over the 1800 licensed.

O. Ghiri: It seems to me that these exceedances have occurred a couple of times. Doesn't this justify our application for a bigger face? If we're going to have these one or two breaches, we could stop them by increasing the face size.

K. Sims: As long as there are no off-site impacts.

O. Gill-Benton: EPA's concerns are if we do have this tip face size as it is at the moment, and MRL is still failing to maintain compliance of that 1800 sq m, and then we allow a larger tipping face, if we haven't identified the root causes of the exceedances, we're not confident compliance with the pilot. We can't be confident MRL has the measures in place to maintain compliance with the requested 3000 sq m. The same issues might be arising because it could be a systemic issue.

O. Ghiri: But doesn't that justify our application to trial a bigger face size? We understand the challenges we have operationally to take it the amount of waste we do. So we can better meet the operational challenges.

A. Abou-Antoun: When the tip face was exceeded, were there any complaints about odour?

O. Gill-Benton: We need to take into account that exceedance that EPA identified was not reported by Cleanaway to EPA. And there have been a number of missed measurements that working face management plan identifies. There should be measurements taken in the morning, afternoon and night shift, and as Kate has identified there have been issues taking that morning measurement, which is the peak time. And EPA did find that exceedance on one flyover.

K. Sims: We want to make sure our working face remains the right size. Our peak time can range from 9am to 4pm. We try to get three measurements as best we can. If the guys miss the morning measurement, it's disappointing because I always ask for it. For me, it's most important that we get a reading at 12-4pm when we have maximum number of trucks on site. We look forward to receiving the image and report of the exceedance to understand how you measured it and if there are any inconsistencies with how Cleanaway measures it.

We acknowledge it's a black and white licence issue, but I would say we've come leaps and bounds in our working face management in the past two years.

M. Gorman: Well I guess it's going to be the trial run that takes the measure isn't it.

O. Gill-Benton: To reiterate, EPA hasn't received any trial application for the working face management plan, so I can't comment on that.

M. Baker: The only concerns I would see is you're not able to meet the limit of 1800 sq m, you have gone over, and my concern would be if you get approval to do 3000 sq m, then you could start doing 3400. Not saying you're going to do that but it could happen. And how does Cleanaway measure the face?

K. Sims: We have a handheld GPS because of safety at the working face, you can't walk around it, so the dozer tracks around the edge of the working face when it's safe to do so. That's how we measure it. It's not as accurate as a drone, but it's not viable to fly the drone every day. I understand where you're coming from with the breach, and what's to say we wouldn't breach 3000. But I would say that it comes down to if you see any of our breaches,

they're below 3000. I'm not discounting in the past we've had bigger breaches, but it would come down to we have demonstrated significant improvement.

A. Abou-Antoun: And for the past 18 months, we've been trying to refine our work face management plan.

M. Gorman: It's about you working smarter than you did years ago. Because when the tip face exceeded your licence, that was when it was the smelliest. And that was when the community was up in arms.

O. Ghiri: yes that was when the old organics facility was running.

M. Gorman: We'll have to agree to disagree on that. From the community, if you're going to increase the tip face, you just have to work smarter and make sure you cover quicker. I have to say, I haven't smelled every much at all in the last two years in Burnside. Before that, it was not acceptable. We can't afford for a larger tip face to go back those bad practices. I must admit you have to agree you have improved practices.

O. Ghiri: Absolutely i agree, that's where all the millions of dollars have been invested upgrading the infrastructure on site.

M. Gorman: To be honest, nobody likes this landfill here. Nobody wants it, nobody likes it. We know we're stuck with it. But we want to make sure you maintain your work ethic to make sure we don't get back to the way things were a few years ago. It was unbearable.

K. Sims: That's why we're gone for different types of daily cover – tarpomatic. That's another form for us to put down quickly because soils you have to wait for waste to get to grade, tarpomatic, roll it out and it's proved to be very useful.

M. Gorman: Working smarter has paid dividends. I'm not giving you tracks yet, but it's in the right direction.

O. Ghiri: I appreciate you've noted some improvements. That's the most important and heartening thing to know.

O. Gill-Benton: Before we move on from the working face non-compliance, the EPA recorded one was 2147 but the figure for the self-reported was 2500 approximately. It was only given to us verbally, never in writing.

O. Gill-Benton resumed presentation

Sanctions

- A court order made to Landfill Operations Pty Ltd on 20 July 2022, wherein Landfill Operations were fined \$20,0000 as part of an aggregate order, ordered to pay costs in the amount of \$7344 and to comply with the section 67AC Publication Orders.
- A number of other non-compliances still under investigation by Environmental Crime Branch, many of which have been delayed because of COVID-19.

Remedial notices

- EPA revoked Pollution Abatement Notice 90012134 and issued an Improvement Notice under the new Environment Protection Act 2017 as per EPA policy.
- This Improvement Notice addresses landfill gas exceedances for methane and carbon dioxide at the premises, a breach of licence condition OL_L5.
- Pollution Abatement Notice 90012130 was revoked on 30/06/2022. This PAN was issued following the Major Industries Assessment, and was to remedy non-

compliance with leachate riser levels, a breach of licence condition OL_L4.1. The PAN was revoked as Landfill Operations complied with notice requirements.

- Active Improvement Notice requiring a section of the haul road is asphalted to prevent dust and mud track out onto Christie's Road. The final compliance date for that notice is 30/08/2022.
- Active Improvement Notice to remedy overfilling in Stage 2 west. The final compliance date for that notice is 07/11/2022.
- Active Improvement Notice to complete final capping on Stage 2 cells. The final compliance date is 30/11/2022

O. Gill-Benton answered questions from a community member

M. Baker: How often does the drone fly over to check?

O. Gill-Benton: Approximately every 4-6 weeks.

M. Baker: And how many times has the working face been within the limit compared to not?

O. Gill-Benton: I don't have those figures on me at the moment, but I do know that there were less non-compliances recorded this year compared to last year.

M. Baker: It would be interesting to know if you are doing 10 checks, and they're meeting half of them or they're only missing 2 of the 10. And you're only doing it every 6 weeks, then how many times are they exceeding when you're not checking it.

O. Gill-Benton: Yes, we would like to check it more. But operationally, we do need to come on site, so we can't come all the time unfortunately.

O. Ghiri noted Cleanaway is required to self-report to EPA as well.

4. Community engagement/awareness

O. Ghiri presented on community engagement

- Updates have been provided by email in past couple of months.
- Cleanaway is ready to launch round 4 (year 4) of the MRL community benefit fund, which is \$50,000. Advertising and calling for applications will begin next week. Melton and Brimbank Council will be asked to help promote.
- Last year Cleanaway granted funds to 7 different groups.
- The group will be asked for nominations on the review panel.
- Community information webinars to explain the batter steepening were scheduled for July. No registrations. Advertising and promotion included local newspapers, and reaching 20,000 people on social media, which prompted approximately 119 clicks to our website where they could see information about the application to increase batters steepness and why, and the webinar information.
- The main focus of communications has been that there would be no change to the peak height. EPA suggested perhaps the lack of interest was because we didn't mention the fact that there could be a potential increase in air space and operating time extension. So I went back to the community database and provided a specific update with more detail, and did more social media on that, and updated the website. There has still been no response from any community members. If we had

of receive any reaction to the second update, the webinars would have been rescheduled.

O. Ghiri responded to community members' suggestions about community communications

M. Gorman and M Baker noted communications should not be wordy, and illustrations may help explain more simply and clearly.

5. Next meeting and meeting close

- Next meeting is scheduled for 17 November, MRL Community Centre, 6.15pm for a 6.30pm start.

S. McNair closed the meeting.

Attachment 1 – new and ongoing action items

New and ongoing actions items as of 18 August 2022	
ACTION items	Update
Action 220519_01: O. Ghiri to share animated video that explains how the biogas plant works	Complete
Action 220519_02: A. Abou-Antoun to provide J. Parson-Jones the odour modelling for the new leachate pond location.	To be completed
Action 220519_03: O.Ghiri to provide an email update to the group when more information is available about the TBM spoils contingency arrangement.	To be completed
Action 220519_04: O. Gill-Benton to provide S. McNair a response on how EPA is managing the risk of an 'asbestos truck crash' on the roads during transport.	Complete
Action 220519_05: O. Gill-Benton to provide rough locations of odour reports at the next meeting.	Complete
Action 220818_01: K. Sims to check the past four weeks of data and tell O. Gill-Benton how much pump LP41 has been fluctuating.	To be completed
Action 220818_2: O. Gill-Benton to provide information to Cleanaway about EPA-identified tip face exceedance	To be completed

Attachment 2 – Cleanaway presentation



Environmental Compliance Update

Landfill Gas Collection Update

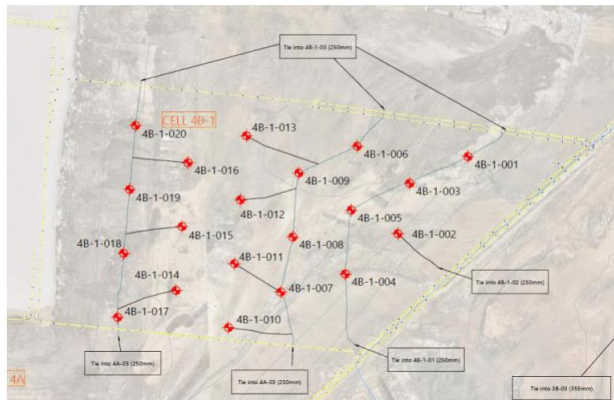


- Newly installed gas infrastructure – Stage 1 .
- 12 New vertical extraction wells.
- Currently being flared, will be hooked up to the main gas system this month.

Environmental Compliance Update

Landfill Gas Collection Update

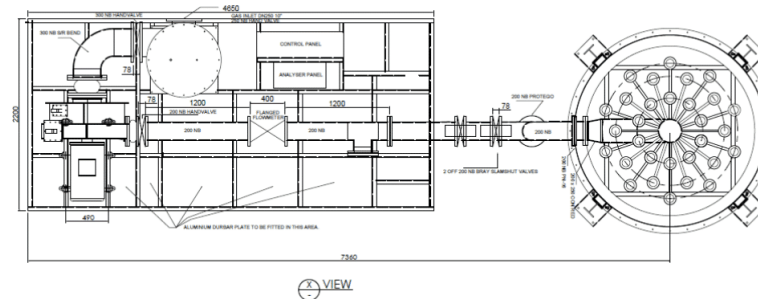
- Installation of gas extraction well works in stage 4 - 4B1 has been completed.
- Header line extension, north of 4C-1 and 4C-2 is approx. 50% complete
- Works to be completed by beginning of September
- Rectification works of offline LFG wells in Stage 1 complete and Stage 2 80% complete – to be completed post capping.



Operations Update

Gas Plant Expansion

- Install 8 new landfill gas generator modules and flares as required
- Double power generating capacity to 68,600MWh of electricity per year
- Mitigate over 220,000 tonnes of greenhouse gas emissions per year
- Approvals: Works Approval Granted and Cleanaway currently reviewing options
- Cleanaway currently exploring options for the expansion
- A new 3000m³ Flare has been ordered to maintain compliance with LFG volumes.



Leachate Redrills Complete

Current status:

A total of 15 re-drills have successfully been installed.

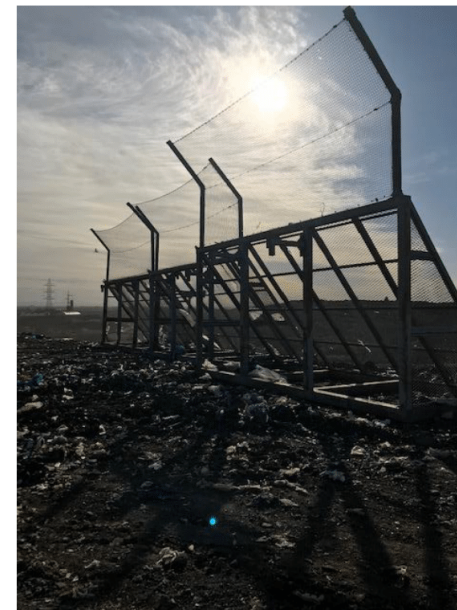
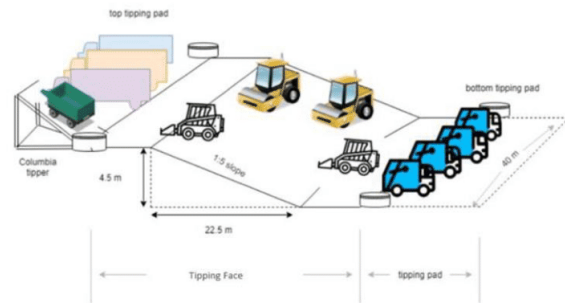
- Gas extraction to maintain environmental control.
- Leachate in stage 2 continues to be drawn down, however, “equilibrium” has been reached.
- Compliance levels have been agreed with EPA and OL amendment is in progress.



Operations Update

Working Face Management and Odour Management

- Safety, Odour, Litter & Vermin
- Waste Compaction - life of landfill, odour reduction, settlement and stability
- Technology - (Visionlink and Propeller) – Field planning, compaction, Face size
- Weekly in-house drone fly overs
- Daily odour inspections (perimeter and site)
- Face measurements - using handheld GPS and drone
- WF Management Plan in place - Live document
- Odour curtain – Northern nets 4C-1 & 4C-2
- Odour cannons



Working Face Prosecution

- In July 2022 **Landfill Operations Pty Ltd** (LOPL) pleaded guilty to 2 wound up charges relating to licence breaches for failing to limit the size of the tipping face, not covering all waste at the end of day's operations and failing to immediately notify EPA of non-compliance with licence conditions at the Melbourne Regional Landfill in Ravenhall, Victoria.
- These offences occurred on 19 and 22 May 2020 and 19 and 31 August 2020, and largely related to bails of additional waste received at MRL as a result of SKM Recycling going insolvent. There were no odour or litter complaints made to the EPA during the time of offending and no environmental harm was alleged to have occurred.
- Since the offences occurred, LOPL has engaged external consultants to update its Working Face Management Plan, which has subsequently been auditor verified, and now undertakes working face measurements three times daily (when practical). There is increased vigilance within LOPL's operations regarding working face management and size, and LOPL has adopted a policy of stopping all landfilling at MRL if there is a working face size exceedance.
- An aggregate fine of \$20,000 was imposed, plus EPA costs of \$7,344. No conviction was recorded.

Overview of Applications – A Better Environmental Outcome

- **WGT Rock Re - Use Application** – Cleanaway in discussions with EPA. Not finalized.
- **Tarpomatic** – EPA has granted permanent approval for the use of the tarpomatic.
- **Working Face Trial** – Cleanaway will be submitting a working face trial application via a Pilot Project Trial.
- **Temporary disposal of clinical waste via deep burial** - EPA issued two s157 Authorisations of Discharges or Disposal (ADD) for the temporary disposal of clinical waste via deep burial at MRL as an emergency provision.
EPA has placed strict compliance conditions and Cleanaway has engaged experienced internal personnel and external contractors to ensure that the conditions are complied with until the temporary permissions expires.

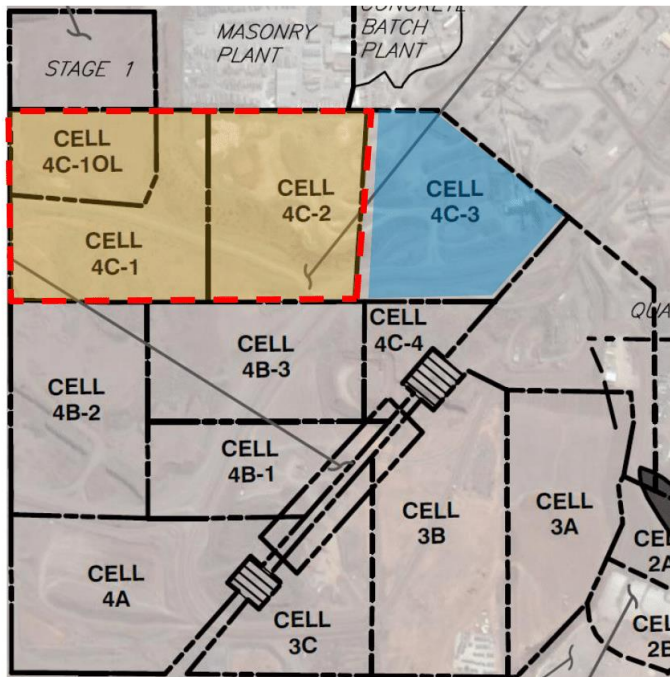
Working Face Trial – Benefits

- Safety – exclusion zones
- Truck swept paths to facilitate movement and volume
- Spread and trim for daily cover
- Compaction – ability to compact thinner layers
- Turn around Times – Essential service to ensure pick up times are met across Melbourne
- Cleanaway would like to demonstrate to EPA and the community that an increased tip face size will **not** result in any off-site impacts

Landfill Fill Plan Update

Stage 4 Currently filling across 4C

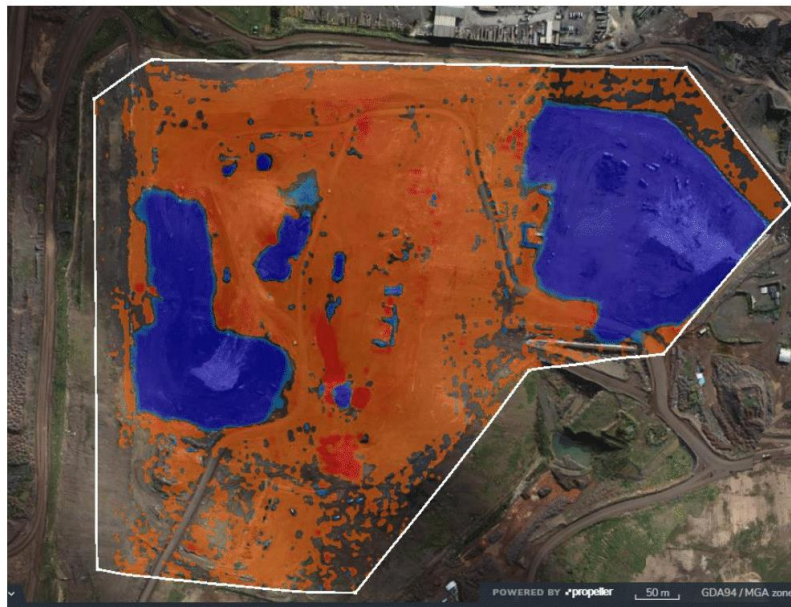
*Whilst Licenced cells are 4A, 4B1, 4B2, 4B3 and 4C1 this does not imply the operational area is spanning across the entire Stage 4 area.
At any given day, a single operating face (maximum of two faces during peak times) is open within a dedicated area until the waste height has reached design level, then onto the next block and so on.*



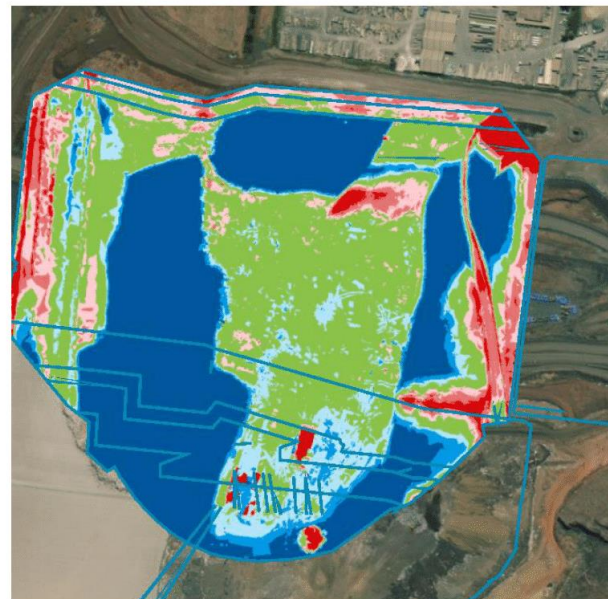
Vision Link

- Stage 4 approx. 2,000,000m³ remaining airspace

Cell 4C3 Lift 3



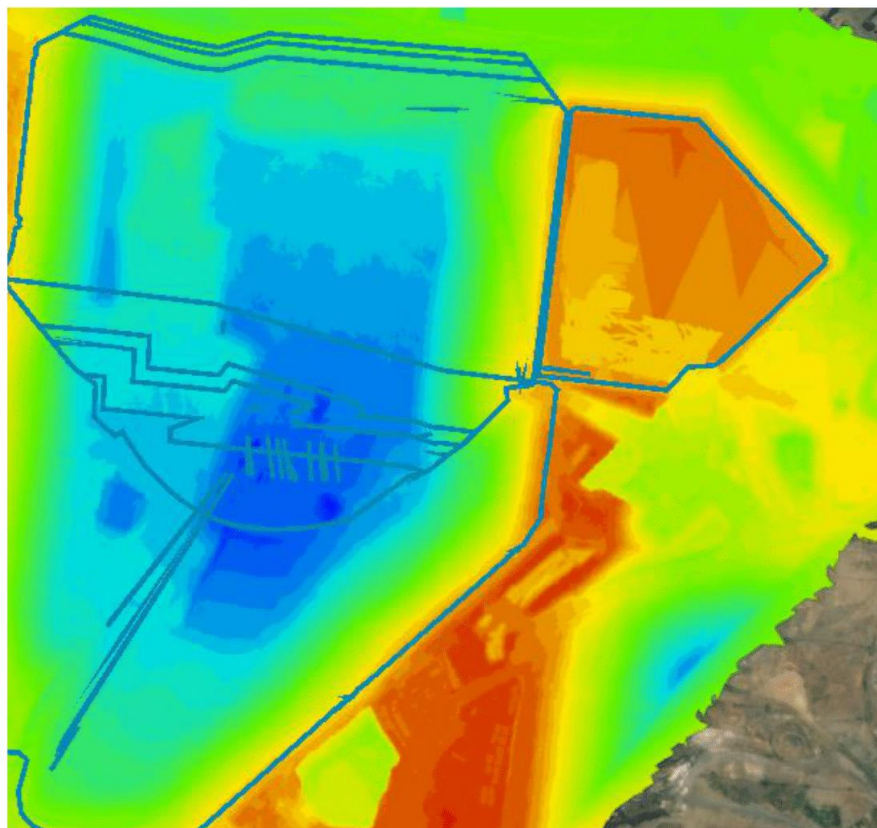
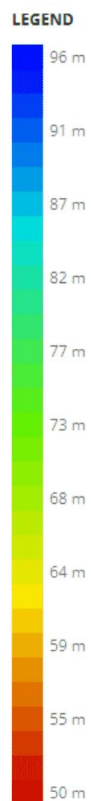
4C1 4C2 Lift 7



Landfill Fill Plan Update

Fill progression – Stage 4

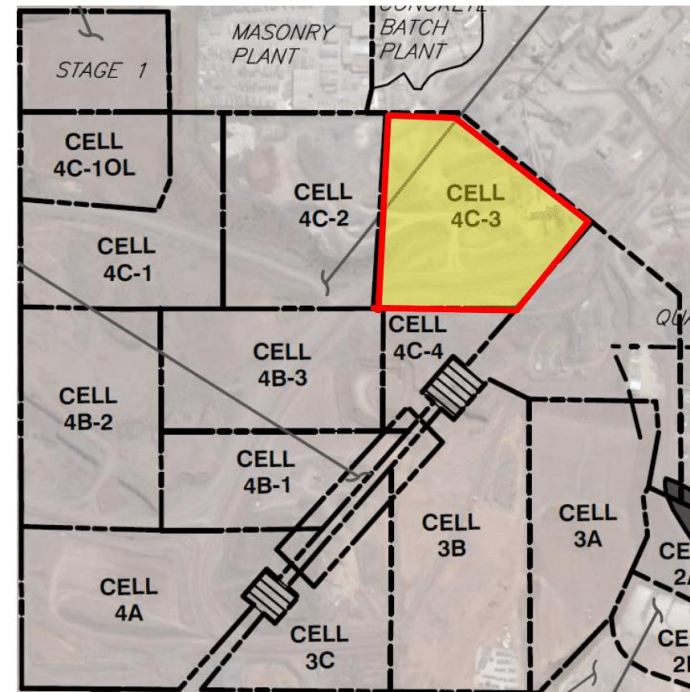
Elevation (AHD)



Construction Update

Current construction cell completed – Cell 4C3

- *Cell 4C3 Licenced early May 2022*



Cell Status and PC Dates (4C3)

Percentage complete:

- Boral Bulk Out: 100% complete
- Subgrade works: 100% complete
- Compacted Clay Liner: 100%
- GCL/Geomembrane: 100%
- Geotextile Cushion: 100%
- Leachate Drainage 100%
- Geotextile Filter: 100%



Construction Update

Upcoming cell construction cell completed – Cell 1 (Southern Expansion)

- Cell 1 construction commenced June 2022
- First half to be Licenced February 2023
- Second half July/August 2023



Cell Status and PC Dates (Cell 1)

Percentage complete:

- Boral Bulk Out: 100% complete
- Subgrade works: 100% complete – Stage 1A, 20% - Stage 1B
- Compacted Clay Liner: 5%.
- Geosynthetics: Delivery of materials currently underway and sampling to begin.

Key Events:

- Subgrade survey complete on 18/07 for Stage 1.
- Auditor inspection for subgrade occurred on the 22nd of July.
- CCL begun on 27/07.

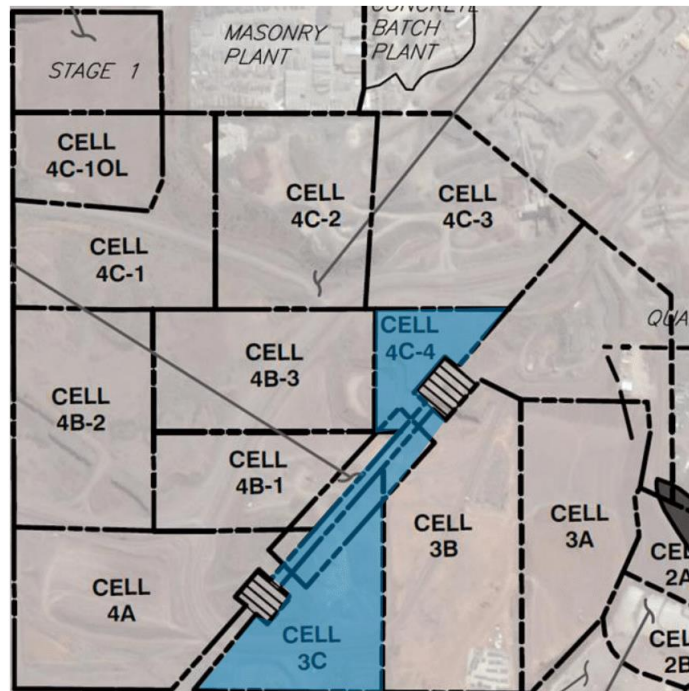
Key Milestones / Items	Cell 1
Practical Completion Date	30-Oct-22
Inclement Weather Allowance	30-Nov-22
Auditor Sign-off	05-Dec-22
EPA Approval	30-Jan-22
Airspace reached by:	01-May-23
Airspace Buffer (relative to 4C2)	3 months



Construction Update

Upcoming cell construction cell completed – Cell 3C

- *Cell 3C expected to commence October 2022*
- *Licensed June 2023*



MRL Steepening of Slopes

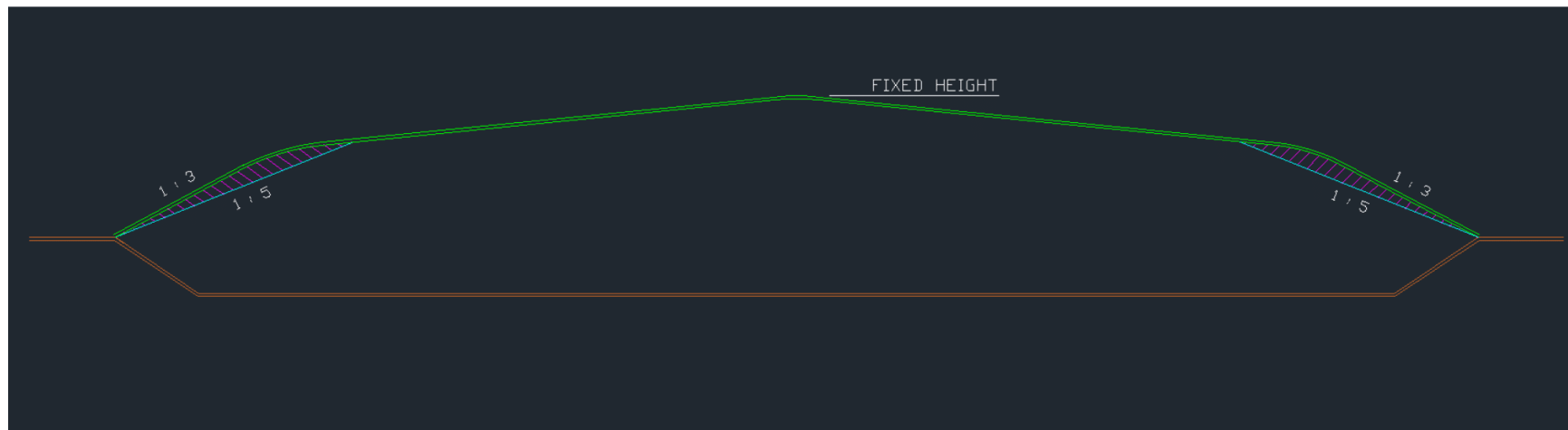


Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept	Melbourne Regional Landfill	319-0795-00-L-01-DR05	01	02.12.2019	KM	MR	MR	1:4000 (A1)

MRL Steepening of Slopes

Steepening of the batters offered the following landfill optimization:

- Increased airspace capacity for same fixed Licensed area and peak height
- Airspace gain less than 10%
- Minimizes settlement on batters
- Promotes quicker runoff of stormwater off the landfill (i.e. reduced leachate generation)
- Steepened site contours endorsed by Melton City Council
- Environmental Auditor has verified proposed cap design and steepened contours have no impact to environment or stability of landfill and capping profile



MRL Steepening of Slopes

Tract



Viewpoint 01: Middle Road, Ravenhall (Easterly View)
E: 299420.0430
N: 5814673.0158
H: 60.4619
Camera Height: 1.5m

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Viewpoint 01 - New Conditions - Proposed Slope - Without Vegetation - 3D Visualisation	Melbourne Regional Landfill	319-0795-00-L-01-DRO8	00	03.12.2019	KM	MR	MR	N/A



MRL Steepening of Slopes – Site Life?

Does the steepened batter add airspace life to MRL? **Yes**

- The batter optimization yields approx. 4M cu.m of airspace which equates to 18 months based on 180K tpm and 0.9 density on-site.

Will the additional airspace from the batters increase MRL life? **No**

- The original Works Approval was solely based on maintaining adequate buffers to the community and setting the peak height at a level that does not pose a visual impact to the community;
- There was no time limit set on time as landfill life is significantly affected by density, tonnes, waste composition and daily cover
- Works Approval concept design airspace = 23.3M cu.m (13 years life based on 130K tpm)
- The Works Approval did expect additional airspace to be recovered once the base floor underwent detail design as the concept design (WA) assumed a flat based.
- The added airspace from steepened batter currently does not extend the site life because the tonnage throughput is at 180K tpm whereas the Works Approval assumed 130K tpm.
- As such, Cleanaway confirms the Southern expansion life will not exceed 2036 based on current site operations.



Proposed Leachate Pond

New leachate pond construction is pending Boral Land Release (ERR Excision). Pond construction is expected to commence September 2022



Southern Expansion Perimeter Litter Net Project

Percentage complete:

Clear & Grade works: 100% complete

Footings: (3 of 86) 4% complete

Post installation: 0% complete

Litter net installation: 0% complete

Key Milestones / Items	Perimeter Litter Fence
Practical Completion Date	31-Dec-22
Inclement Weather Allowance	Included in PC date
Cell 1 EPA Approval to Fill	Feb-23



events

-
- Proposed bypass for yellow gear (final alignment TBC)
- Upgrade to existing Light Vehicle Road for use by customer trucks
- Remedial works to existing wheel wash required
- Proposed bypass for soils trucks and yellow gear (final alignment TBC)
- Legend
- PROPOSED ROAD CENTRELINE
 - PROPOSED ROAD SHOULDER (TO EXISTING PAVEMENT)
 - PROPOSED ROAD SHOULDER (NEW PAVEMENT)
 - PROPOSED PARKING AND PAD AREAS

Cap Status and PC Dates

Percentage complete:

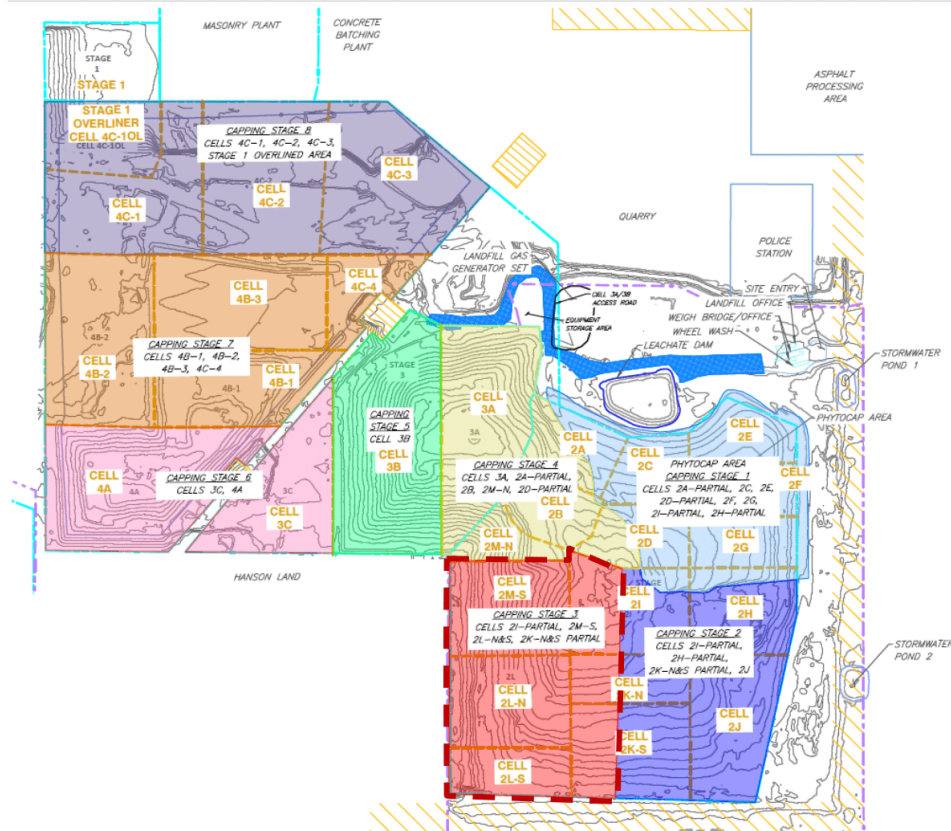
- REA Submitted and Approved
- Preferred supplier chosen
- Subgrade works: 100%
- GCL/Geomembrane: 100%
- Geotextile Cushion: 100%
- GCD: 100%
- Subsoil: 40%
- Topsoil: 0%

Key Milestones / Items	Stage 2 Cap
Practical Completion Date	3 November 2022
EPA IMPN	30 November 2022
REA approved amount	\$9.9 million
FY22 Spend	\$6.7 Million



Landfill Remediation Update

Rehabilitation Plan



- Detail design has been approved by EPA Environmental Auditor
- EPA Approved granted
- Next phase of capping (**red hatch** = western half of Stage 2) going out to tender in October 2022.
- Continuous capping year on year to be expected at MRL



Home Safe

We take responsibility for our personal safety, as well as that of our team. We are committed to Goal Zero, because everyone deserves to go Home Safe, every day.



Stronger Together

Building from a place of strength, we are focused on creating something stronger than the sum of our parts each and every day.



Integrity

We do the right thing – no matter what. Holding ourselves to higher standards, we say what we mean, and we do what we say.



We Make A Difference

We are proud of what we do to make a sustainable future possible – for our employees, our customers, our investors, the communities in which we work, and the planet.

Attachment 3 – EPA presentation



O'shea Gill-Benton, Thursday 18 August 2022

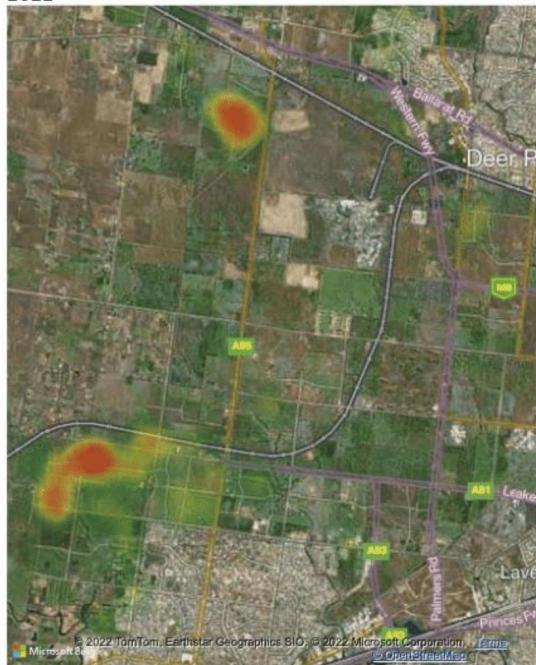
Melbourne Regional Landfill CRG meeting



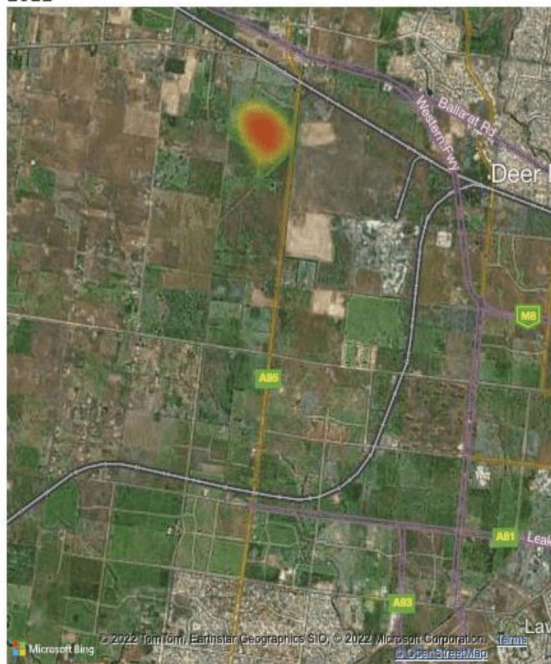
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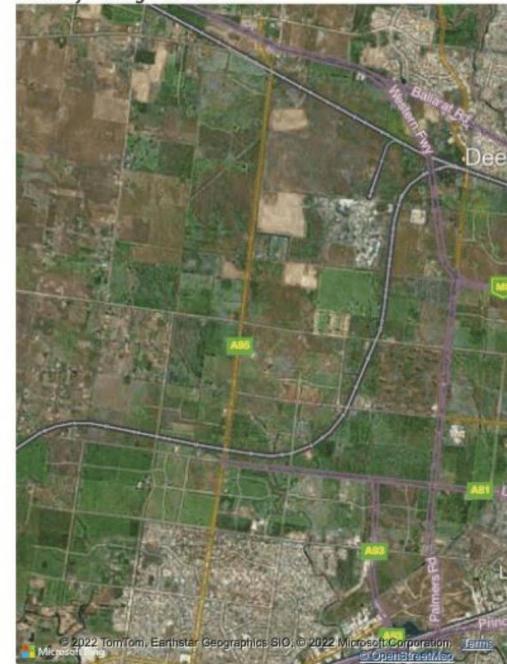
Odour Reports - Melbourne Regional Landfill Area
2022



Odour Reports - Melbourne Regional Landfill Area April
2022



Odour Reports - Melbourne Regional Landfill Area
15 May - August 16 2022



Odour reports between May – August 2022

- Two pollution reports have been received since the last MRLCRG on 19 May 2022 alleging Landfill Operations Pty Ltd within a 5km radius.
- One report was received on 21/07/2022, alleging a rotting garbage odour at the Christie's Road roundabout.
- One report was received on 26/06/2022, alleging a putrid scent of rotting garbage, reporter was in Deer Park. The wind direction at the time of the report was a westerly.

Compliance and Enforcement

Inspections

- EPA has conducted a Licence Compliance Assessment inspection since the last CRG meeting:
 - A range of non-compliances were identified during assessment
 - Some of these non-compliances are already subject to compliance and enforcement action
 - EPA is formalising further compliance and enforcement action to address additional non-compliances identified during inspection
- EPA has conducted 1 drone survey since last CRG meeting:
 - One exceedance in tipping face size reported
 - EPA considering further compliance and enforcement action regarding the breach

Compliance and Enforcement

Sanctions

- A court order made to Landfill Operations Pty Ltd on 20 July 2022, wherein Landfill Operations were fined \$20,0000 as part of an aggregate order, ordered to pay costs in the amount of \$7344 and to comply with the section 67AC Publication Orders.
- A number of other non-compliances still under investigation by Environmental Crime Branch.



Compliance and Enforcement

Remedial notices

- EPA revoked Pollution Abatement Notice 90012134 and issued an Improvement Notice under the new Environment Protection Act 2017 as per EPA policy.
 - This Improvement Notice addresses landfill gas exceedances for methane and carbon dioxide at the premises, a breach of licence condition OL_L5.
- Pollution Abatement Notice 90012130 was revoked on 30/06/2022. This PAN was issued following the Major Industries Assessment, and was to remedy non-compliance with leachate riser levels, a breach of licence condition OL_L4.1. The PAN was revoked as Landfill Operations complied with notice requirements.
- Active Improvement Notice requiring a section of the haul road is asphalted to prevent dust and mud track out onto Christie's Road. The final compliance date for that notice is 30/08/2022.
- Active Improvement Notice to remedy overfilling in Stage 2 west. The final compliance date for that notice is 07/11/2022.
- Active Improvement Notice to complete final capping on Stage 2 cells. The final compliance date is 30/11/2022.



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