Development licence

Environment Protection Act 2017

Licence number	DL000232330
Issue date	31/08/2020
Last amended	25/06/2025
Expiry date	30/06/2030
Licence holder	Chunxing Corporation Pty Ltd
ACN	632 456 538
Activity site(s)	Crown Allotment 2047, Fourth Road, Hazelwood North, VIC 3840
Prescribed permission activities	A01 Reportable priority waste management and I02 Metal melting

Issued on 31 August 2020 under section 19B of the *Environment Protection Act 1970* and continued under section 471 of the *Environment Protection Act 2017* (the Act).

Madeline King

Maddeline King
Team Leader Development Licences
Permissioning Licences
Delegate of Environment Protection Authority Victoria (EPA)

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Context

Environment Protection Authority Victoria (EPA) is Victoria's environmental regulator acting in accordance with the *Environment Protection Act 2017* (the Act). Our regulatory role is to work with community, industry and business to prevent and reduce the harmful effects of pollution and waste on Victoria's environment and people.

Why we issue development licences

A range of development activity types are prescribed in the Environment Protection Regulations 2021 (the Regulations) because they give rise to risks of harm to human health or the environment. We issue development licences so applicants can lawfully undertake prescribed development activities. Section 44 of the Act provides that a person must not engage in a prescribed development activity except as authorised by a development licence in respect of that activity.

When we issue development licences

EPA can issue a development licence under section 69(1) of the Act. When issuing a development licence, EPA takes into account a number of factors, including the measures an applicant has taken or proposes to take in order to comply with the Act when engaging in the prescribed permission activity.

EPA can amend, suspend or revoke a licence for a range of reasons. This can include in response to changes in activities, risks or licence holder performance. All development licence details are publicly accessible via the EPA Public Register.

Key information and obligations

Interpretation

For the purposes of this development licence "You" means the "licence holder" identified on the first page. Unless a contrary intention appears, words or terms used in the conditions of your licence have the same meaning as in the Act, and in any regulations made pursuant to the Act.

Compliance

Your licence is subject to conditions. These conditions confer legal obligations on you as the licence holder. Some of these are general in nature, while others require you to do (or not to do) specific things. The requirements of these conditions do not detract from each other in any way, nor do they affect any other duties or obligations with which you are required to comply by law. You must fulfil all duties and perform all obligations set out in this licence or otherwise required by law.

Strict penalties apply for non-compliance with any part of your development licence.

You must comply with the Act and regulations administered by EPA. This includes, but is not limited to, compliance with the general environmental duty (GED).

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Duties under the Act

Under the Act, you have legal obligations in relation to your prescribed and non-prescribed activities. These legal obligations exist to minimise risks of harm to human health and the environment from pollution and waste.

You may be committing an offence and be liable to a penalty under the Act if your actions or omissions constitute a breach of these legal obligations.

General environmental duty

The Act places the onus on you to understand the risks associated with your operation or activity and requires you to minimise the risk of harm. This is called the general environmental duty (GED).

Sections 6 and 25 of the Act provide the legal basis for the GED. These sections state that a person engaging in an activity which may give rise to risks of harm to human health or the environment from pollution or waste must eliminate or minimise those risks, as far as reasonably practicable.

Duty to notify EPA of notifiable incidents

A notifiable incident is a pollution incident that causes or threatens to cause material harm to human health or the environment or is a prescribed notifiable incident. Under section 32 of the Act, you have an obligation to notify EPA of a notifiable incident as soon as practicable after you become aware of the incident.

Duty to take action to respond to harm caused by pollution incident

Under section 31 of the Act, if a pollution incident has occurred as a result of an activity (whether by act or omission) and the pollution incident causes or is likely to cause harm to human health or the environment, a person who is engaging in that activity must, so far as reasonably practicable, restore the affected area to the state it was in before the pollution incident occurred.

Duty to notify of contaminated land

Under section 40(1) of the Act, a person in management or control of land must notify EPA if the land has been contaminated by notifiable contamination as soon as practicable after the person becomes aware of the notifiable contamination.

Notifiable contamination means contamination which is prescribed in the Regulations, or contamination for which the cost of action to remediate the land is likely to exceed $50,000, or any other prescribed amount.

Duties relating to industrial waste, priority wastes and reportable priority wastes

Under parts 6.4 and 6.5 of the Act, a person has obligations in relation to the generation, receiving, recording, managing, transporting, and disposal of industrial, priority wastes and reportable priority wastes. These duties include:

- Duties of persons depositing industrial waste.

- Duties of persons receiving industrial waste.
- Duty of persons involved in transporting industrial waste.
- Duties of persons managing priority waste.
- Duty to investigate alternatives to waste disposal.
- Duty to notify of transaction in reportable priority waste.
- Duty of persons transporting reportable priority waste.

For further information on waste classifications see schedule 5 of the Regulations.

Further information and resources

To aid compliance with the Act and the Regulations, Environment Reference Standards (ERS), Compliance Codes, Position Statements and Guidelines have been developed to address a range of environmental objectives, permitted and non-permitted activities and risks.

You should understand how the Victorian environment protection framework applies to you and your activity, operation or business by making yourself familiar with the Act, Regulations, Compliance Codes and other relevant guidance material.

To assist you with understanding your obligations refer to www.epa.vic.gov.au.

Amendment

You can apply at any time to EPA for an amendment to your licence under section 57 of the Act. EPA may also decide to amend a licence under its own initiative according to section 58 of the Act.

Transfer

A person may apply to EPA for the transfer of this licence to a new licence holder pursuant to section 56 of the Act.

Duration of licence and renewal

This development licence is subject to the expiry date identified on the first page of this licence. It will remain in force until that time unless it is first surrendered by the licence holder (with consent from EPA), or it is suspended or revoked by EPA. EPA may decide to extend the term of the licence under section 72 of the Act. Note that an application for a development licence renewal must be submitted to EPA before the licence expiry date.

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Development licence structure

Your development licence has multiple parts:

- Conditions
- Appendix 1 – locality plan
- Appendix 2 – activity plan

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Conditions

General conditions

WA_G1

Subject to the following conditions, this approval allows the construction of the following works and associated equipment – a used lead acid battery (ULAB) recycling facility with secondary smelter which is capable of processing 50,000 tonnes per annum of ULABs, including externally processed lead paste measured in ULAB-equivalent tonnes, to produce 28,000 tonnes per annum of refined lead. It consists of the following key components:

1) Recycling processing facility consisting of:
    a) ULAB storage and sorting
    b) a continuous ULAB breaking process unit
    c) acid neutralisation using hydrated lime, $Ca(OH)_2$
    d) pre-desulphurisation of lead paste process
    e) a set of dual chamber furnaces, each 4m in internal diameter and with a capacity of 120 tonnes for smelting lead paste
    f) slag tapping and quenching
    g) metallics melting in one kettle, 2.8m in internal diameter and with a capacity of 70 tonnes
    h) three refining kettles (each 2.8m in diameter and with a capacity of 70 tonnes) and refinery process
    i) one tapping kettle (2.8m in internal diameter and with a capacity of 90 tonnes).
    j) two casting kettles (each 2.4m in internal diameter and with a capacity of 60 tonnes)
    k) externally processed lead paste storage
    l) by-product productions
    m) plastics processing plant.
2) Air emission control system for flue gas designed to emit to the atmosphere via a 30m stack (DP1) at maximum mass emission rates of no more than the following:
    a) $SO_2 \leq 3.5$ g/min.
    b) $NO_2 \leq 67$ g/min.
    c) Sulphuric acid mist, $H_2SO_4 \leq 2.3$ g/min.
    d) Metals: Pb ≤ 0.103 g/min; Cr ≤ 0.015 g/min; As ≤

0.012g/min; Cd ≤ 0.00055g/min; and Sb ≤ 0.004 g/min.

e) Dust: PM_{10} ≤ 9.2 g/min and $PM_{2.5}$ ≤ 6 g/min.

f) Dioxin < 0.00000003 g/min.

3) Air emission control system for fugitive emissions designed to emit to the atmosphere via 20m stack (DP2) at maximum mass emission rates of no more than the following:

a) SO_2 ≤ 4.1 g/hour.

b) NO_2 ≤ 24 g/hour.

c) Sulfuric acid mist ≤0.05 g/hour.

d) Metal: Pb ≤ 0.01 g/hour; Cr ≤ 0.15 g/hour; As ≤ 0.0036 g/hour; Cd ≤ 0.0019 g/hour; and Sb ≤ 0.0008 g/hour

e) Dust: PM_{10} ≤ 1.1 g/hour and $PM_{2.5}$ ≤ 0.72 g/hour.

4) Fugitive air emission control system, designed to achieve the following:

a) total enclosure of recycling process in buildings which are free of significant cracks or gaps, provided with ventilation and under negative pressure of at least 1.73 Pascals (0.013 mm mercury), except for the plastics plant area.

b) an inward flow of air maintained through all-natural draft openings.

c) collection of fugitive emissions throughout the storage, smelting and melting areas of the process buildings and discharge to a baghouse.

d) collection of gaseous emissions from battery breaking area.

e) final treatment of collected fugitive emissions, through a dedicated baghouse prior to discharge to the atmosphere via a stack (DP2).

5) Fit for purpose wastewater treatment plant capable of treating all process water generated to the standards suitable for reuse on-site and/or discharge to sewer.

6) Stormwater management system which is designed to contain stormwater run-off in one in 100-year rainfall event and firefighting water.

7) Fit for purpose storage facilities designed for chemicals, dangerous goods and combustible materials.

8) Risk and emergency management system, including firefighting protection system meeting the requirements in WA_W1.

WA_G02	The works must be constructed in accordance with the application accepted on 6 December 2019 as augmented or amended by additional information dated 30 June 2020, 13, 20, 28 and 31 July 2020, as well as 7, 12, 26 and 27 August 2020 ('the

	application'), 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_G03	This approval will not take effect until any permit which is required under the *Planning and* Environment *Act 1987* has been served on the Authority by the applicant.
WA_G04	This approval expires: 1) On the issue or amendment of a licence relating to all works covered by this approval 2) When EPA advises in writing that all works covered by this approval have been satisfactorily completed and no licence is required, or 3) On the expiry date listed on the front page of this permission.
DL_C05	1. You must develop a risk management and monitoring program for your activities which: a) identifies all the risks of harm to human health and the environment which may arise from the activities you are engaging in at your activity site; b) clearly defines your environmental performance objectives; c) clearly defines your risk control performance objectives; d) describes how the environmental and risk control performance objectives are being achieved; e) identifies and describes how you will continue to eliminate or minimise the risks in 1(a) (above) so far as reasonably practicable; and f) describes how the information collated in compliance with this clause, is or will be disseminated, used or otherwise considered by you or any other entity. 2. The risk management and monitoring program must be: a) documented in writing; b) signed by a duly authorised officer of the licensed entity; and c) made available to the Authority on request.
DL_C07	Within 45 days of the completion of the approved activities, you must provide to EPA a written report that summarises the activities undertaken and includes, but not to limited to: (a) operating conditions, including incoming materials' handling volumes; (b) the results of the commissioning monitoring program per condition WA_R1 2); and

(c) volumes of by-products generated and their disposal and/or reuse destinations.

Works conditions

Before commencing construction of the following components of the works, you must provide to EPA the following plans or reports. Those reports, except under sub-conditions 6), 10), 11) and 12), must be endorsed by an EPA-appointed environmental auditor[1] to ensure they meet the condition requirements:

WA_W1

1) Reports of the final detailed process design. The reports, with any accompanying plans and specifications (prepared under section a) through c) of this condition must be endorsed by a suitably qualified person or persons approved by the EPA in writing.

   a) The complete process, including:

      i. ULAB storage and sorting
      ii. a continuous ULAB breaking process
      iii. acid neutralisation using hydrated lime, $Ca(OH)_2$
      iv. pre-desulphurisation process to achieve < 1.2% sulphur remaining in paste
      v. smelting lead paste in a set of dual chamber furnaces
      vi. one lead bullion tapping kettle
      vii. slag tapping and quenching
      viii. metallics melting in one kettle
      ix. three refining kettles and refinery process
      x. two casting kettles
      xi. by-products production
      xii. storage and shipment of finished goods and waste
      xiii. plastics processing plant.

   b) a report of the detailed design of equipment, demonstrating good engineering practice, including compliance with Australian engineering, occupational health, and safety standards.

   c) a report of the detailed design of the process building, including storage and holding areas for: rejected wastes, excess product from the breaker, other sources of materials in the plant, i.e. the refinery and external purchases of scrap or feed material. All storages must be fit for purpose.

[1] if an EPA appointed environmental auditor is not available you can seek approval from EPA in writing to use another suitably qualified professional. In this instance that party must be independent from the author of the reports.

2) A report of the final detailed design and schematics of the building's negative pressure ventilation system, except for the plastics plant area, prepared by a suitably qualified building ventilation designer, including:
    a) free of significant cracks or gaps, corrosion or other deterioration that could cause lead bearing material to be released from the primary barrier.
    b) negative pressures of at least 1.73 Pascals (0.013 mm mercury).
    c) an inward flow of air through all-natural draft openings.
    d) the locations of doors, windows/or intake vents, sealing of the building.
    e) building ventilation extraction rate and extraction fan capacity.
3) A report of the detailed design of pollution control system, including:
    a) the flue gas emission control system, including both the furnace and refining area:
        i. must consist of baghouses and scrubbers as a minimum, with the investigation of the feasibility of installing a wet electrostatic precipitator, to meet the performance specifications in WA_G1 2)
        ii. must design conceptual provision for retrofitting of additional pollution control equipment that may be required in the future.
    b) vent collection of fugitive emissions must be designed to maintain lead compounds in any process vent gas < 0.20 mg/m^3 (dry weight) concentrations and the discharge to atmosphere must meet the performance specifications in WA_G1 3).
4) A report of the final detailed designs and schematics of the wastewater treatment plant, including:
    a) designed capacity to treat the maximum hydraulic and pollutant loadings.
    b) critical control points related to Process Flow Diagram and Pipe and Instrument Diagram.
    c) operational monitoring
5) A report detailing the final stormwater water management system design, including the
    a) the water balance of roof rainwater and stormwater.
    b) the storage pond design.
    c) the bunding around the premises.
    d) capacity to manage firefighting water on-site and/or seek

agreement with Gippsland Water to discharge fire water into the sewer system if fire water cannot be contained within the storage ponds and bunded area.

e) consideration for installing cut-off valves to prevent off-site run-off in the event of incidents, i.e. fire and spills.

6) A report detailing the fit for purpose investigation of the baseline land and groundwater conditions, prepared by an EPA-appointed environmental auditor, including:

a) an investigation of the existing land and groundwater conditions at the site and in the surrounding areas.

b) construction environmental management plan (CEMP) for managing contaminated soil and groundwater to meet the requirements in the *Environmental management Plan Former Lurgi Gasworks Site Morwell,Victoria*, 24 September 2008.[2]

c) recommendation for revising the contaminated land EMP, because of the redevelopment of the site.

7) A report of the final detailed designs and schematics of all chemicals, dangerous goods, combustible and hazardous substances storages, including:

a) inventory of substances (input materials and by-products), including the information of their material safety data sheets.

b) location and volume of each substance to be stored at any one time.

c) the designs for storage and handling of dangerous goods and flammable and combustible liquids/substances, are demonstrated to be in accordance with:

i. the *Dangerous Goods (Storage and Handling) Regulations* 2012

ii. the *Storage and Handling of Combustible Recyclable and Waste Materials* (EPA publication 1667.2)

iii. the *Liquid Storage and Handling Guidelines* (EPA's Publication 1698),

iv. all relevant Australian Standards.

d) design for loading and unloading chemicals and dangerous goods.

8) A report of a full plant and operations risk assessment, including a comprehensive risk management study that considers all process and environmental risks for operation (normal and other than normal operating conditions), including the following:

[2] Link to the plan: apps.epa.vic.gov.au/EnvAuditFiles/53X/51360-1/51360-1_c.pdf

a) Hazard and Operability Study (HAZOP).

b) a report of the final detailed designs and schematics of the fire mitigation controls, informed by a fire risk study and endorsed by a suitably qualified fire safety engineer which includes implementation of all recommendations of the Country Fire Authority/Fire Rescue Victoria.

c) emergency management plan which must be developed in consultation with and reviewed by CFA's State Infrastructure and Dangerous Good Unit.

d) the detailed requirements for process control and monitoring, and alarm system.

e) air pollution control equipment maintenance, performance monitoring and alarm system.

f) real time monitoring for process and control system which is capable of monitoring the performance of air pollution control equipment (baghouses and scrubbers), vent extraction rates and wastewater treatment plant. This must include relevant performance parameters and indicative alarm set points.

g) contingency measures to manage air quality in the event of incidents or emergencies.

9) Design for continuous and periodical air emission monitoring programs to demonstrate compliance with air quality standards, including testing of stack emissions, as well as site boundary monitoring, soil and surface water monitoring.

10) Provide a CEMP for management of noise and dust emissions, stormwater run-off, infiltrated groundwater and contaminated soil (if any) during construction.

11) A communication and engagement plan for the construction phase of the ULAB recycling facility, including a pollution report line and a schedule of community liaison committee (CLC) meetings.

12) Confirmation that access to both the property and 'Used Lead Acid Battery Facility' will be achievable via the Fourth Road.

WA_W2	You must not commence construction 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.

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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 the written approval of EPA.
WA_W10	You must install a device capable of activating an alarm that warns the operator whenever pollution control system fails or partially fails, i.e. building negative pressures, baghouses, scrubbers, cooling tower, flue gas or fugitive emissions extraction fans.
WA_W12	You must install all exhaust stacks so that provisions for sampling are included in accordance with EPA Publication 440.1 "*A guide to the Sampling and Analysis of Air Emissions and Air Quality*", as amended from time to time.
WA_W13	You must implement all liquid storage containment and handling measures in accordance with EPA Publication 1698 "*Liquid Storage and Handling Guidelines*", dated June 2018.
WA_W14	You must install all wastewater discharge points so that provisions for sampling are included in accordance with EPA Publication 441 *"Guide to the Sampling and Analysis of Waters, Wastewaters, Soils and Wastes"*, as amended.
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*", as amended from time to time.
WA_W18	During construction, you must undertake an environmental monitoring program that enables you and EPA to determine compliance with condition(s) WA_W15, WA_W16 and WA_W17.
WA_W19	During construction, you must ensure that all activities are carried out in accordance with the information provided in the Works Approval Application.

Reporting conditions

WA_R1	At least three months before the commencement of any commissioning, you must provide to EPA the following documents which can be incorporated into the report per condition DL_C05, where appropriate: 1) Operational procedures underpinning HAZOP, including ULAB transportation, sorting procedures and process, including:

a) identification of non-confirming batteries, i.e. lithium batteries and storage of rejects.

b) an inventory of reportable priority waste generated, including storage, handling and disposal procedures.

c) an Environment Management System prepared in accordance with the standards specified in the Waste Management Plan (E-Waste).

d) requirements for record keeping of incoming, outgoing, rejected wastes that would include/satisfy the monitoring/auditing requirements of the Waste Management Plan (E-Waste).

2) A detailed commissioning plan, including:

a) confirming effective building sealing and achieving negative pressure specifications.

b) air emissions monitoring plan to demonstrate compliance with the air emission standards specified in condition WA_G12).

c) noise emission measurement to confirm that ULAB activities can meet the noise limits in accordance with EPA publication 1826: *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, as amended.*

d) test of the performance of the wastewater treatment plant.

e) testing to confirm waste categorisations for slag, waste refractory materials and plastic separators.

3) An environmental improvement plan (EIP) for managing ongoing operation of the ULAB facility, in accordance with EPA's publication 739 Guidelines for the Preparation of Environment Improvement Plans. The EIP must include, but not be limited to:

a) the plan for on-going Community Liaison Committee (CLC) meetings.

b) environmental performance standards for air emissions, wastewater treatment and noise emissions.

c) an on-going monitoring program for checking the compliance of performance target levels for point sources, as well as a maintenance and audit plan, including:

i. a continuous and routine stack testing program, including SO_2

ii. routine tests for lead and dust at site boundary

	iii. on-going groundwater monitoring iv. monitoring for the wastewater treatment plant v. monitoring for the performance of baghouse, scrubber, and cooling tower vi. reportable priority waste management. d) environmental auditing and reporting. 4) A copy of an agreement with Gippsland Water to discharge excess treated wastewater and /or fire water into the sewer system if fire water cannot be contained within storage ponds and bunded area.
WA_R4	Before the commencement of any commissioning, you must provide, to the satisfaction of EPA, a report that includes: 1) Construction verification report prepared by a suitably quality expert approved by the EPA in writing demonstrating that the facility has been built in accordance with the works approval and all endorsed reports provided under WA_W1.
WA_R5	You must not commence operation of the works until written EPA approval of the plans and reports required by condition(s) WA_R1, DL_C05 and DL_C07 have been received.

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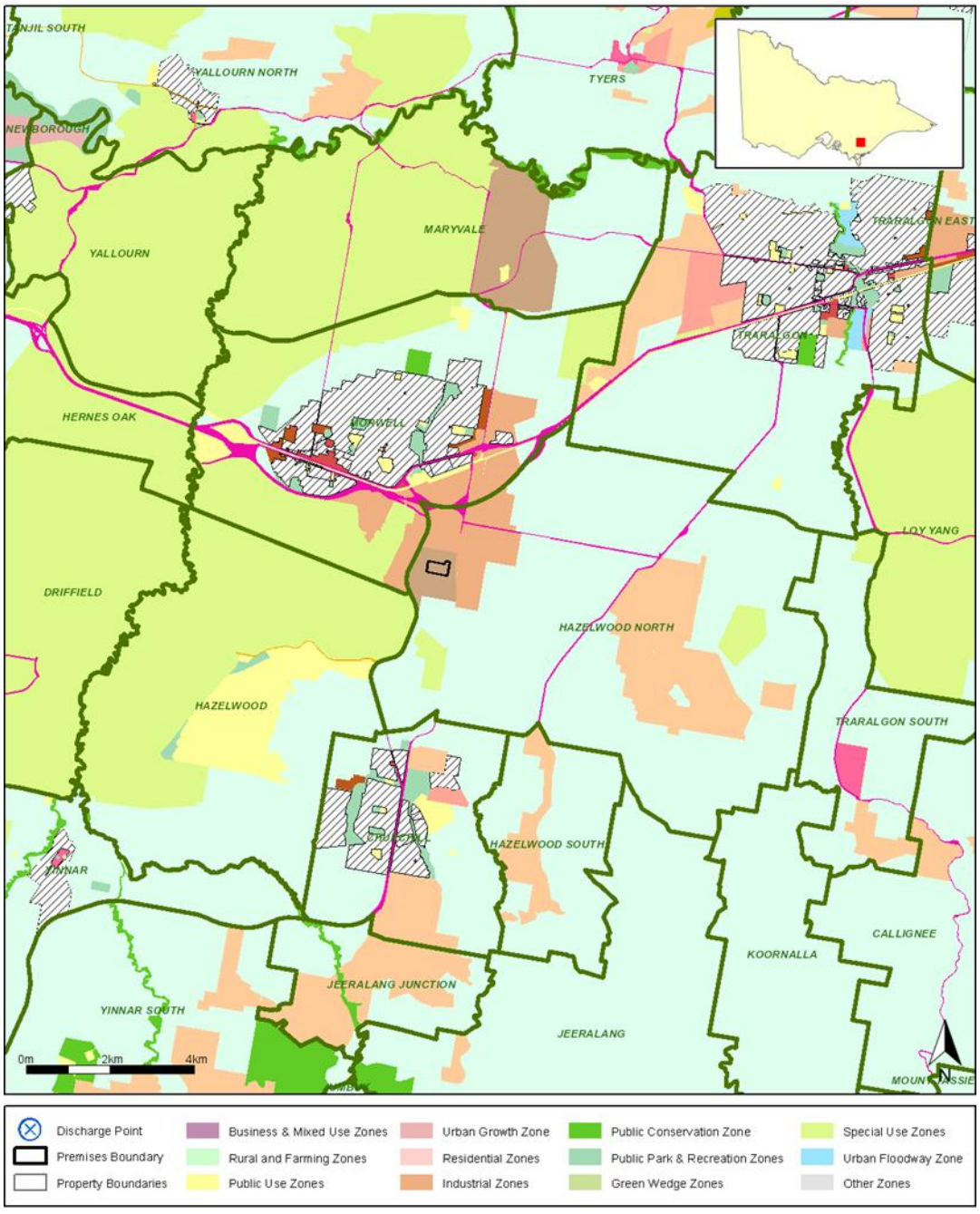
Appendices

Appendix 1 – locality plan



Before relying on the information in this map, carefully evaluate its accuracy, currency, completeness and relevance. Obtain appropriate professional advice before using this information.

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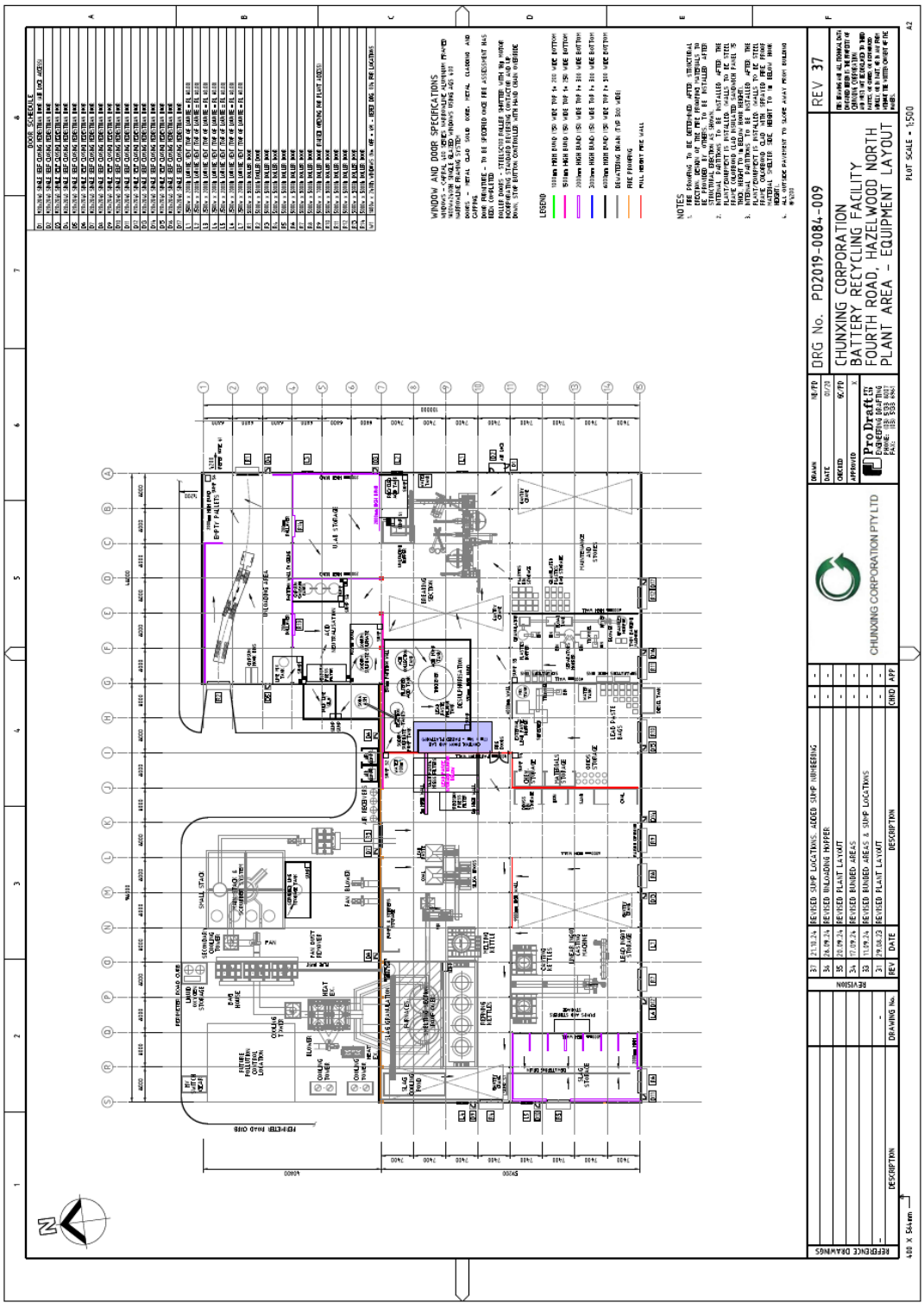
Appendix 2 – activity plan



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