



ENVIRONMENT PROTECTION ACT 1970
SECTION 19B

WORKS APPROVAL

WYNDHAM CITY COUNCIL

Holder of Works Approval: 148798
Issued: 11/10/2017
ABN: 38 393 903 860
Registered Address: 45 PRINCES HIGHWAY
WERRIBEE VIC 3030
Premises Address: 470 WESTS ROAD
WERRIBEE VIC 3030
Scheduled Categories: A05 Landfills
Description: This proposal allows for the extension of landfill operations for the deposit of solid inert waste, putrescible waste, and pneumatic tyres shredded into pieces <250mm.

NIAL FINEGAN
Chief Executive Officer
Delegate of the Environment Protection Authority

PREAMBLE

Works Approvals

Who we are: The Environment Protection Authority (“EPA”) is an independent statutory authority established under the *Environment Protection Act 1970* (“the Act”). Our purpose is to protect and improve our environment by preventing harm to the environment and human health.

Why we issue works approvals: EPA is responsible for preventing or controlling pollution (including noise) and improving the quality of the environment. This responsibility includes regulating activities that may present a danger to the environment. One of the tools available to EPA is issuing works approvals for scheduled premises to prevent or minimise risk to the environment.

Section 19A of the Act requires the occupier of a “scheduled premises” to obtain works approval to construct or install plant and equipment in order to discharge, handle, treat or dispose of waste to the environment. These types of premises are defined in the *Environment Protection (Scheduled Premises) Regulations 2017* (“the Regulations”).

When we issue works approvals: EPA will issue a works approval when satisfied that an applicant has put in place measures to protect the environment. Works approvals allow construction of works to occur and set control measures to minimise a site’s environmental risk. EPA can amend a works approval in response to changes in standards and site activities. Works approval holders must submit reports if required by a condition of the approval.

Works Approval information and obligations

For the purposes of this works approval “You” means the works approval holder identified on the first page of this works approval at the “premises” identified on the first page and represented in Schedule 1.

If you object to any of the works approval conditions, you may have the decision reviewed by applying in writing to the Registrar, Planning and Environment Division, Victorian Civil and Administrative Tribunal (“VCAT”), 7th Floor, 55 King Street, Melbourne within 21 days of the date of issue. An application fee may be applicable when lodging an appeal with VCAT. Contact VCAT on (03) 9628 9777 for further details on fees associated with an appeal. A copy of the appeal should also be forwarded to the Manager, Development Assessments Unit, Environment Protection Authority, GPO Box 4395, Melbourne, 3001, within 7 days of lodgement of the appeal.

Interested (third) parties may also appeal against the works approval within 21 days of the date of issue. The Tribunal will notify you if such appeals are received. If an appeal is lodged, you must not go ahead with the works until the appeal is resolved.

Compliance: You must comply at all times with the Act and all policies and regulations administered by EPA. Strict penalties apply for non-compliance with any part of your works approval.

Works Approval structure

Structure: Your works approval has:

- Works conditions - setting out requirements for construction or installation;
- Schedule 1A - locality plan of your premises;
- Schedule 1B - plan of premises (provided by you).

Some types of works approvals also contain Schedule 1C - final landfill contour plan

CONDITIONS

General Conditions

- WA_G1 Subject to the following conditions, this approval allows the construction of the following works and associated equipment - a landfill for the deposit of solid inert waste, putrescible waste, pneumatic tyres shredded into pieces <250 mm, as defined in EPA Publication 631, Industrial Waste Resource Guidelines, Solid Industrial Waste Hazard Categorisation and Management, dated July 2009.
- WA_G2 The works must be constructed in accordance with the application accepted on 8 December 2016 comprising the application received on 30 November 2016 as augmented by additional information received on 9 May, 10 July and 7 September 2017 and as identified in the documents listed in Appendix A of this Works Approval, except that, in the event of any inconsistency arising between the application and the conditions of this approval, the conditions of this approval shall apply.
- WA_G3 This approval will not take effect until any permit which is required under the Planning and Environment Act 1987 has been issued by the Responsible Planning Authority.
- WAG4.1.1 This works approval will expire:
- (a) on the issue or amendment of a licence relating to all works covered by the works approval; or
 - (b) on the issue of written notification from EPA confirming that all works covered by the works approval are complete and that no licence or licence amendment is required to operate the works; or
 - (c) two years from the date of issue unless the works have been commenced by that date to the satisfaction of EPA.
- WA_G6 You must maintain a financial assurance calculated in accordance with the EPA method.
- WA_G6.3 You must submit the financial assurance instalment determined by the EPA for each landfill cell prior to the addition of the cell to the licence.

Works Conditions

- WA_W1 Before commencing construction of the following components of the works, you must provide to EPA a report or reports with the plans and specifications of those components, including details of:
- (a) for each landfill cell or leachate pond: a geotechnical stability assessment including material characteristics and specifications, with supporting evidence, demonstrating total geotechnical stability for each landfill cell or leachate pond;
 - (b) for each cell a veneer cap assessment, demonstrating the geotechnical stability of the cap;

(c) for each landfill cell: Stormwater and erosion control structures including calculations of stormwater flows to appropriately size and position the control structures;

(d) for the groundwater drainage layer of each landfill cell or leachate pond: Plans, technical specifications and a construction quality assurance (CQA Plan) (“design documents”) for groundwater collection. For cells 5A, 5B and 5C additional design and management measures, as outlined in documents received in responses to S22 notices received on 9 May 2017 and 10 July 2017, must be employed, these measures include: 1) A groundwater collection layer which shall be installed beneath the cell liner and/or leachate pond liner, 2) an upgrade to the sump liner and 3) an additional GCL layer. In all subsequent cells (in areas 6, 7 and 8) these additional design and management measures, or the equivalent, must be employed where a minimum 2 metres separation between the top of the liner (including the liner of any sumps) and the long term undisturbed groundwater elevation is either not achieved or not able to be verified by the EPA appointed auditor conducting the verification of the cell (or pond) design;

(e) for each landfill cell or leachate pond: the plans, the technical specifications, and a construction quality assurance plan (CQA plan) (“design documents”) for the construction of each landfill cell and/or the leachate pond.

(f) the “design documents” (plans, technical specifications and CQA plan) referred to in conditions WA-W1(d) & (e) must comply with this Works Approval and the Best Practice Environmental Management (Siting, Design and Management of Landfills) Guidelines (EPA Publication 788.3) (as amended from time to time), and assessed by an EPA-appointed environmental auditor, in accordance with the procedures outlined in EPA Publication 1323.3 (Landfill Licensing Guidelines) (as amended from time to time) prior to submission for EPA approval;

(g) for each landfill cell or leachate pond: the name of the environmental auditor, appointed under the Environment Protection Act 1970, engaged by you to conduct the audit required under WA_R1; and

(h) for the landfill site: designs of the environmental monitoring network infrastructure to include landfill gas, odour, dust, groundwater and surface water monitoring for the premises

- WA_W2 You must not commence construction of those parts of the works for which reports are required by condition WA_W1 until written EPA approval of those reports has been received.

- WA_W3 Where any reports specified in condition WA_W1 and approved by EPA differ from the application, the works must be constructed in accordance with those approved reports.

- WA_W4 You must notify EPA when the construction of the works covered by this approval has been commenced.

- WA_W5 You must notify EPA when the construction of the works covered by this approval has been completed.

- WA_W7 You must not commission or operate the works without written approval of EPA.

- WA_W8 You must install:
- (a) in respect of each new cell, leachate collection sumps, extraction and transmission pipework and extraction pumps.
 - (b) in respect of each new cell, a landfill gas collection system to a design approved by the EPA that includes landfill gas collection wells, transmission pipework, vacuum extraction equipment, condensate management equipment and landfill gas combustion equipment. The landfill gas extraction & combustion capacity must match the predicted gas generation for the site, validated by site gas concentration and flow data.
 - (c) prior to commissioning of the next new cell, landfill gas monitoring bores along the site perimeter upgraded to meet the spacing requirements outlined in Table B.2 of EPA Publication 788.3 Best Practice Environmental Management (Siting, Design and Management of Landfills) (as amended from time to time);
 - (d) prior to construction of the next new cell, additional groundwater monitoring bores to assess the regional undisturbed ground water quality and level;
 - (e) stormwater storage pond;
 - (f) upgraded litter screens around the perimeter of the site at least 10m high, up to a maximum height of 12m;
 - (h) noise abatement barriers as identified in the noise modelling;
 - (i) litter traps on stormwater drains;
 - (j) mobile nets near the tip face;
 - (k) wheel wash on the egress road;
 - (l) firefighting equipment including on-site water trucks that must be available on-site at all times;
 - (m) dust monitors.
- WA_W15 During construction, unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises.
- WA_W16 During construction, stormwater discharged from the premises must not be contaminated with waste.
- WA_W17 All construction activities must be undertaken in accordance with EPA Publication 480 "Environmental Guidelines for Major Construction Sites" (1996).
- WA_W18 During construction, you must undertake an environmental monitoring program that enables you and EPA to determine compliance with condition(s) WA_W15 and WA_W16.

Reporting Conditions

- WA_R1 At least two months before the commencement of any commissioning, you must provide to EPA a report that include(s):
- (a) in respect of each new cell, information as to the status of the site on the landfill schedule in the State-wide Waste and Resource Recovery Infrastructure Plan and the Metropolitan

Waste and Resource Recovery Implementation Plan (and any future successor or replacement policy documents), this information needs to be provided with the application for a new cell approval;

(b) in respect of each new cell or leachate pond, an environmental audit report, under S53V of the EP Act on the risk of harm from its construction and confirming construction compliance in accordance with EPA approved reports as set out in condition WA_W1 above;

(c) in respect of each new cell or leachate pond, a report from a suitably qualified, experienced and independent (to the contractor who constructs the landfill cell or leachate pond) person which details liner integrity testing (leak detection survey) results for each cell and leachate pond;

(d) in respect of each new cell, details of how you have informed the community through the Refuse Disposal Facility Community Reference Group (RDFCRG) or alternative engagement activities of the progress regarding the construction of cells and leachate pond and the progressive rehabilitation of the landfill. This information needs to be provided with the application for a new cell approval and must include explanations about how any issues or concerns raised have been considered; and

(e) in respect of each new cell, the environmental performance of the preceding cells as determined by the monitoring required in the monitoring and management plans identified in WA_R4, this information needs to be provided with the application for a new cell approval.

WA_R4

Before the commencement of any commissioning, you must provide, to the satisfaction of EPA, a report that includes:

(a) a Leachate Management Plan including but not limited to:

- (i) predicting and monitoring cumulative volumes of leachate generated and to be managed;
- (ii) an assessment on the adequacy of the existing leachate management system to handle the cumulative volumes of leachate generated;
- (iii) a proposal to manage leachate across the site;
- (iv) a plan to minimise any impacts on the environment from the proposed leachate management system.

(b) a Rehabilitation Plan including but not limited to:

- (i) progressive rehabilitation of landfill cells and sub-cells in accordance with BPPEM;
- (ii) a process for an independent annual survey to be conducted for each active and filled landfill cell to ensure that the cell heights are less than the approved pre-settlement top of waste contour plan;
- (iii) each landfill cell would be managed so that its final contour prior to settlement is not higher at any point than the pre-settlement top of waste and top of cap contour plan included in the licence.

(c) a Dust Management Plan incorporating Air Monitoring Program including but not limited to;

- (i) implementation of best practice airborne particulate and dust control measures that also includes adaptive operational practices to respond and control dust events on site;

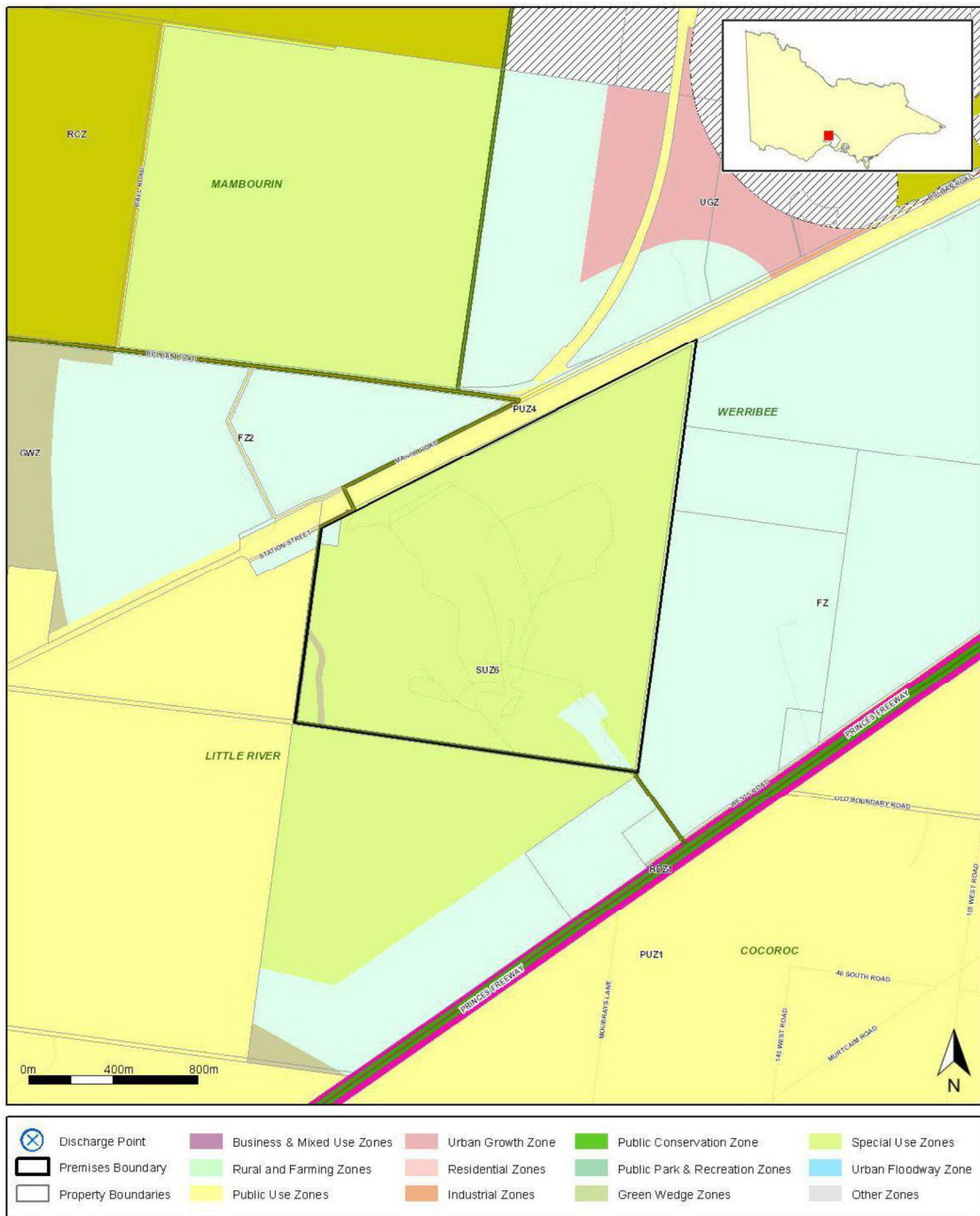
- (ii) air monitoring program to assess air quality impacts and triggers reactive management practices to be implemented during dust events on site;
 - (iii) dust deposition monitoring that enables an assessment of nuisance dust impacts;
 - (iv) a review of the effectiveness of the particulate and dust control measures in light of the monitoring data produced from (ii) and (iii) above and the relevant standards for the control of airborne particulate and dust; and
 - (v) provision of surveillance or monitoring records to the RDFCRG and the Authority;
- (d) an Odour Monitoring and Management Plan including but not limited to:
- (i) identification of potential odour sources and receptors;
 - (ii) specifying the odour mitigation measures and procedures to manage the odour impact off-site of the various potential odour sources and to mitigate the off-site odour impacts;
 - (iii) comprehensive monitoring practices, including surveillance by independent and appropriately trained personnel;
 - (iv) procedures for addressing the odour source if a complaint is verified, including consideration of any mitigation measures or operational changes that might be required;
 - (v) provision of surveillance or monitoring records to the RDFCRG and the Authority; and
 - (vi) incorporation of a requirement to assess new odour management technologies or tools on a regular basis;
- (e) a Landfill Gas Monitoring & Management Plan including but not limited to:
- (i) details (numbers and locations) of landfill gas perimeter monitoring bores. The landfill gas perimeter monitoring bore spacings must meet the recommended spacings in Table B.2 of EPA Publication 788.3 Best Practice Environmental Management (Siting, Design and Management of Landfills) (as amended from time to time);
 - (ii) the sequencing for the design and installation of the landfill gas extraction system in each cell;
 - (iii) the sequencing for the design and installation of the horizontal gas wells in each active cell;
 - (iv) a program of inspection and maintenance of landfill gas extraction and monitoring infrastructure including provision of standby equipment; and
 - (v) a schedule of landfill gas well balancing frequency and condensate management.
- (f) a Groundwater Monitoring and Management Plan including but not limited to:
- (i) updating the Conceptual Site Model to illustrate the hydrogeology, surrounding land uses and receptors more comprehensively;
 - (ii) installation of additional groundwater monitoring bores
 - (iii) improved groundwater quality sampling, testing and monitoring to additionally include groundwater depth; and
 - (iv) enable the determination of the long term undisturbed groundwater quality and depth.

- (g) a Surface Water Monitoring and Management Plan including but not limited to;
- (i) sampling of water at retention points prior to discharge to the environment and downstream of the site in Cherry Creek;
 - (ii) visual inspection of sediment and erosion control facilities and other potential sources of contamination;
 - (iii) a sampling plan and methods consistent with those in EPA publication IWRG701; and
 - (iv) routine testing of stormwater for, but not limited to, the following physio-chemical parameters: total phosphorus and nitrogen, turbidity, electrical conductivity, pH, and dissolved oxygen with occasional testing for heavy metals and indicators of leachate. The sampling frequency and reporting is to be agreed with EPA as are the action levels for each parameter.
- (h) a Noise Management and Monitoring Plan including but not limited to:
- (i) identification of the receptors most likely to be impacted by the filling of a particular cell;
 - (ii) identification of mitigation actions to be employed which are being relied upon to meet the permissible noise levels of SEPP N1;
 - (iii) a program of monitoring and reporting including installation of noise loggers to assess noise levels at receptors and the effectiveness of mitigation actions;
 - (iv) the monitoring program to include logging of any noise complaints and any follow up actions;
 - (v) a monitoring program for assessment of the noise from construction and operation of the landfill, and effectiveness of the noise abatement (including barriers) being applied. This may include the definition of derived point(s) located in accordance with SEPP N1;
 - (vi) auditing of the monitoring program (by an EPA appointed auditor) including auditing of the implementation of management and mitigation actions
 - (vii) regular reporting to EPA and the RDFCRG especially of non-compliances with noise limits
 - (viii) milestones to be used for updating and submitting any amendments to the monitoring, assessments and noise abatement required by the noise management plan. The noise monitoring data from each cell construction and operation to be used to confirm the assumptions in modelling and identification of any amendments to the plan and required noise abatement for subsequent cells.
- (i) Fuel Use Minimisation Plan to seek more efficient use of energy during construction and operation of the landfill including but not limited to consideration of alternatives such as:
- (i) vehicle and equipment use;
 - (ii) LFG collection and treatment;
 - (iii) promotion of waste minimisation programs;
 - (iv) use of alternative fuels and engines; and
 - (v) improved driver training and fleet maintenance.
- (j) a Vermin Management Plan detailing measures to reduce disease vectors at the landfill and the spread of vermin from the landfill to the surrounding area.

(k) an Environmental Management Plan detailing measures to manage potential environmental impacts.

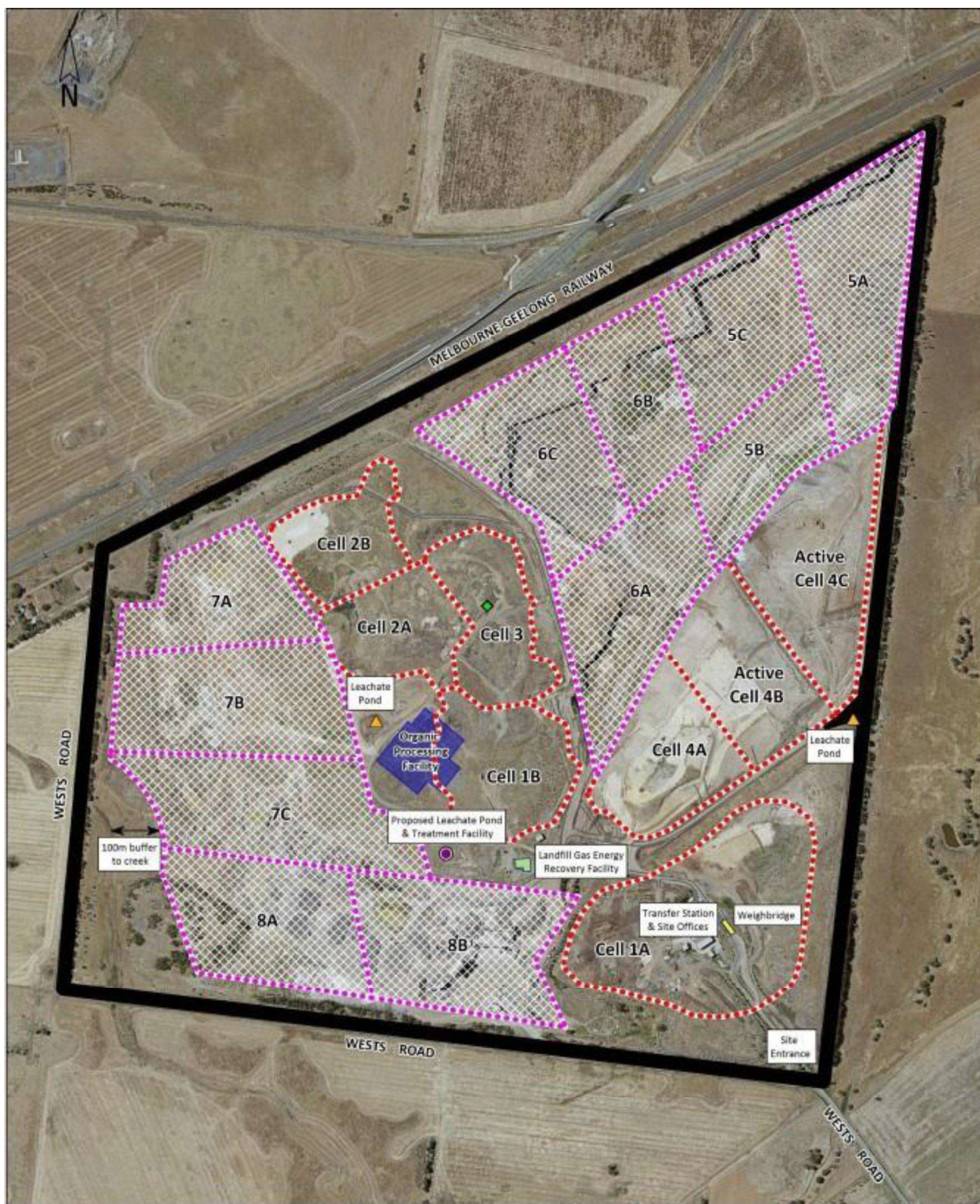
Each of the above plans must be approved by the Authority prior to the commissioning of each new cell. Each approved plan must be implemented to the satisfaction of the Authority. Plans which have previously been approved by the Authority may be reviewed by the Authority prior to commissioning of each new cell, and updated plans must be submitted to the satisfaction of the Authority if required.

SCHEDULE 1A – LOCALITY PLAN



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ABN:	38 393 903 860
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SCHEDULE 1B – PREMISES PLAN



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SCHEDULE 1C – CONTOUR PLAN



Legend			
	Fenceline		Inferred Top of Waste contour Major 5.0 m AHD Minor 1.0 m AHD
	Inferred extent of waste based on test pits and aerial photograph (March 1995)		Design Top of Waste contour Major 5.0 m AHD Minor 1.0 m AHD
	Cell Boundary		Cell 1a existing cap contour Major 5.0 m AHD Minor 1.0 m AHD
	Existing Cell 1a Boundary		
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APPENDIX A LIST OF APPLICATION DOCUMENTS

1. Wyndham City Council Wests Road Refuse Disposal Facility Works Approval Application – GHD Report for Wyndham City Council – Wests Road Refuse Disposal Facility – Works Approval Application – extension of operations, November 2016, 31/33268 supported by:
 - Appendix A – Planning Permit
 - Appendix B – EPA Licence
 - Appendix C – Supporting information to Section 3.1
 - Appendix D – Letter regarding Metropolitan Landfill Schedule
 - Appendix E – Groundwater Section Annual Compliance report 2014 - 2015
 - Appendix F – Leachate Management Plan
 - Appendix G – Surface Water Management Plan
 - Appendix H – Odour Management Plan
 - Appendix I – Acoustic Management Plan
 - Appendix J – Noise Survey Monitoring Report (Compass Environmental)
 - Appendix K – Fire Management Plan
 - Appendix L – Operations and Maintenance Procedure Manual

2. Further Information received on 10 July 2017 in response to section 22 Notice 1, issued on 19 January 2017 comprising:
 - 2.1 Response
 - 2.2 S22 Notice issued by EPA
 - 2.3 Additional groundwater information
 - 2.4 EPA assessment of S22 response Feb 2017
 - 2.5 Revised groundwater and Design measures report
 - 2.6 Sidewall linear section
 - 2.7 Conception groundwater interception layout
 - 2.8 Concept groundwater relief trench
 - 2.9 Additional leachate information
 - 2.10 Leachate pond location
 - 2.11 Typical leachate pond design
 - 2.12 Stormwater management plan
 - 2.13 Revised site contours

APPENDIX A LIST OF APPLICATION DOCUMENTS CONT.

- 2.14 Landfill gas risk assessment
- 2.15 Noise modelling report
- 2.16 Odour dispersion modelling report
- 2.17 Cap and Sump sections including groundwater relief system received 9 May 2017

- 3. Further Information received on 10 July in response to the second section 22 Notice, comprising the:
 - 3.1 Second section 22 Notice from EPA dated 12 April 2017
 - 3.2 Revised cell layout plan
 - 3.3 RDF landscape plans
 - 3.4 Bulban Rd landscape plans
 - 3.5 Sample fact sheet
 - 3.6 Top of cap presettlement plan
 - 3.7 Top of waste presettlement plan
 - 3.8 Site cross sections
 - 3.9 Progressive rehabilitation plan
 - 3.10 Response to submissions
 - 3.11 WCC response

- 4. Further Information received on 7 Sept 2017 in response to the third section 22 Notice comprising the:
 - 4.1 Third section 22 Notice, issued 18 August 2017
 - 4.2 RDF Revised cell layout and rehabilitation Schedule
 - 4.3 Revised Contour Plans
 - 4.4 Revised Premises plan
 - 4.5 Response to WREC submission
 - 4.6 Preliminary construction drawings Cells 1B – 3 rehabilitation
 - 4.7 Rehabilitation Management Plan Cells 1B – 3 final report
 - 4.8 Addendum rehabilitation of Cells 1B to 3
 - 4.9 WCC response