



MRL CRG

Cleanaway Update

20 May 2021

Environmental Compliance Update

Landfill Gas Collection Update

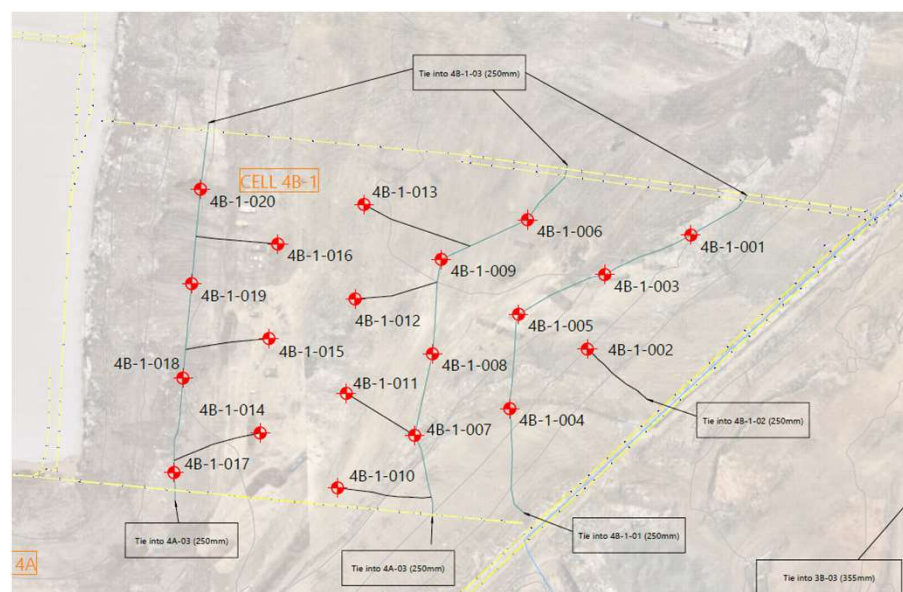
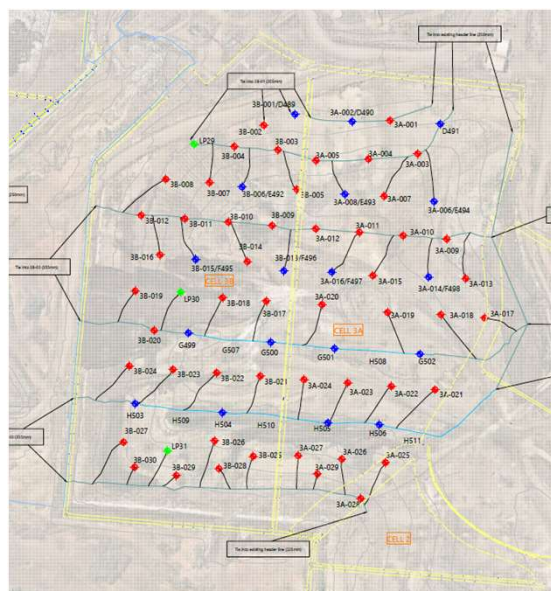


- The installation of gas field infrastructure in stage 3 and 4 is complete.
- 21 vertical extraction wells have been installed in Cell 4A to mitigate gas control on site.
- Installing head works and flow lines the next stage for the wells.
- Gas sent to biogas plant engines and flares.

Environmental Compliance Update

Landfill Gas Collection Update

- Planned gas extraction well works in stage 3 and 4
- Header line extension planned to allow for future tie into horizontal wells in 4C
- Currently in design discussion phase – header line path
- Works to planned to commence in Aug 2021



Operations Update

Gas Plant Expansion

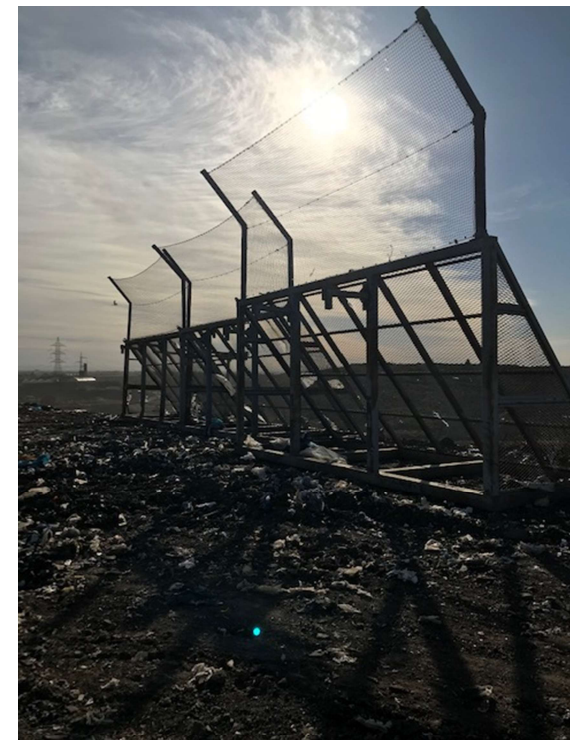
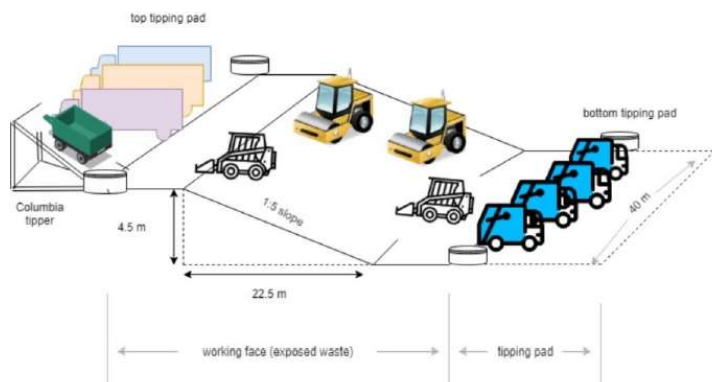
- Install 8 new landfill gas generator modules
- Double power generating capacity to 68,600MWh of electricity per year
- Mitigate over 220,000 tonnes of greenhouse gas emissions per year
- Approvals: Works Approval Granted



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
- Management Plan in place - Live document
- Odour curtain – Northern nets 4C-1 & 4C-2



Leachate Redrills in Stage 2

Current status of works:

- The 13 re drill wells have been installed with both leachate and gas extraction (dual) – July/Aug 2020.
- Gas extraction to maintain environmental control.
- Leachate in stage 2 continues to be drawn down, however, “equilibrium” has been reached.
- A pump trial to be conducted using a different type of pump.
- Aeration treatment is common practice in Australia.



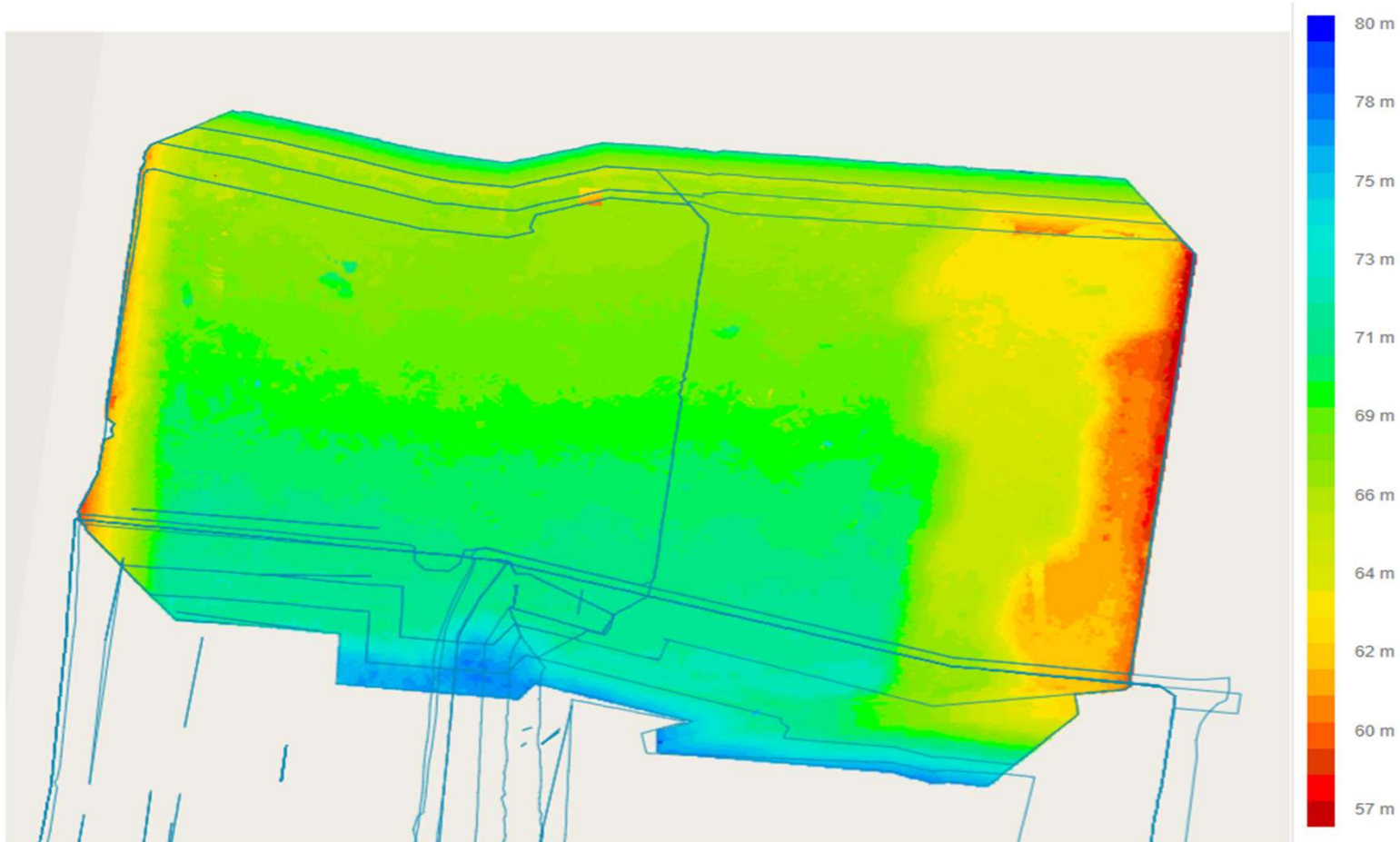
EPA Approvals – A Better Environmental Outcome

- **Tarpomatic** – Cleanaway will be seeking a trial for the use of a tarpomatic cover which will assist in remaining compliant with Licence Condition L8.
- **Spray Cover** – Cleanaway will be seeking a trial for the use of a spray cover which will assist in remaining compliant with Licence Condition L8.
- **Baled waste** – Currently receiving baled waste which is deposited directly into the waste mass, however, the twine on the bales is causing safety concerns for the yellow gear. Cleanaway are proposing to stack the baled waste at the edge of the cell (covered) and place the 6m litter nets on top, this will also assist in capturing windblown litter as the nets will sit higher.

Landfill Fill Plan Update

Fill progression – Lift 4 has begun in 4C1 and Lift 3 currently being placed across Cell 4C2

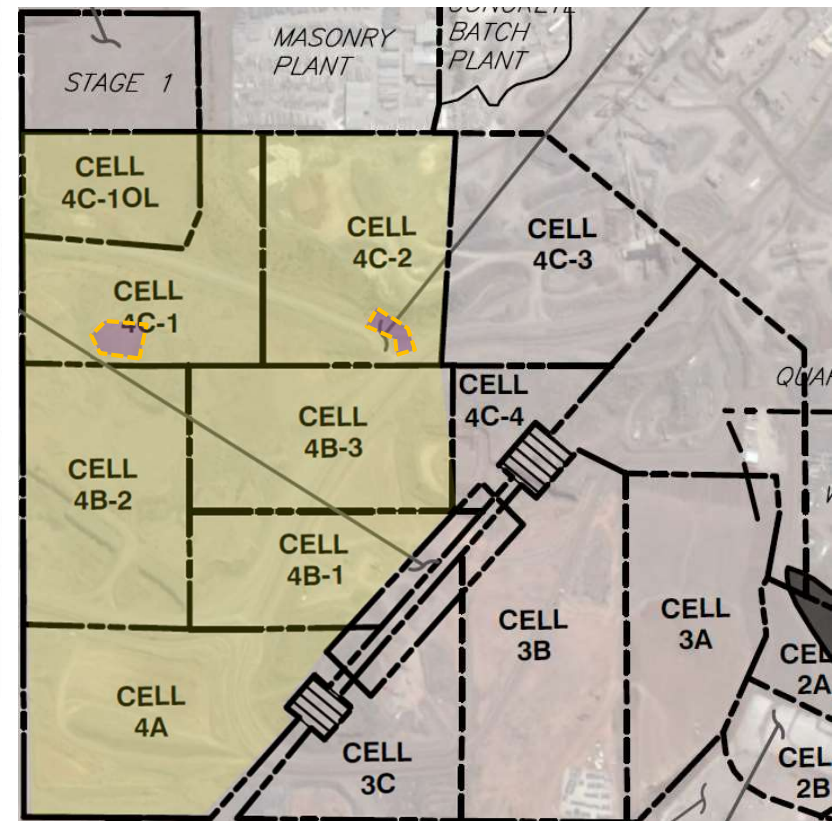
Elevation (Australian Height Datum - AHD). Note Cell base level is approximately RL55m AHD



Landfill Fill Plan Update

Stage 4 Currently finalizing (lift 3 and 4)

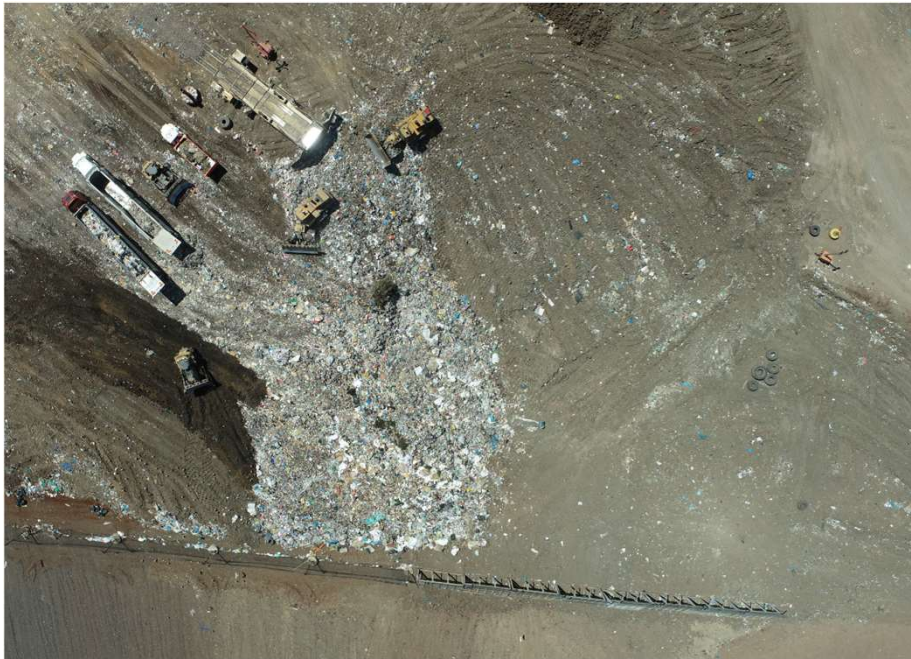
Yellow highlight: extent of open face at any given time during waste operations.



Landfill Fill Plan Update

Stage 4 Currently finalizing

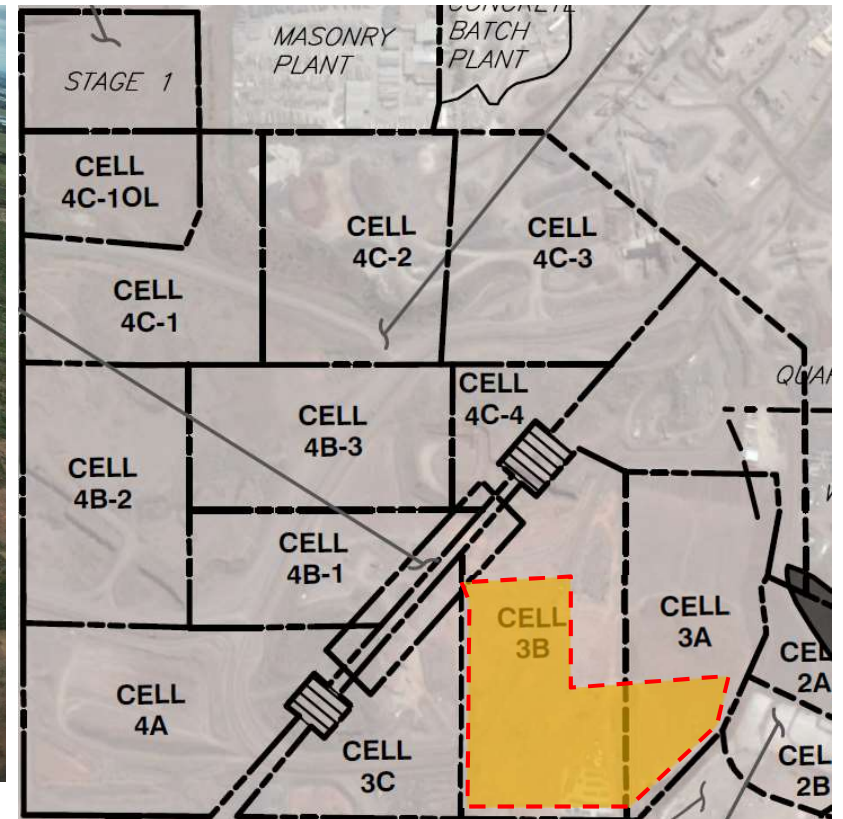
Active face is limited to 1,800 sqm and is continuously moving within the Licenced cell. The face size limit is maintained through progressive daily cover soils placed simultaneously once the waste lift has received adequate compaction and trimmed to grade.



Landfill Fill Plan Update

Stage 3 dressing of external batters

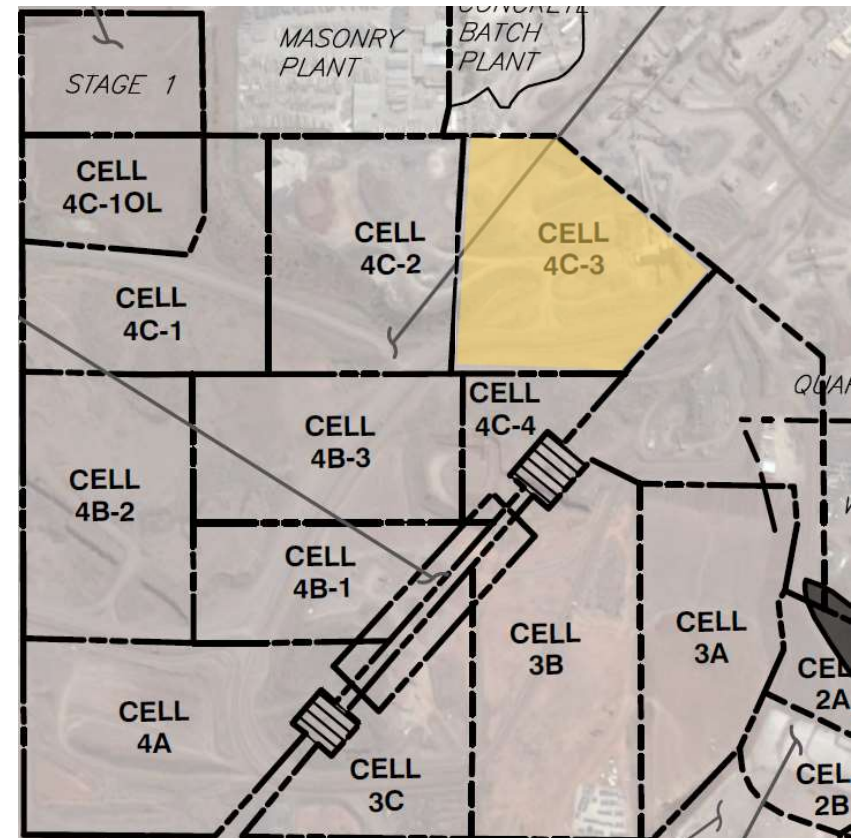
As good practice cover added on the batters to assist with odour control and minimizing leachate generation (via shedding off stormwater away from waste).



Construction Update

Upcoming Cell 4C3

- Early works have already commenced by Boral to hand over cell (bulk out and decommissioning of redundant quarry plant): March - June 2021
- Official cell liner construction start date July 2021
- Cell completion/Licencing May 2022

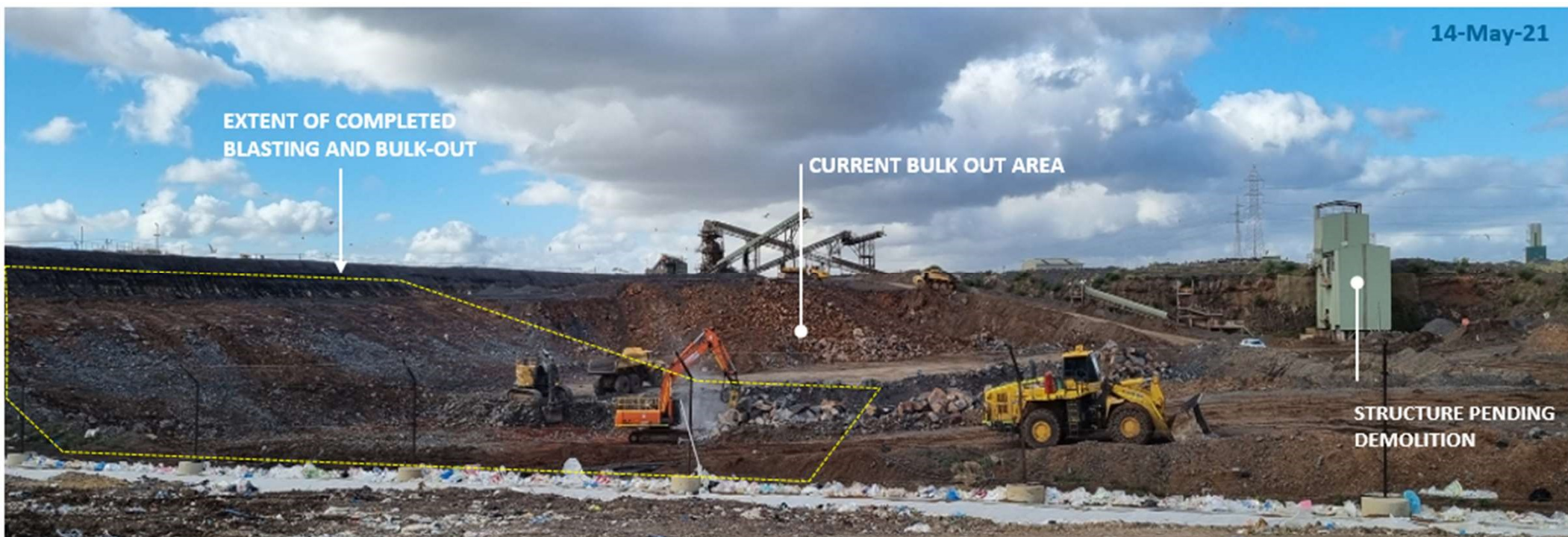


Cell Status and PC Dates (4C3)

Percentage complete:

- Boral Bulk Out: 60% complete
- CEA submission: 100% (**Approved**)
- Subgrade works: 0% complete
- Compacted Clay Liner: 0%
- GCL/Geomembrane: 0%
- Geotextile Cushion: 0%
- Leachate Drainage 0%
- Geotextile Filter: 0%

Key Milestones / Items	Cell 4C1
Practical Completion Date	28-Jan-22
Inclement Weather Allowance	4 weeks
Auditor Sign-off	28-Feb-22
EPA Approval	11-May-22
Airspace reached by:	01-Sept-22
Airspace Buffer (relative to 4C2)	3.5 months



Cell Status and PC Dates (4C3)

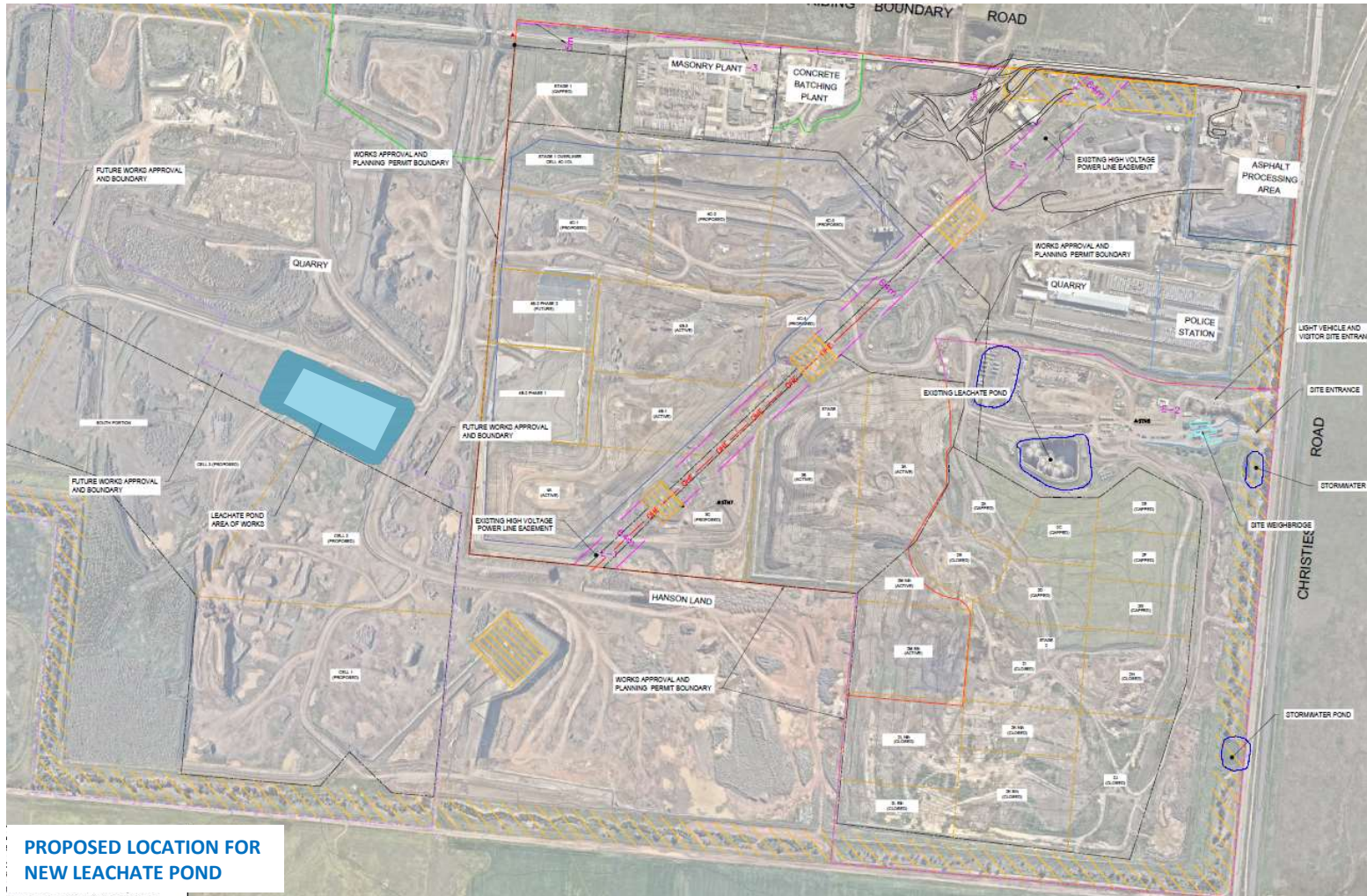


Cell Liner (final product)



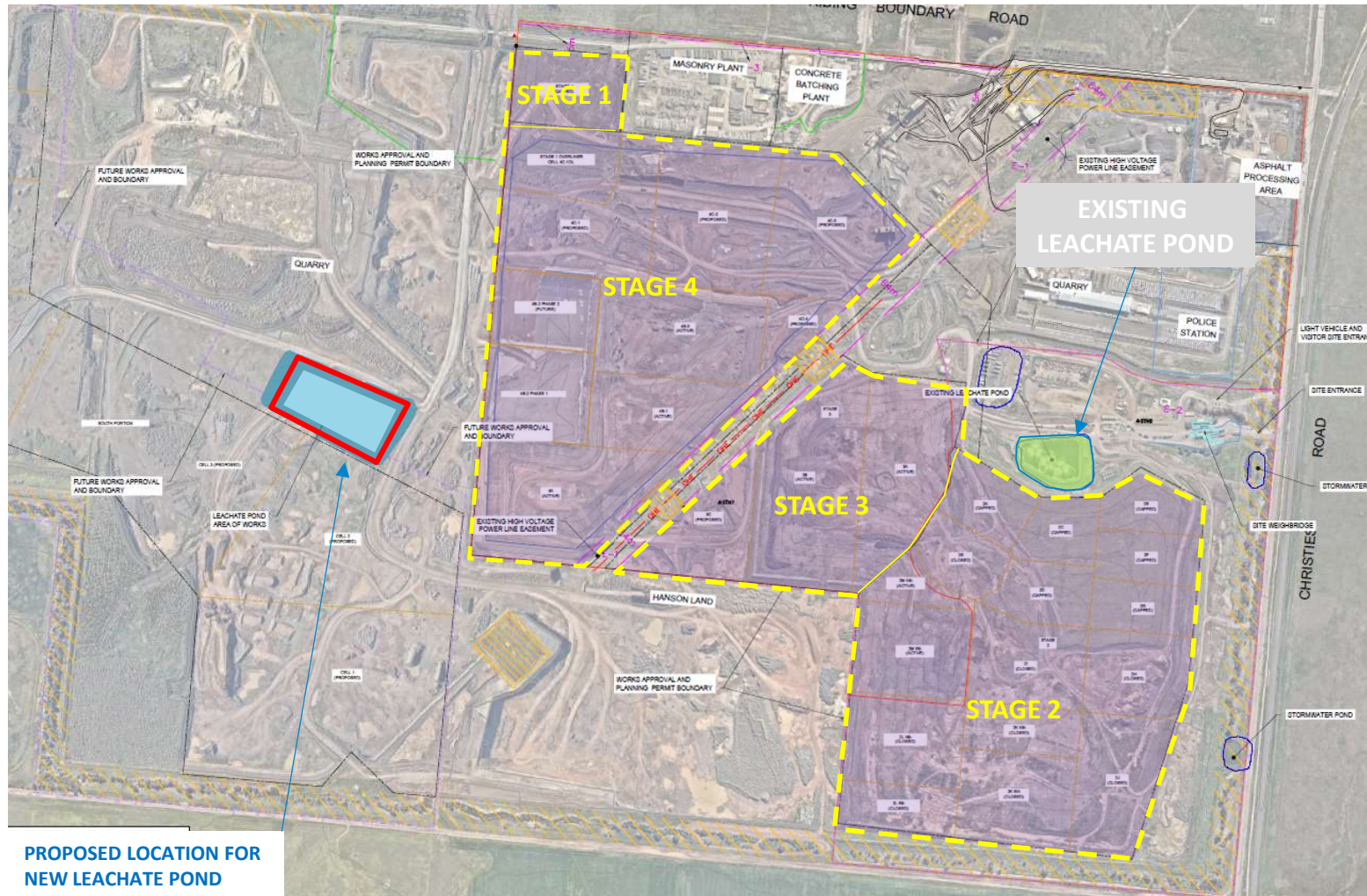
Proposed Leachate Pond

New leachate pond pending Planning Permit Application was rejected following Counselor's vote despite Council Planning Department supporting the application from a technical and needs front.



MRL Site Overview

Current Licence Area = 120 Ha Landfill Type: 2 Throughput: 1.8-2.0M tpa Construction pace: 10-15 Ha/yr

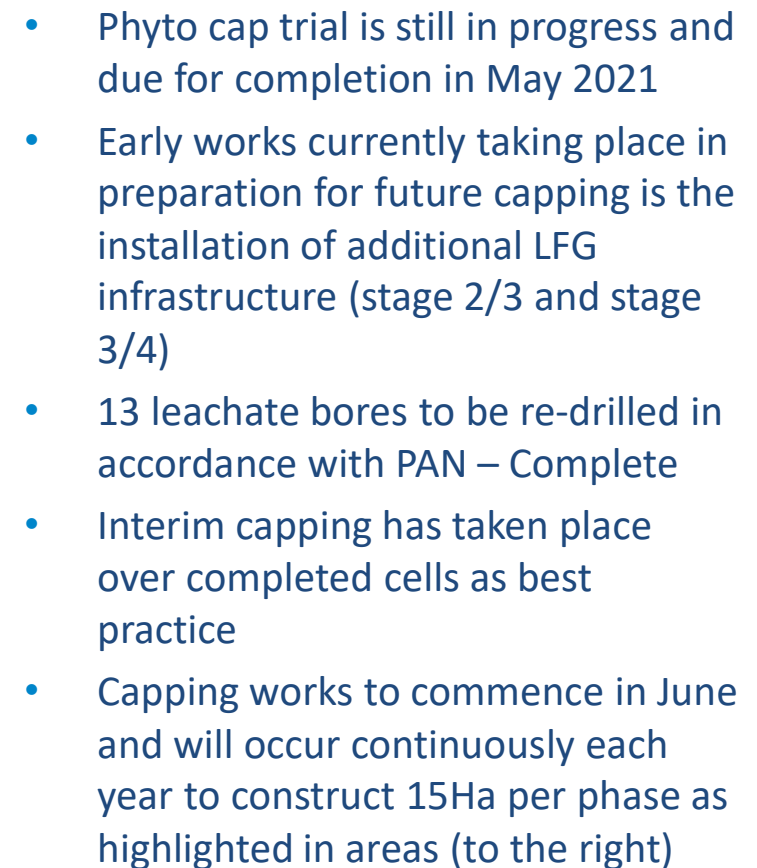


Distance to sensitive receptors



- Closest receptor southwest 800m
- Distance to Mt Atkinson 2,350m
- Distance to Prison 2,200m
- Distance to Caroline springs 3,800m

Rehabilitation Plan



Cap Status and PC Dates

Percentage complete:

- REA Submitted and **Approved**
- Tender to be Awarded 28th May
- Subgrade works: 0%
- GCL/Geomembrane: 0%
- Geotextile Cushion: 0%
- Subsoil: 0%
- Topsoil: 0%

Key Milestones / Items	Stage 2 Cap
Practical Completion Date	TBC
Inclement Weather Allowance	TBC
Auditor Sign-off	TBC
EPA Approval	TBC
REA approved amount	\$9.9 million
FY22 Spend	\$6.7 Million





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.