Environmental Assessment Report

Asphalt Suppliers Pty Ltd

Increase of Annual Production Limit at Asphalt Production Facility (Batch Plant)

30 & 34 Industrial Drive, Ulverstone

August 2025

ENVIRONMENT PROTECTION AUTHORITY

Environmental Assessment Report

Proponent	**Asphalt Suppliers Pty Ltd**
Proposal	Increase of Annual Production Limit at Asphalt Production Facility (Batch Plant)
Location	30 & 34 Industrial Drive, Ulverstone
Class of Assessment	2B
PCE no.	10993
Permit Application No.	DA 2021258, Central Coast Council
myDAS Folder No.	21/4281
myDAS Document No.	D25-111442

Assessment Process Milestones

Date	Milestone
3 September 2021	Permit Application submitted to Council
10 September 2021	Application received by the Board
28 October 2021	Guidelines issued
21 June 2023	Start of public consultation period
19 July 2023	End of public consultation period
6 September 2023	Date draft conditions issued to proponent
1 July 2025	Additional information (Supplement) submitted to the Board
15 August 2025	Statutory period for assessment ends

Glossary/Acronyms

Term	Detail
AHD	Australian Height Datum
Air EPP	*Environmental Protection Policy (Air Quality) 2004*
Board	Board of the Environment Protection Authority
dB(A)	A-weighted decibels
EIA	Environmental impact assessment
EIS	Environmental Impact Statement
EMPCA	*Environmental Management and Pollution Control Act 1994*
EMPCS	Environmental management and pollution control system
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
GLC	Ground level concentration
LISTmap	Land Information Systems Tasmania
LUPA Act	*Land Use Planning and Approvals Act 1993*
Noise EPP	*Environmental Protection Policy (Noise) 2009*
OU	Odour unit
PAH	Polycyclic aromatic hydrocarbon
PM_{10}	Particulate matter less than 10µm in diameter
RAP	Recycled Asphalt Product
RMPS	Resource Management and Planning System of Tasmania
SD	Sustainable development
TSP Act	*Threatened Species Protection Act 1995*
VOC	Volatile organic compound

Report Summary

This report is an environmental assessment of Asphalt Suppliers Pty Ltd.'s proposed increase of the annual production limit at its existing asphalt production facility (the Batch Plant) at 30 & 34 Industrial Drive, Ulverstone.

The proposal involves a production limit increase from 20,000 tonnes to 30,000 tonnes of asphalt per annum at the Batch Plant. The Batch Plant is part of the wider Hardings Hotmix Pty Ltd site on Industrial Drive.

This report has been prepared based on information provided in the permit application, Environmental Impact Statement (EIS), and Supplement to the EIS. Relevant government agencies and the public were consulted, and their submissions considered as part of the assessment.

Appendix 1 contains a table of the proponent's proposed management measures.

Appendix 2 contains the Permit Conditions – Environmental (PCE) No. 10993.

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1. Approval Process

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPAA) for the proposal was submitted to Central Coast Council on 3 September 2021.

This proposal is defined as a 'Level 2 activity' under clause 7(d), Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPCA), being a pre-mix bitumen plant in which crushed or ground rock aggregates are mixed with bituminous or asphaltic materials and heated, to produce road-building mixtures.

The site is currently permitted to produce 20,000 tonnes of asphalt per annum under Permit Conditions Environmental (PCE) No. 7877, contained in Permit DEV 2009.48 issued by Central Coast Council in June 2010, as varied by Environment Protection Notice (EPN) No. 9761/1 (the existing Permit).

Section 25(1) of the EMPCA required Council to refer the application to the Board of the Environment Protection Authority (the Board) for assessment under EMPCA. The application was received by the Board on 10 September 2021.

The Environmental Impact Statement (EIS) supporting the proposal was prepared in accordance with Guidelines issued by the Board on 28 October 2021. Several drafts of the EIS were submitted to EPA for review against the Guidelines prior to finalisation and acceptance on behalf of the Board on 15 June 2023.

The EIS was released for public inspection for a 28 day period commencing on 21 June 2023. Advertisements were placed in The Advocate and on the EPA website. The EIS was also referred to relevant government agencies for comment. No representations were received.

On 14 September 2023, the Executive Director, Environmental Assessments requested that the proponent submit additional information to address matters raised during the assessment period. Satisfactory additional information, in the form of a Supplement to the EIS, was submitted by the proponent on 1 July 2025.

The Executive Director, Environmental Assessments has undertaken determination of the assessment under delegation from the Board.

2. SD Objectives and EIA Principles

The proposal must be considered by the Board in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and the Environmental Management and Pollution Control System (EMPCS). Both sets of objectives are specified in Schedule 1 of the EMPCA.

The functions of the Board are to administer and enforce the provisions of the EMPCA, and to use its best endeavours to further the RMPS and EMPCS objectives. The Board must assess the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPCA.

3. The Proposal

The main characteristics of the proposal are summarised below. A detailed description of the proposal is provided in Section 3 of the EIS.

Summary of the proposal's main characteristics

Activity

The activity includes production of a maximum of 30,000 tonnes of asphalt per annum. This is an increase from the current production limit of 20,000 tonnes of asphalt per annum authorised under PCE No. 7877, as varied by EPN No. 9761/1 (the existing Permit). The proposed increase is within the production capacity of the existing plant and no capital works are required.

Location and planning context

Location	30 & 34 Industrial Drive, Ulverstone, CT 146935/2 and CT 246406/1, as shown in Figure 1.
Land zoning	The site is zoned General Industry under the *Tasmanian Planning Scheme – Central Coast,* as shown in Figure 2. Pre-mix bitumen plants are a Permitted Use Class within this zone.
Land tenure	Private freehold owned by the proponent.

Activity site

Land Use	The site is currently operated as an existing level 2 asphalt production facility (batch plant).
Topography	Relatively flat with a gentle slope to the northeast with the elevation ranging from 15 metres Australian Height Datum (AHD) in the south of the site to 10 metres AHD in the north of the site.
Geology	The area is underlain by older stabilised aeolian sand of predominantly coastal plain, with underlying marine sands.
Soils	Soil types have not been recorded for the area, however the site is located in close proximity to the Bass Strait coastline and the soils would typically be silt and sand. The site and surrounding area have a low probability of containing acid sulphate soils.
Hydrology	The site is located within the Ulverstone East – Buttons Creek catchment, which is a fully piped network with a catchment area of 3.33 square kilometres that discharges to Bass Strait via Buttons Creek, a waterway located approximately 1 kilometre to the east. The closest waterbody to the site is a water storage dam located approximately 250 metres to the southeast on the far side of Bass Highway. There is no groundwater information available for the site.
Natural Values	The site has been used for industrial purposes for over 10 years and is highly modified and devoid of vegetation. No fauna or flora species listed under the *Threatened Species Protection Act 1995* (TSP Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), including native fauna habitat or evidence of fauna activity, have been identified on site. There are no records of declared weeds listed under the *Biosecurity Act 2019* or evidence of plant pathogens or disease on site. As no natural areas remain on site, natural values are not considered further in this report.

Location region

Climate	The annual average rainfall for Devonport Airport, located approximately 18 kilometres to the east of the site, is 760 millimetres per annum, with maximum rainfalls occurring in July and August. Wind direction is predominantly westerly with south westerlies and north westerlies sub-dominant.
Surrounding land zoning, tenure and uses	The area immediately surrounding the site comprises the Ulverstone Industrial Estate, including suppliers of construction materials and various manufacturers for agricultural machinery, masonry and natural insecticides. Commercial areas and recreational areas, including Button Beach and the coastal shoreline of Bass Strait, are also located nearby. The nearest sensitive receptor is a residence, Westella House, located 150 metres southeast of the site on the far side of Bass Highway, and residential areas are located within 250 metres to the south and 400 metres to the northwest, as shown in Figure 3.
Species of conservation significance	The Natural Values Atlas (NVA) Report indicates one species of threatened flora listed under the TSP Act occurring within 500 metres of the site boundary. The NVA Report also notes records of the eastern barred bandicoot (*Perameles gunnii*) listed under the EPBC Act within 500 metres of the site. Two sightings of the shy albatross (*Thalassarche cauta*) listed under the TSP Act and EPBC Act, and one sighting of the white-bellied sea-eagle (*Haliaeetus leucogaster*) listed under the TSP Act, were recorded within 500 metres of the site in 2018 and 2019 respectively. While traffic movements associated with the activity are proposed to slightly increase, the area has many industrial facilities in the vicinity and is not considered an area with suitable foraging or habitat for species of conservation significance. The risk to species of significance is therefore not considered further in this report.

Proposed infrastructure

Major equipment	No new equipment or plant upgrade is proposed. The major equipment for the existing hot mix asphalt batch plant includes: aggregate belt conveyor; aggregate drier and forced draft fan; aggregate hoppers/feeders; aggregate storage shed; baghouse; baghouse exhaust fan and stack; batching tower including screens, chutes, pugmill and bucket elevator; bitumen container heating; bitumen storage tanks (kettles); drying drum; front end loader; heat tracing oil heater, hot asphalt storage; liquid petroleum gas container; and two trucks (refer to Figure 4).
Other infrastructure	Other existing infrastructure includes: offices and control room, a cyclone installed in the batching tower for air pollution control, and two triple interceptor trap systems; one located at the discharge point for stormwater that is collected from the bunded contaminated drainage on which the plant is located, and the other located at the vehicle washdown bay to collect and treat wastewater which is not discharged to sewer as part of the first flush pretreatment system as per the trade waste agreement with TasWater. The pretreatment system (holding tank and oil/water separator) is the only new infrastructure proposed to be installed at the site.

Inputs

Water	Mains connection. Water is not used in the asphalt production process, however, small volumes may be required for dust suppression, washing of trucks that have transported aggregates to site, for general use, toilets, and a safety shower.
Energy	Per annum, the site utilises approximately 528, 874 kilowatts per hour of electricity from the power grid and approximately 5,206 gigajoules of liquid petroleum gas.
Other raw materials	Aggregate, crusher dust, sand, and bitumen. All aggregates and crusher dust are sourced from Ulverstone Quarries (an associated entity of the proponent) which is

	located approximately 4 kilometres from the site. Sand is sourced from the Calder area, a rural locality approximately 65 kilometres from the site. Bitumen is sourced directly from an international importer. Raw materials used to blend with the hot bitumen, aggregate, and sand are stored on site in the aggregate storage shed (shown in Figure 4). The plant has capacity to mix asphalt with other additives and or recycled materials, including the potential for the inclusion of crumb rubber and Recycled Asphalt Product (RAP).

Wastes and emissions

Liquid	Stormwater runoff from the plant and around the site. Liquid wastewater generated from vehicle washing (refer to Figure 5).
Atmospheric	Fugitive odour and dust emissions from site traffic and general materials handling, including unloading of aggregates, stockpiles, and loading of hot mix asphalt product onto trucks. Fugitive odour emissions of bitumen fume from storage tank vents, shipping container vents during heating, batching tower, drier, and conveyors. Point source particulate and gaseous emissions from the baghouse stack. Combustion emissions from the small gas burner used to heat the thermal oil for the bitumen tank and pipe heat tracing system.
Solid	General refuse including food scraps, paper and packaging. Spilled asphalt material and dust generated by operations, unused asphalt, asphalt from test batches, and the solids removed from the triple interceptor trap systems.
Controlled wastes	Waste oil from routine plant maintenance.
Noise	From materials loading and unloading, plant operation, and vehicles on site and going to and from the site.
Greenhouse gases	Associated with the use of diesel and petro-fuelled transportation of raw materials to the site, transportation of product from the site, and plant operation. The production of asphalt generates greenhouse gas emissions including carbon dioxide, methane, nitrous oxide, sulphur dioxide, propane, ethane, and fluorinated gases. Total greenhouse gas emissions generated by the asphalt batch plant and associated trucking movements are predicted to increase for the proposal.

Construction, commissioning and operations

Production rate	The maximum production rate of the plant is 30 to 80 tonnes of asphalt per hour, dependent on the required product specification and weather conditions. The production of asphalt batches is in accordance with customer demand and plant operations will continue to fluctuate based on the quantity of product ordered.
Proposal timetable	Construction and commissioning activities are not required for the proposal. Dependent on approval and subject to demand, the proposed increase to the annual production limit will commence as soon as possible and be ongoing.
Operating hours (ongoing)	0600 to 1800 hours on weekdays and Saturdays; and 0900 to 1800 hours on Sundays and local public holidays. Operations outside of these hours is permitted under the existing Permit, subject to written notice to the Director at least 24 hours in advance detailing the date, time, and reason for out of hours operation. The existing Permit also states that the site must not operate on public holidays that are observed state wide (Easter Tuesday excepted), without the prior written approval of the Director. There is no proposed change to existing hours of operation.

Figure 1: The site, as defined by the boundaries of the Activity Area, inclusive of Title Reference 146935/2 and part of Title Reference 246406/1.

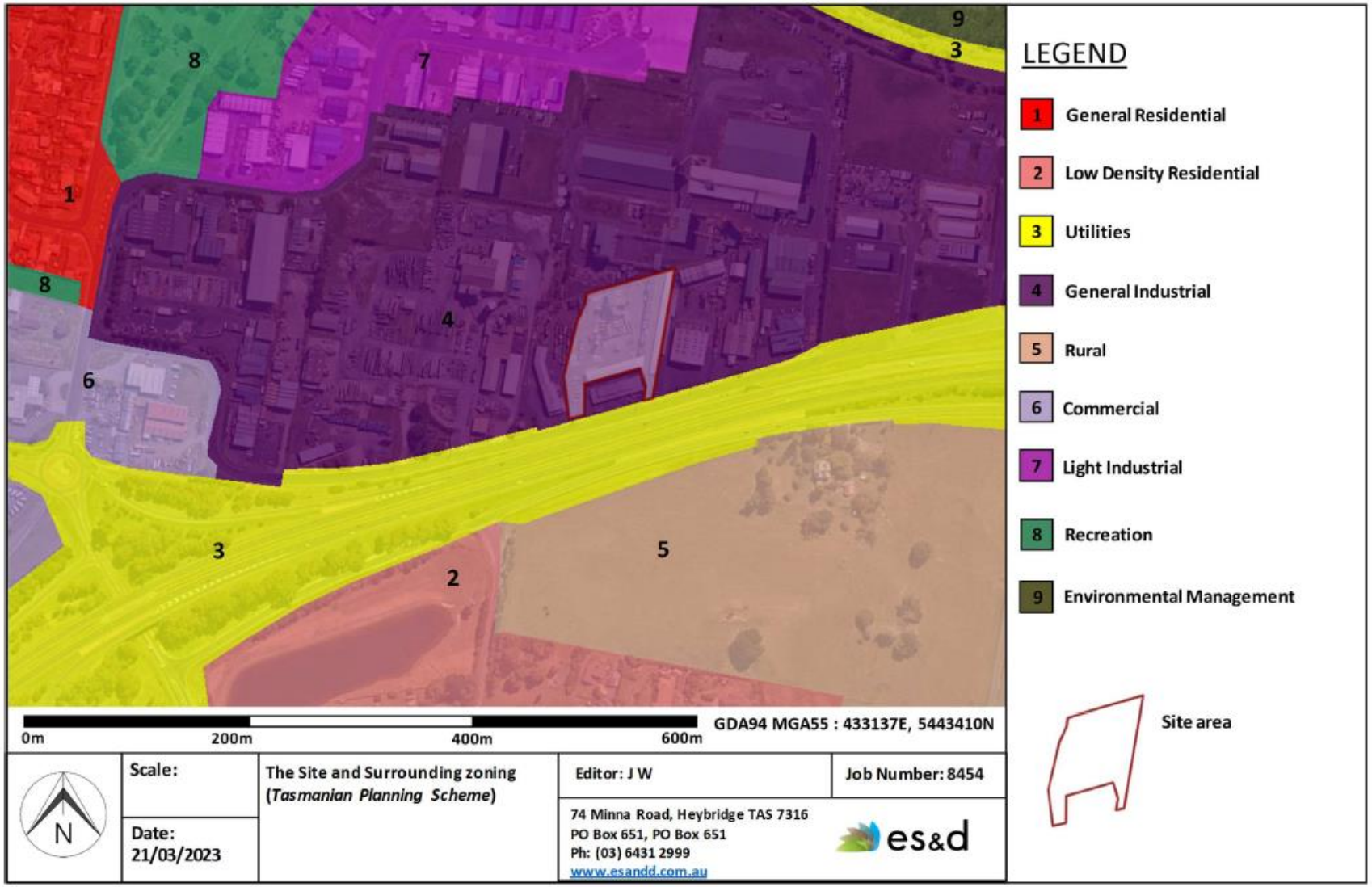

Figure 2: General location of the site and surrounding zoning under the *Tasmanian Planning Scheme – Central Coast* (Figure 4 of the EIS).

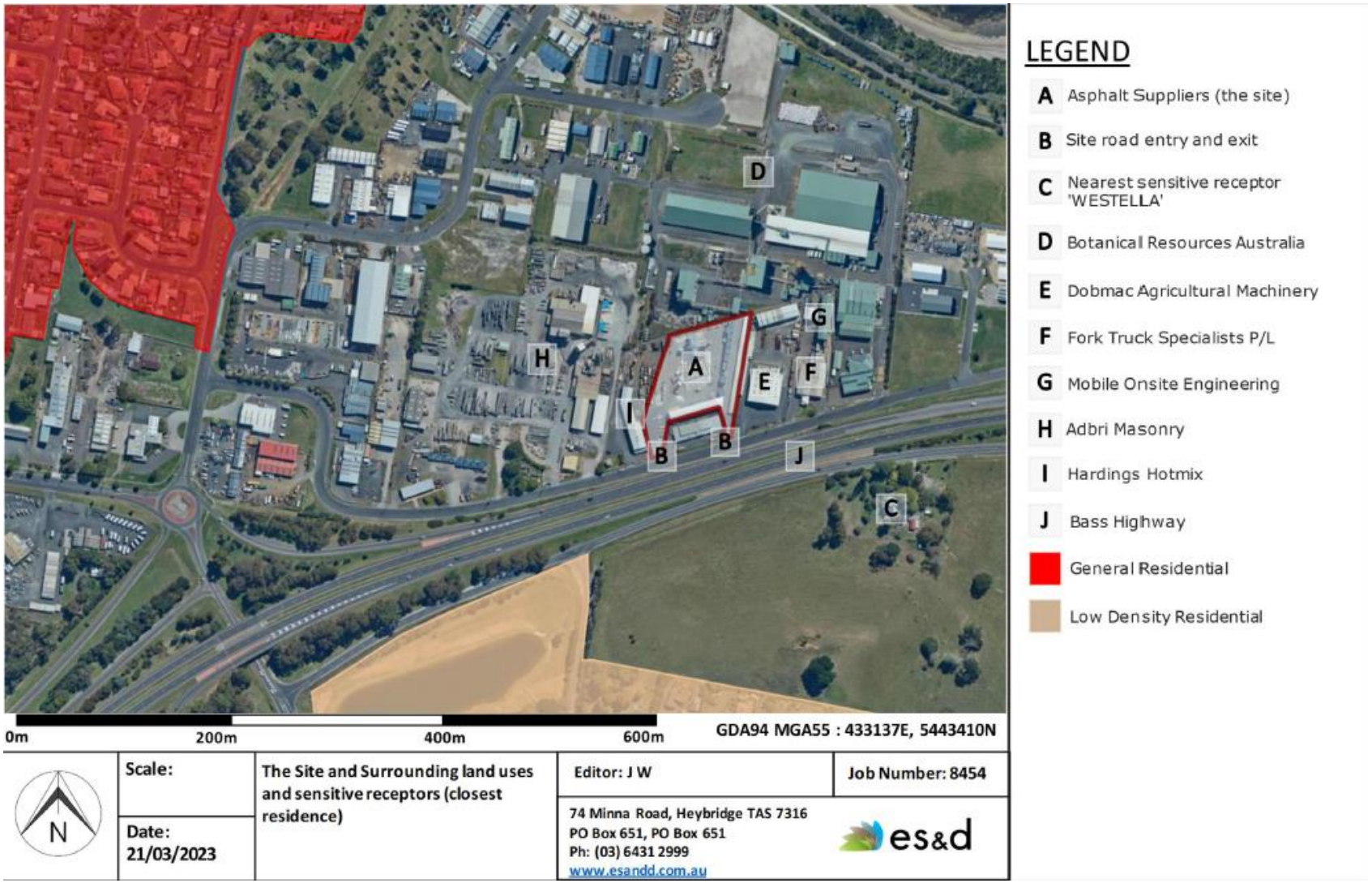

Figure 3: General location of the site and surrounding land uses and sensitive receptors (Figure 2 of the EIS).

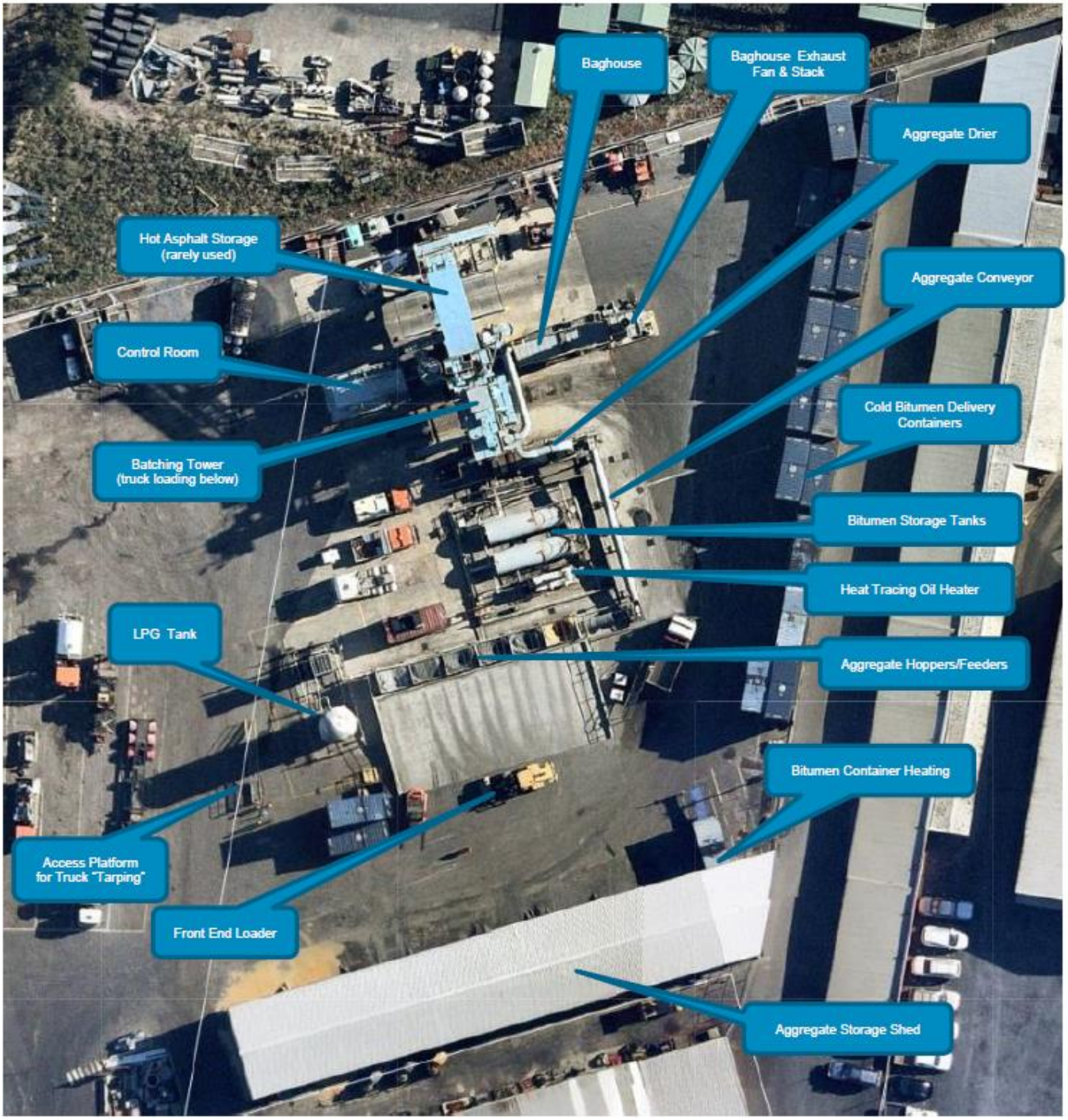

Figure 4: Site plan including location of all major equipment (Figure 5 of the EIS).

Figure 5: Site plan showing water management infrastructure and location of vehicle washdown bay (Appendix 1 of the Supplement to the EIS).

4. Project Rationale and Alternatives

The EIS states that the purpose of the proposal is for the proponent to continue to meet the demand for asphalt product in the region.

The existing site of the Batch Plant is part of a wider site which accommodates Hardings Hotmix Pty Ltd, a specialist civil contracting and asphalting business. Both the proponent and Hardings Hotmix Pty Ltd share common management and ownership. The proponent has been operating the Batch Plant since it was commissioned in October 2011, with exceedance of the annual production limit occurring on five occasions, all of which were identified and communicated to the EPA by the proponent. The proposed increase of the annual production limit will allow the proponent to meet customer demand for asphalt in the region.

Alternatives to the proposal which were considered include, the supply of asphalt product from other locations which would not be in the best commercial interest of the proponent, and the addition of a new site to the proponent's operations. This has not been considered further due to the existing Batch Plant having capacity to meet the proposed increase in production levels.

5. Public and Agency Consultation

No public submissions were received during the public consultation period.

The EIS was referred to several government agencies with an interest in the proposal. No submissions were received.

The following EPA staff provided specialist advice on the EIS:

- Regulatory Officer, Environment Protection Authority
- Air Section, Environment Protection Authority
- Noise Section, Environment Protection Authority
- Water Section, Environment Protection Authority

The Supplement to the EIS prepared by the proponent provides a response to relevant environmental issues that were raised during the assessment.

The proponent has undertaken its own informal consultation process, advising that they spoke directly with immediate neighbouring businesses (D, E and H; shown in Figure 3), about the proposed increase of production. The EIS states that no immediate concerns have been raised by any of the parties consulted.

6. Evaluation of Key Environmental Issues

Two key environmental issues were identified for detailed evaluation in this report:

- Air quality; and
- Noise emissions.

These issues are discussed in the following subsections.

6.1 Air quality

6.1.1 Description

Emission sources

The production of fine and coarse dust, odours, and gaseous pollutants (i.e., fumes) can occur at most stages of the asphalt production process and potentially result in environmental harm or nuisance to nearby sensitive receptors. Emissions to air are derived from the baghouse stack (odours and fumes), and from fugitive sources (particulate matter/dust, odour, and fumes).

Dust sources include vehicle movements, stockpiles, handling of materials with front-end loaders, drying, conveying, screening, and truck loading.

Potential sources of fumes include drying, bitumen storage, mixing, conveying, screening, the exhaust stack, venting of the bitumen storage tank, heating and combustion, and truck loading. Process emissions include products of both complete combustion, such as nitrous oxides (NO_x) and sulphur dioxides (SO_x), carbon dioxide (CO_2), and water, and incomplete combustion, which includes polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), carbon monoxide (CO), metals, and other organic particulate matter. VOCs are created from use of liquid bitumen, petroleum distillates, and emulsifiers. Storage tanks holding fuel oils and heated liquid asphalts may also be a source of VOC emissions. Potential sources of odorous fumes generated by hot bitumen include the exhaust stack, and truck loading processes. Minor fugitive odour emission sources are spillage and storage, including the storage of cold bitumen which has the potential to generate odour emissions if there is water ingress into the storage container.

Air dispersion modelling

Air emissions modelling was undertaken for the proposal and is presented in Section 7.1 and Appendix 3 of the EIS.

Modelling results for the constituents of concern were assessed against criteria values derived from the *Tasmanian Environment Protection Policy (Air Quality) 2004* (Air EPP) for in-stack concentrations under Schedule 1, maximum ground level concentrations (GLCs) for constituents of concern under Schedule 2, and odour under Schedule 3.

Modelling assumptions included the following:

- Emission factors for constituents of concern based on National Pollutant Inventory (NPI) data for hot mix asphalt manufacturing.
- Stack emissions derived from manufacture data and scaled using measurements from a number of Victorian batch plants producing hot mix asphalt.
- Emissions calculated based on the maximum possible production rate for the plant of 80 tonnes per hour (tph) for 24 hour production.
- Asphalt discharging from the batching plant chute during truck loading is flowing 50% of the time when the plant is operating at 80 tph, and 25% of the time when the plant is operating at 40 tph.
- A truck is on site at all times with an uncovered load of asphalt product, either waiting to complete loading or for the finished load to be covered by a tarpaulin prior the departing the site.

Three scenarios were evaluated for odour modelling (refer to Table 1), as follows:

- One scenario assumes the maximum possible emission rate which corresponds to the plant operating at 80 tph, 24 hours per day, every day.
- The second scenario corresponds to the plant operating at 40 tph, between 0600 and 1400 hours every day.
- The third scenario corresponds to the proposed annual production limit, which could be produced by operating the plant for approximately 3 hours per day (assumed to be 0600 to 0900 hours), 5 days per week at 40 tph.

Table 1: Odour source emissions rates for the three odour modelling scenarios (Table 2 in EIS Appendix 3).

Odour Source	Scenario 1	Scenario 2	Scenario 3	
Assumed Operating Time	24 hours/day 7 days/week	8 hours/day 7 days/week	3 hours/day 5 days/week	
Assumed Operating Rate	80	40	40	tph
Resulting Annual Tonnage	700,000	116,500	31,000	tpa
Baghouse Stack	1040,000	520,000	520,000	ou.m³/min
Truck Loading Chute	255,000	127,500	127,500	ou.m³/min
Open Truck (10m²)	3,000	3,000	3,000	ou.m/min

Modelling results

The calculated in-stack concentration of pollutants of interest is presented in Table 2. The maximum GLCs for constituents of concern at or beyond the boundary of the site is presented in Table 3.

Isopleths for particulate matter with a diameter of 10 µm or less (PM_{10}), NO_x, SO_2, CO, PAHs, and odour are presented in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10 and Figure 11 respectively.

Table 2: Calculated baghouse stack (in-stack) concentrations for pollutants of interest (Table 1 in EIS Appendix 3).

Pollutant	EPP-Schedule 1 Design Criteria Limits	Calculated In-Stack Concentration	Calculated In-Stack Concentration
	mg/m³	mg/m³	% of EPP
Total Metals	5	0.056	1.1%
Cadmium	1	0.017	1.7%
Mercury	1	0.0009	0.1%
Nitrous Oxides (as NO_2)	2000	580	29%
Particulate Matter	100	50	50%
Sulphuric Acid Mist	100	28	28%

Table 3: Air dispersion modelling results (Table 1 in EIS Appendix 3).

Pollutant	Maximum Predicted GLC	EPP GLC Design Criteria Limit	Units (at 25°C, 1 atm)	Averaging Period	Percentile Result	% of EPP
Particulates						
PM_{10}	7.45E-03	0.05	mg/m^3	24 hours	100th	15%
	7.25E-04	0.025	mg/m^3	1 year	100th	3%
Combustion Products						
Carbon monoxide	3.86E-01	9.0	ppm	8 hours	100th	4%
Nitrous Oxides (as NO_2)	1.01E-02	0.08	ppm	1 hour	99.9th	13%
	5.96E-04	0.015	ppm	1 year	100th	4%
Sulphur dioxide	1.19E-03	0.10	ppm	1 hour	99.9th	1.2%
	7.06E-05	0.02	ppm	1 year	100th	0.4%
Metals						
Arsenic	4.11E-07	0.00017	mg/m^3	3 minutes	99.9th	0.2%
Beryllium	1.40E-07	0.00007	mg/m^3	3 minutes	99.9th	0.2%
Cadmium	5.23E-07	0.000033	mg/m^3	3 minutes	99.9th	2%
Chromium (total)	5.60E-07	0.017	mg/m^3	3 minutes	99.9th	0.003%
Chromium (hexavalent)[3]	6.07E-09	0.00173	mg/m^3	3 minutes	99.9th	0.0004%
Copper	2.24E-06	0.0067	mg/m^3	3 minutes	99.9th	0.03%
Lead	3.37E-08	0.0015	mg/m^3	90 days	100th	0.002%
	2.71E-08	0.0005	mg/m^3	1 year	100th	0.01%
Manganese	6.26E-06	0.033	mg/m^3	3 minutes	99.9th	0.02%
Mercury	2.89E-07	0.0003	mg/m^3	3 minutes	99.9th	0.1%
Nickel	2.61E-06	0.00033	mg/m^3	3 minutes	99.9th	0.8%
Selenium[4]	5.70E-08	-	mg/m^3	3 minutes	99.9th	-
Zinc[4]	4.23E-06	-	mg/m^3	3 minutes	99.9th	-
Organics						
Acetaldehyde	4.02E-04	0.076	mg/m^3	3 minutes	99.9th	0.5%
Acetone	4.02E-03	48	mg/m^3	3 minutes	99.9th	0.01%
Benzene	2.15E-04	0.1	mg/m^3	3 minutes	99.9th	0.2%
Asphalt Fumes	8.96E-03	0.17	mg/m^3	3 minutes	99.9th	5%
Formaldehyde	5.32E-04	0.05	mg/m^3	3 minutes	99.9th	1.1%
PAHs (total)[5]	7.84E-05	0.00073	mg/m^3	3 minutes	99.9th	11%
Toluene	1.09E-03	0.65	mg/m^3	3 minutes	99.9th	0.2%
Xylenes	2.61E-03	0.35	mg/m^3	3 minutes	99.9th	0.7%

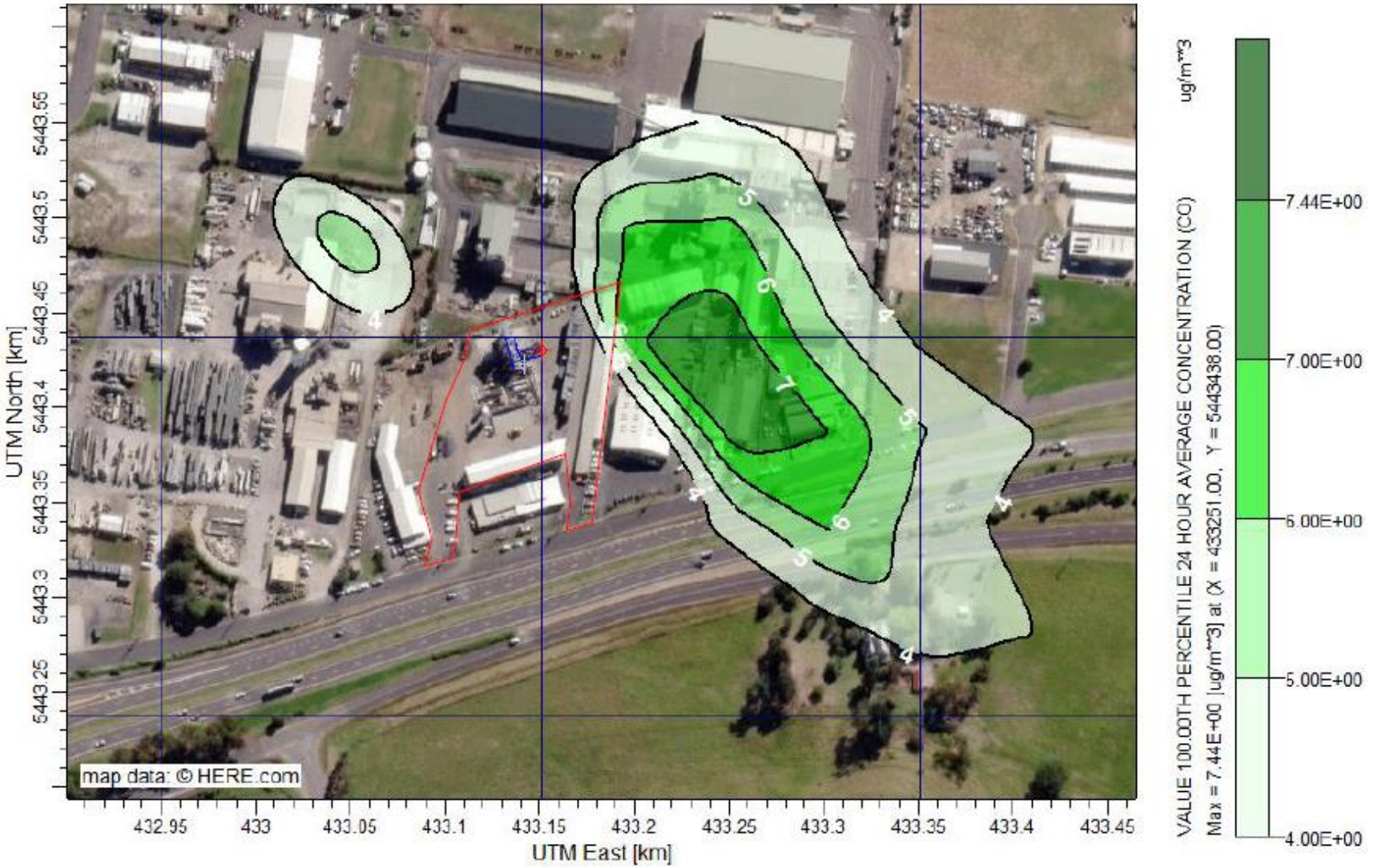

Figure 6: 100th percentile 24 hr average ground level PM_{10} concentration contours (µg/m³) (Figure 12 in EIS Appendix 3).

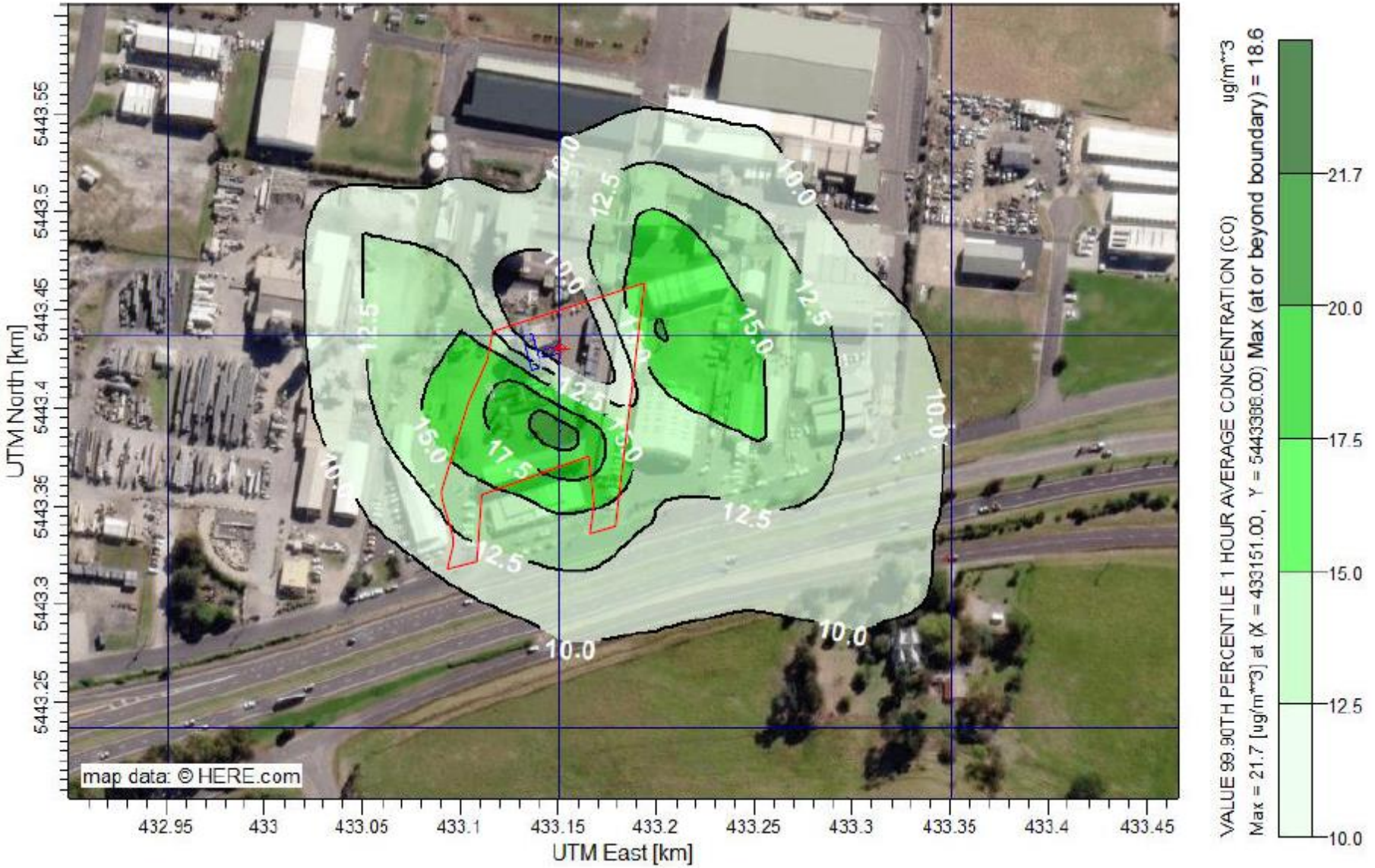

Figure 7: 99.9th percentile 24 hr average ground level NO_x concentration contours (µg/m³) (Figure 13 in EIS Appendix 3).

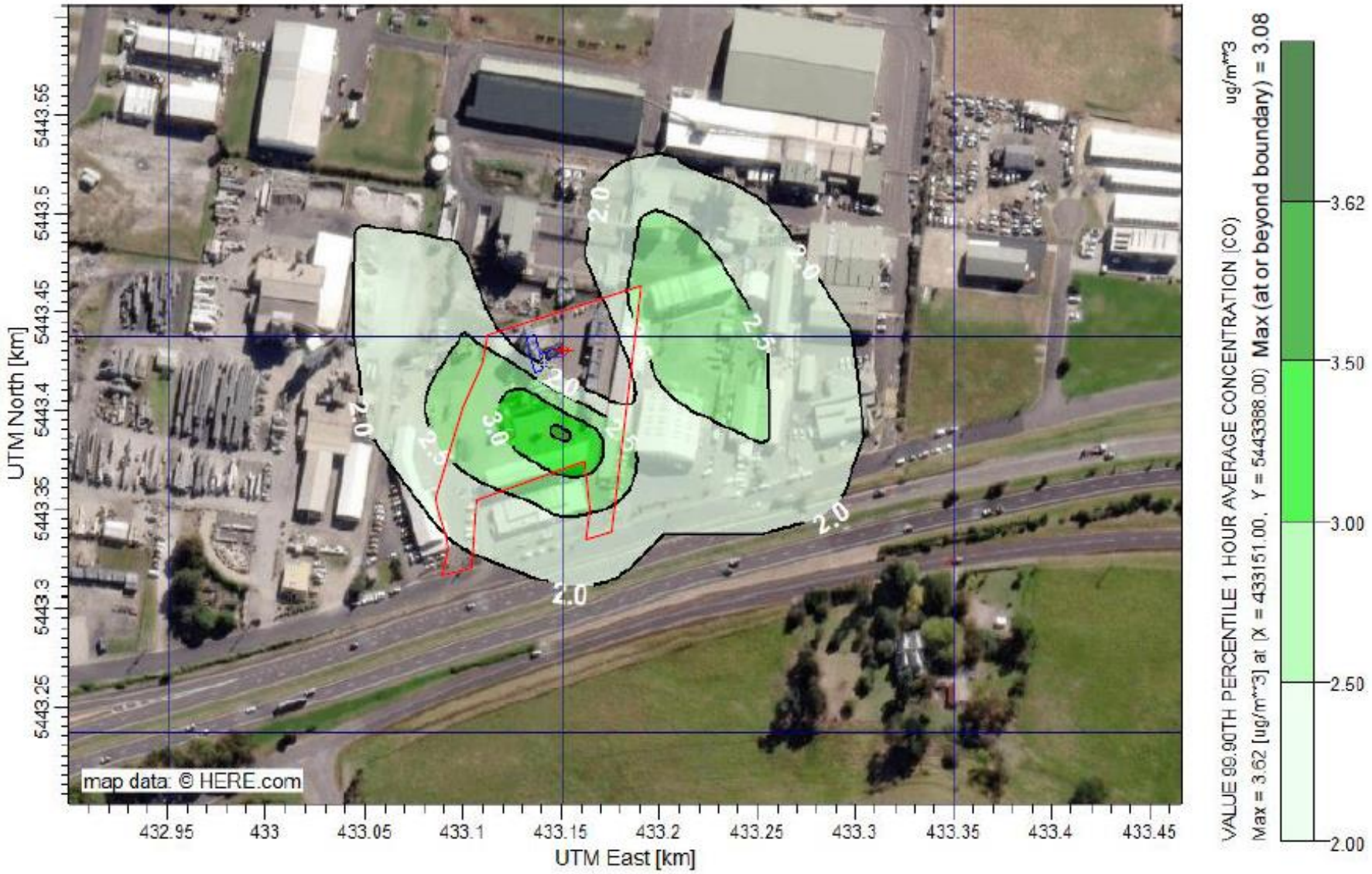

Figure 8: 99.9th percentile 24 hr average ground level SO_2 concentration contours (µg/m³) (Figure 14 in EIS Appendix 3).

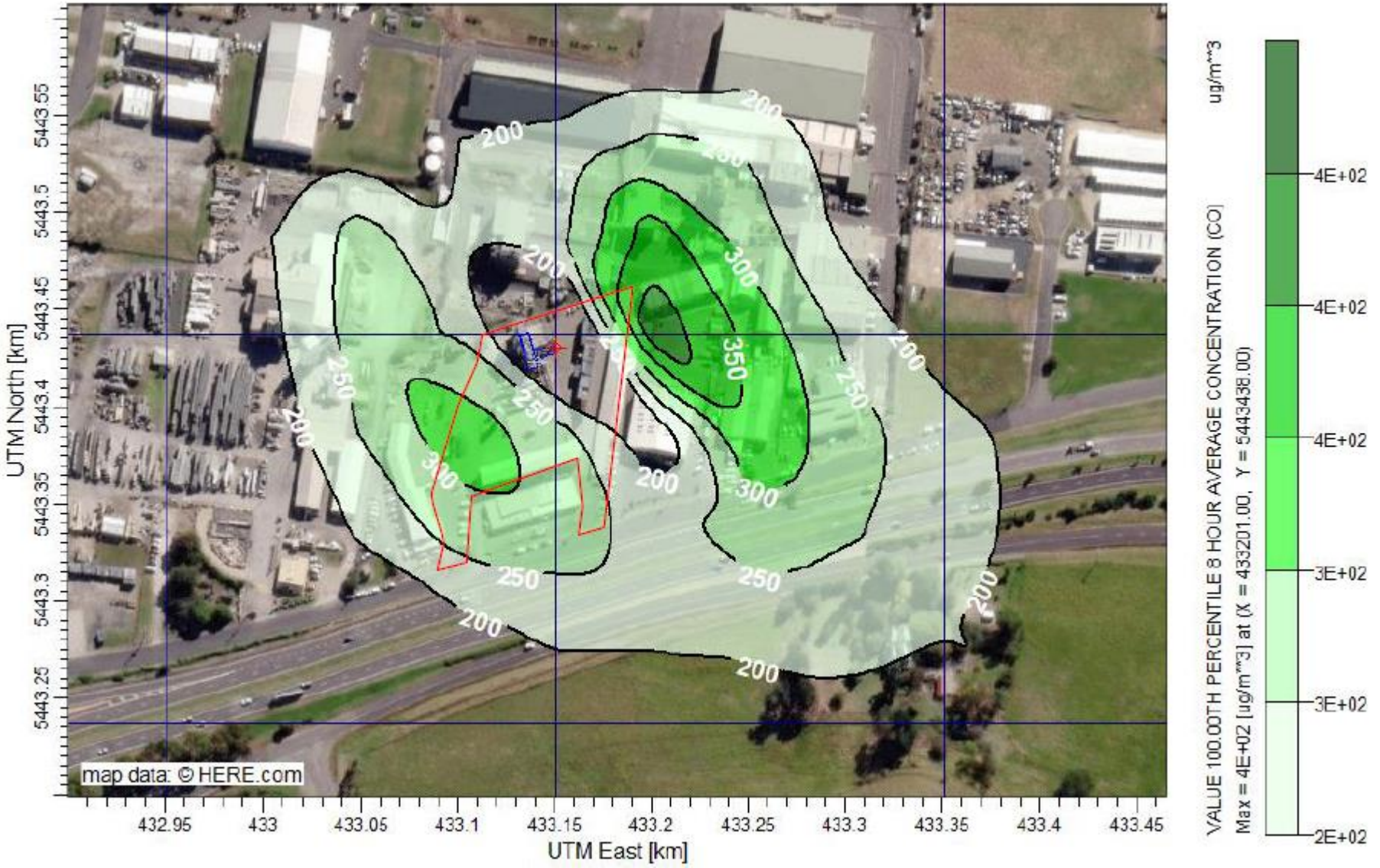

Figure 9: 100th percentile 24 hr average ground level CO concentration contours (µg/m³) (Figure 12 in EIS Appendix 3).

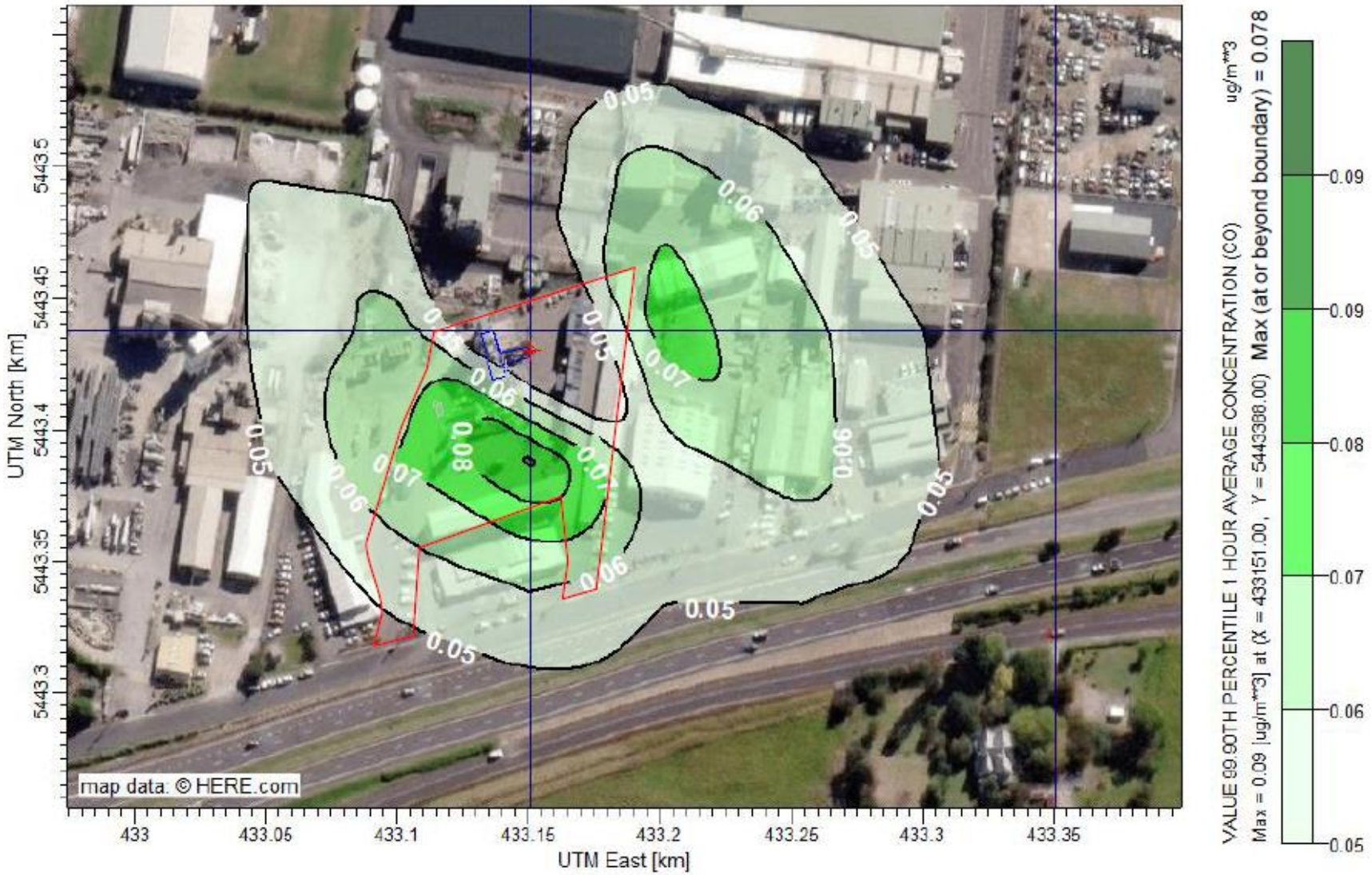

Figure 10: 99.9th percentile 24 hr average ground level PAHs concentration contours (µg/m³) (Figure 16 in EIS Appendix 3).

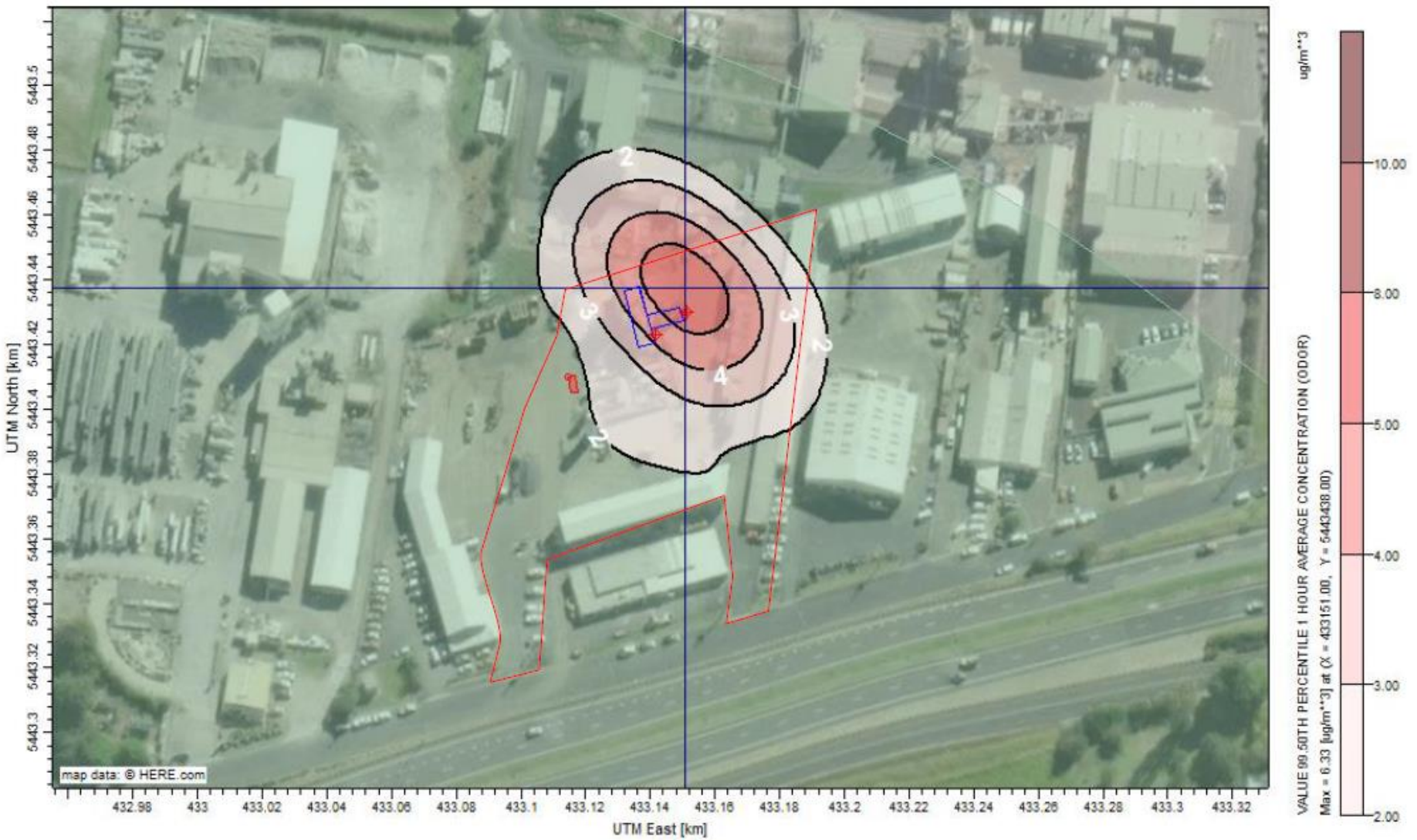

Figure 11: 99.5th percentile 1 hr average ground level odour concentration contours in OU, representing scenario 2 (Figure 11 in EIS Appendix 3).

According to the EIS, the modelling results indicate the following:

- Predicted GLCs for PM_{10} did not exceed the Air EPP design criteria limit at or beyond the boundary of the site.
- Predicted GLCs for carbon monoxide, nitrous oxide, and sulphur dioxide were below the Air EPP design criteria with all results below 50% of the criterion level.
- All predicted GLCs for metals were below the Air EPP design criteria.
- VOCs for benzene, formaldehyde, toluene, and xylenes were below the Air EPP design criteria.
- PAHs, assessed by using Benzo(a)pyrene as a marker, did not exceed the Air EPP design criterion.
- Isopleths for PM_{10}, NO_x, SO_2, and PAHs show that the maximum concentration results occur a short distance downwind from the baghouse stack. The interaction of the pattern of wind speeds and directions, and the varying percentiles and averaging periods applies, results in the location of the maximum varying between pollutants, but broadly they all occur within a short distance of the eastern, southern, and western boundaries of the site.
- Calculated baghouse stack concentrations of total metals, cadmium, mercury, nitrous oxides, particulate matter and sulphuric acid mist do not exceed the Air EPP design criteria, with most results below 50% of the criterion level.
- Predicted GLCs under the second scenario for odour exceeded the Air EPP criterion of 2 odour units at or beyond the boundary of the Activity Area, with a maximum of 5.2 odour units occurring on the northern boundary. The isopleth for odour dispersion (Figure 11) indicates that the area where the 2 odour unit criterion in the Air EPP is exceeded is limited to a small portion of neighbouring industrial sites.
- The highest on site odour concentration predicted is 6.6 odour units occurring close to the baghouse stack.
- Predicted odour concentrations at sensitive receptors, including the nearest residence, Westella House, is less than 2 odour units for all three of the odour modelling scenarios evaluated.

The EIS states that the odour dispersion modelling for the second scenario presented in Figure 11 is likely to be conservative as the model assumed plant operation for 8 hours a day, which is similar to the likely operational hours of the plant, however at an average production rate of 40 tph which would exceed the proposed annual production limit of 30,000 tonnes per annum if operated to this extent. The EIS also states that the area outside the plant boundary that exceeds the 2 odour unit criterion in the Air EPP does not extend further than 50 metres beyond the boundary of the Activity Area and the area is limited to a small portion of the industrial sites adjoining the asphalt batch plant.

6.1.2 Management measures

The EIS states a number of air emissions management features are incorporated in the plant design and operating arrangements for the plant:

- The drier and batching tower are equipped with a negative pressure emissions control system, which discharges through a cyclone and baghouse, to a 14 metre high vertical stack to control fine particulates and promote rapid dispersion of emissions to air;
- The baghouse is equipped with a monitoring system that alerts the operator in the event of leakage or failure;
- All bitumen storage and handling systems are equipped with automatic temperature controls;
- All gas burners are regularly maintained and tuned where required to ensure optimum efficiency and minimisation of pollutants associated with incomplete combustion;
- As a batch process with a very short batch time, any upset conditions that do occur are unlikely to persist for extended periods, and operators are able to intervene without delay or disruption to correct any problems detected; and
- All process controls are maintained in good order and any defects that arise are repaired promptly to ensure efficient operation and to minimise the potential for air emissions.

The EIS also identifies the following additional mitigation measures:

- Spillage is cleaned up promptly to minimise dust generation;

- Trucks carrying asphalt are tarped immediately after loading to minimise the potential for spillage and emission of odour; and
- Dust generation is minimised onsite by the site being fully paved, stockpiles being stored in a three-sided shed and short tramming distances between the shed and feed hoppers.

6.1.3 Public and agency comment and responses

No comment received.

6.1.4 Evaluation

The proposal does not entail a physical change to the existing operation of the plant. However, the increase in annual production levels will be achieved by operating the plant for increased hours which will increase the duration of air emissions.

The air dispersion modelling for constituents of concern and pollutants of interest is considered conservative and indicates that impacts to sensitive receptors from air emissions are unlikely during normal operations. The odour dispersion modelling results for the second scenario, which suggests that the site would not be compliant with the Air EPP for odour, are regarded as less conservative and the most realistic odour modelling scenario presented. The area predicted to be affected under this scenario by exceedances of the 2 odour unit criterion in the Air EPP does not extend further than 50 metres beyond the boundary of the Activity Area and is limited to a small portion of the neighbouring industrial sites. It is considered that no adverse impact on amenity or environmental nuisance and/or harm to sensitive receptors is likely to occur due to air and odour emissions from the proposal. However, given the nature of the activity and proximity of sensitive receptors, it is important that the site is maintained and run effectively to minimise the risk of odour impact. The management measures proposed in the EIS for air emissions are considered appropriate and are reinforced by the conditions imposed in the Permit.

Standard conditions relating to control of dust emissions (**A1**) and management of odour (**A2**) from the site to prevent environmental nuisance beyond the boundary of the Activity Area have been included in the Permit.

Conditions requiring covering of vehicles (**A3**), maintenance of emissions control equipment (**A4**) and use of approved fuels for combustion (**A5**) are included as standard conditions applied to bitumen plants. These conditions ensure the risk of odours, gaseous emissions, and particulates causing environmental nuisance or harm continue to be minimised.

Condition **A6** will require the proponent to report any received dust or odour complaints to the Director within 24 hours, and if required by the Director, monitoring of dust or odour emissions at the site must be undertaken. Condition **A7** specifies the control of odorous gases and requires the proponent to ensure that all devices used to heat asphalt and bitumen products are operated at the lowest practicable temperature, all vehicles that have been loaded with asphalt product are covered, and all appropriate measures are taken to prevent production of avoidable fumes and odour. These conditions are included in the existing Permit for the site and are also relevant to the current proposal.

In 2021, two odour complaints were received from a sensitive receptor located approximately 780 metres west of the site. Investigations did not conclusively identify the source of the odour, however, it was considered to be associated with the bitumen kettle operated by Hardings Hot Mix on the same site. The bitumen kettle is used occasionally for storing excess hot bitumen that can be used for spray sealing bituminous surfaces. The EIS states that this kettle will be decommissioned and replaced with a new tank which will further reduce the risk of potential impact from combined odour emissions from both the asphalt batch plant and Hardings Hot Mix operations. Condition **A2** requires that odour management measures are instituted as necessary to prevent odours causing environmental nuisance beyond the boundary of the Activity Area.

The EIS states that the asphalt batch plant has capacity to mix asphalt with other additives and or recycled materials, including the potential for inclusion of crumb rubber and Recycled Asphalt Product (RAP). Crumb rubber produced from the shredding of end-of-life tyres from cars and trucks could be a source of increased plant process emissions as the material contains substances such as VOCs, PAHs, and heavy metals. The use of crumb rubber was not explicitly included in the air dispersion modelling. However, the

standard emission factors used in the model for constituents of concerns are based on NPI data for hot mix asphalt manufacturing which incorporate a range of ingredients and account for changes to raw materials. Given the air dispersion modelling for constituents of concern is considered conservative and the results indicate that VOCs and PAHs are well below the Air EPP criteria, it is considered that inclusion of crumb rubber in asphalt production will not significantly increase the potential for air emissions to cause environmental nuisance and or environmental harm to sensitive receptors. Requirements for the management of dry granular synthetic materials, such as crumb rubber, are addressed under **Issue 6.4 Surface and stormwater quality**.

6.1.5 Conditions

The proponent will be required to comply with the following conditions:

A1 Control of dust emissions

A2 Odour management

A3 Covering of vehicles

A4 Maintain emission control equipment

A5 Fuel

A6 Dust and odour complaints

A7 Control of odorous gases

6.2 Noise emissions

6.2.1 Description

Existing environment and emission sources

Existing dominant noise sources in the area include traffic from vehicles travelling along Bass Highway, and neighbouring activities located on Industrial Drive.

The main sources of noise emissions from the activity are the aggregate conveyor and drier, batching tower and elevator, draft fans, baghouse and stack exhaust, baghouse air compressor, front end loader, vehicle movements and the unloading and loading of trucks.

The nearest noise sensitive premises (residences) are located approximately 150 metres south east of the site on the far side of Bass Highway, 250 metres to the south, and 400 metres to the northwest (Locations 1-3; shown in Figure 12). There have been no previous complaints in relation to noise emissions from existing operations.

The existing Permit specifies that activities associated with the production of asphalt, including the loading and unloading of trucks and deliveries to and from the premises, are permitted seven days a week from 0600 hours to 1800 hours on weekdays and Saturdays, and 0900 hours to 1800 hours on Sundays and local public holidays. Operation outside of these hours is permitted under the existing Permit, subject to written notice to the Director at least 24 hours in advance detailing the date, time, and reason necessitating out of hours operations.

The existing Permit also specifies the following noise emission limits from the activity, when measured at any noise sensitive premises and expressed as the equivalent continuous A-weighted sound pressure level:

- 47 dB(A) between the hours of 0600 and 0700 (early morning period); and
- 55 dB(A) between the hours of 0700 and 1800 (day time); and
- 42 dB(A) between the hours of 1800 and 0600 (night time).

In addition, the existing Permit specifies that when measured at any industrial or commercial premises and expressed as the equivalent continuous A-weighted sound pressure level, noise emissions from the activity must not exceed 68 dB(A) at the northern industrial or commercial premises, and 65 dB(A) at all other industrial or commercial premises.

The proposal is not expected to increase the level of noise emissions from the asphalt batch plant compared to the existing operations as it does not involve any physical changes to the plant. However, there will be a proportionate increase in vehicle movements to and from the site for the delivery of raw materials and the dispatch of additional product. This increase in vehicle movements may result in a change in traffic noise associated with the proposal.

The EIS states that since the plant was commissioned in 2011, noise emission levels measured on the northern boundary of the site have typically been above the noise limit of 65 dB(A) permitted in PCE No. 7877, and 68 dB(A) as varied by EPN No. 9761/1 (the existing Permit) by a small margin. Direct comparison of measured and modelled noise levels has not been possible due to high levels of ambient noise.

Noise survey and assessment

A noise emissions survey and noise assessment was undertaken for the proposal and is presented in Section 7.2 and Appendix 4 of the EIS.

The survey was conducted in 2022 during routine operations on a weekday morning and the asphalt batch plant was operating continuously at a typical rate of production for the survey duration. The locations for the measurement of noise emission levels are shown in Figure 12, and are consistent with the locations from previous surveys undertaken for the facility in 2016 and 2020 respectively. The survey was undertaken to determine compliance with the noise limits in the existing Permit.

The noise assessment used the results of noise emissions modelling that was undertaken for the asphalt batch plant in 2017. The inputs for the noise model are listed in section 7.2.2 of the EIS. The EIS states that there have been no changes to the plant since this modelling was completed.

Survey and modelling results were assessed against permitted noise level limits and relevant noise acoustic indicator levels set out in the *Environment Protection Policy (Noise) 2009* (Noise EPP).

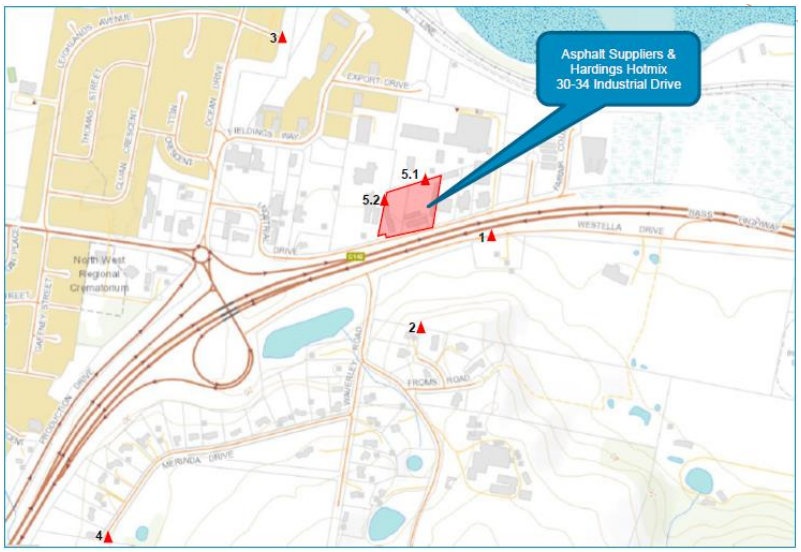

Figure 12: Map of noise survey measurement locations (Figure 1 in EIS Appendix 4).

Survey and assessment results

Noise survey results and compliance with permitted noise level limits are provided in Table 5. A summary of noise surveys and noise modelling results for the asphalt batch plant are provided in Table 6. A noise contour for the day time period under neutral conditions at Location 5.1 is presented in Figure 13.

Table 5: Noise survey results and compliance with permitted noise level limits (Table 2 in EIS Appendix 4).

Location		Raw L_{eq}	Low Frequency Correction	Corrected Leq	EPN Limit	Reason for Compliance
1	Westrella House	73.0	+5	78.0	55	Plant not Audible
2	Gumnut Drive	63.4	+5	68.4	55	Plant not Audible
3	Leighlands Avenue	45.6	+5	50.6	55	Plant not Audible
4	Merinda Drive	54.3	+5	59.3	55	Plant not Audible
5.1	Northern Boundary	68.4	+5	73.4	68	EPN Limit Exceeded
5.2	Western Boundary	64.7	+5	69.7	68	Plant does not exceed ambient by more than +5 dB(A)[2]

Table 6: Summary of noise surveys and modelling results. Survey results are without the low frequency correction (Table 11 in EIS).

Location		September 2016 VIPAC Noise Survey			August 2017 Tarkarri Noise Model	May 2020 Tarkarri Noise Survey			May 2022 pitt&sherry Noise Survey
		Day	Evening	Night		Day	Evening	Night	Day
1	Westrella House	-	73.6	63.5	41.4	73.6	70.6	67.9	73.0
2	Gumnut Drive	-	55.1	48.1	40.1	-	55.0	52.0	63.4
3	Leighlands Avenue	53.3	-	45.0	37.5	-	46.9	47.4	45.6
4	Merinda Drive	58.6	51.5	44.4	11.8	53.1	48.5	44.7	54.3
5.1	Northern Boundary	-	-	68.2	67.1	69.0	-	-	68.4
5.2	Western Boundary	-	-	60.7	60.6	-	-	62.0	64.7

Figure 13. Noise emission levels predicted from modelling, without low frequency correction, at Location 5.1 at the northern boundary of the site (Figure 5 in EIS Appendix 4).

Noise emissions from plant operation complied with existing permitted noise level limits at all measurement locations surveyed, excluding Location 5.1 at the northern boundary of the site (Table 5).

The EIS states that during the noise survey several noise sources were active on neighbouring industrial sites that may have contributed to the total noise level measured, in addition to the noise emissions from the asphalt batch plant.

In accordance with the Tasmanian *Noise Measurement Procedures Manual,* the results were checked for intrusive noise characteristics including tonality, impulsiveness, modulation and low frequency. No tonality, impulsiveness or modulation was found, however, all noise measurements contained sufficient low frequency which required the addition of the 5 dB(A) correction factor in accordance with the *Noise Measurement Procedures Manual*.

The EIS states that noise survey results at nearby sensitive receptors (Locations 1-4; Figure 12) were dominated by ambient noise, primarily traffic noise from Bass Highway which rendered the noise emissions from the asphalt batch plant inaudible. The overall ambient noise levels at Locations 1-4 exceed the Noise EPP acoustic indicator levels of L_{eq} 45 dB(A) and L_{eq} 50 dB(A), relevant to sleep disturbance and "annoyance" for users of outdoor living areas, respectively. It is noted in the EIS that noise emission levels predicted by noise modelling at Locations 1-4 (Table 6), are significantly lower than the measured ambient noise levels, suggesting that the asphalt batch plant does not have a significant impact on the noise experienced at these locations.

The EIS states that noise level exceedances at Location 5.1 (highlighted in Table 6) have been minor in magnitude. Predicted noise contours at this location (Figure 13) indicate that the affected area is a small portion of the adjoining industrial site that is utilised by Botanical Resources Australia for storage of old equipment and materials.

The EIS and noise survey and assessment (Appendix 4 of the EIS) propose to raise the noise level limit at the northern industrial premises from 68 dB(A) to 70 dB(A) to accommodate existing noise emission levels at this location.

6.2.2 Management measures

No specific management measures in relation to noise emissions are proposed.

6.2.3 Public and agency comment and responses

No comment received.

6.2.4 Evaluation

Survey results presented in the EIS indicate that noise emission levels for the proposal are unlikely to adversely impact upon or cause environmental nuisance to any nearby noise sensitive premises.

The proponent's proposed increase in the noise emission limit from 68 dB(A) to 70 dB(A), when measured at the northern industrial premises, is not considered appropriate. Table 1 of the Noise EPP specifies the acoustic environmental indicator level of 70 dB(A) for industrial, commercial, shopping and traffic areas, indoors and outdoors, noting that critical health effect(s) at this level may include hearing impairment. Mitigation measures for reducing noise emission levels at the northern boundary of the site are presented in the noise survey and assessment (Appendix 4 to the EIS), including construction of a 3 metre high noise attenuation wall (or 'barrier fence') along the rear boundary of the property to replace an existing chain link security fence. However it is also noted that there are some practical operational difficulties for implementing some measures.

The Noise EPP states that best practice environmental management should be employed in every activity to reduce noise emissions to the greatest extent that is reasonably practical. The Noise Specialist advised that the noise barrier fence identified in the noise survey and assessment (Appendix 4 of the EIS) is a feasible mitigation measure that could be implemented to enable operations to comply with the existing noise emission limit. Due to the critical health effect(s) that may occur at the noise emission level proposed by the proponent and the ability of the proponent to implement a feasible and practical mitigation measure to reduce noise emission levels at the northern boundary of the site, it is considered appropriate that the existing noise emission limit of 68dB(A) (when measured at the northern industrial premises) is applied to the new Permit (condition **N1**).

The predicted change in traffic noise associated with the proposal and the proportionate increase in vehicle movements to and from the site is considered negligible due to elevated background noise levels in the area which are dominated by significant traffic flow on Bass Highway and nearby commercial and industrial activities. This is confirmed by measurements taken at the nearest noise sensitive premises, Westella House (Location C, Figure 3), which shows a level of L_{eq} 73 dB(A) for day time hours.

The majority of the additional hours of operation required for increased production are expected to occur during the daytime on weekdays within the standard permitted hours of operation. It is noted that the existing Permit enables operations to occur outside the permitted hours of operation with prior notification to the Director, and it is anticipated that the proposal will require a minor increase in production outside of permitted operating hours. The EIS states this will constitute approximately 10% of operational days per year, or less.

The main risk of a greater annual production limit is that the additional hours of operation required may occur during night time. The noise survey did not include operations during the night time period and is therefore not representative of a scenario in which production occurs outside of the permitted hours of operation, with prior notification to the Director. Both predicted and measured background noise levels at nearby sensitive receptors during the night time period are elevated. Given that the site and its immediate surrounding area comprises an industrial precinct and state highway, and that no complaints have been received from residents in relation to noise emissions from current production levels, the potential for noise impacts to nearby noise sensitive premises is considered low.

Hours of operation for the plant and activities associated with the production of asphalt (including the loading and unloading of trucks and deliveries to and from the site) are specified by condition **OP1** and the same as those in the existing Permit (0600 to 1800 hours on weekdays and Saturdays, and 0900 to 1800 hours on Sundays and local public holidays). Condition **OP1** states that occasional operation outside of these hours is permitted, subject to written notice to the Director at least 24 hours in advance, detailing the date, time and reason for out of hours operation. This condition is included in the existing Permit for the site and is also relevant to the current proposal.

Condition **N2** is included in the Permit to require a noise survey be undertaken if any changes in the activity occur that are likely to substantially alter the character or volume of the noise emitted, and/or to allow the Director to require a noise survey be undertaken if considered necessary. Condition **N3** specifies the noise survey method and reporting requirements to support condition **N2**. In the event that a noise

complaint is received in relation to the activity, condition **N4** requires the proponent to report the compliant to the Director within 24 hours.

6.2.5 Conditions

The proponent will be required to comply with the following conditions:

N1 Noise emission limits

OP1 Hours of operation

N2 Noise survey requirements

N3 Noise survey method and reporting requirements

N4 Noise complaints

Evaluation of Other Environmental Issues

In addition to the key issues, the following environmental issues are considered relevant to the proposal and have been evaluated in this section:

1. Surface and stormwater quality
2. Waste management
3. Greenhouse gas emissions and climate change
4. Dangerous goods and environmentally hazardous substances
5. Decommissioning and rehabilitation
6. Social and economic issues

6.3 General conditions

The following general conditions will be imposed on the activity:

- **G1** Activity Area
- **G2** Access to and awareness of conditions and associated documents
- **G3** Incident response
- **G4** Proposed change to activity
- **G5** Change of responsibility
- **G6** Change of ownership
- **G7** Complaints register
- **G8** Annual Environmental Review
- **G9** Amendment of required plans and reports

6.4 Surface and stormwater quality

6.4.1 Potential impacts

Stormwater will be generated from operational infrastructure areas such as the hardstand, access ways, car park, buildings, and drains. Potential contaminants of stormwater runoff include sediments, fuel, chemicals, oil, and greases. This runoff also has potential to flow to surface water and to the downstream environment, without adequate controls. The receiving environment for surface water runoff from the local area is Buttons Creek which discharges to Bass Strait, and also receives runoff from other industrial and commercial areas.

The site and surrounding area gently slope in a northeasterly direction. The entire site is concrete or asphalt hardstand with an extensive system of pits and underground drainage pipes. Most areas of the site drain to the Council stormwater system, either via the pumped discharge to stormwater within the eastern area of the site or via the connection in the northwest corner of the site (refer to Figure 5). Both of these connection points have triple interceptor traps installed to ensure any minor amounts of grease and oils are not discharged to the stormwater system.

A bunded contaminated drainage pad area surrounding the asphalt storage tanks and hot oil heater is located within the central area of the site. The Supplement to the EIS notes that the outlet pipe for the bunded contaminated drainage pad area has a manual shut off valve which is maintained in a closed position to ensure any potential spills are contained. Stormwater collected in the bunds and contaminated drainage pad is discharged to the stormwater system via triple interceptor trap #2. Prior to stormwater in the bunded area being discharged through the outlet pipe, the operator will visually inspect the contents of the bund and take a photo, before turning the valve on to release the stormwater if it does not appear to be contaminated. A register of bund releases is maintained by the proponent. The Supplement to the EIS states that if contamination is evident within the bund, an application will be made to TasWater to accept the contaminated water as tankered waste, noting that TasWater may require the water to be tested prior to acceptance. Stormwater which also reports to the stormwater system via triple interceptor trap #2 includes drainage from various pits located across the site and runoff from where truck release agent is applied.

A vehicle washdown bay is located in the northwest corner of the site. The Supplement to the EIS states that the vehicle washdown bay captures and collects wastewater in which the first flush will discharge to the sewer system via a pretreatment system (holding tank and oil/water separator), as per the proponent's trade waste agreement with TasWater[1], and wastewater thereafter will discharge to the stormwater system via triple interceptor trap #1. The Supplement to the EIS notes that the vehicle washdown bay has an asphalt bund that diverts clean stormwater away from the bay, minimising the amount of wastewater required to be discharged. The pretreatment first flush system also further reduces the amount of wastewater discharging to sewer.

The EIS notes that aggregates such as crusher dust (which is produced from crushed rock or recycled crushed concrete and contains fine particles), and sand are stored undercover in the aggregate storage shed which is bunded on three sides to allow front end loader access.

Staff amenities are connected to the sewerage system. There are no new point source liquid emissions associated with the proposal and the generation of stormwater runoff will not increase, as there are no physical works proposed.

It is noted that the EIS states that the asphalt batch plant has capacity to mix asphalt with other additives and or recycled materials, including the potential for inclusion of crumb rubber additive which has the potential to result in wind or water dispersed pollution if not appropriately managed.

[1] The pretreatment system is considered in this report as a mitigation measure to reduce potential risks to water quality. The installation works for pretreatment system infrastructure will require separate approval from Council.

6.4.2 Management measures proposed in EIS

The following management measure is included in the EIS:

- Potentially contaminating activities (e.g. spraying with truck slip) will be conducted over the contaminated drainage pad.

The following management measures are included in the Supplement to the EIS:

- Maintenance of triple interceptor traps – Both triple interceptor trap #1 and #2 will be pumped out every six months or as required to maintain the equipment.
- Installation of trade waste pretreatment system – A pretreatment for trade waste comprising of a holding tank and oil/water separator will be installed as per the proponent's trade waste agreement with TasWater, which includes a timeframe for installation.
- Maintenance of operational bund – If contamination is evident in the central bunded area (containing the asphalt tanks and the hot oil heater), an application will be made to TasWater to accept the contaminated water as tankered waste. TasWater might require the water to be tested prior to acceptance of the contaminated water.

6.4.3 Public and agency comment

No comment received.

6.4.4 Evaluation

Conditions common to pre-mix bitumen plants are included in the Permit in relation to construction and maintenance of perimeter drains and bunds on the site (condition **EF1**), and stormwater and wastewater collection, treatment and discharge (condition **EF2**). Condition **EF3** is imposed which requires the design and maintenance of a stormwater treatment system (e.g., triple interceptor trap system) which must be periodically cleaned out by a person who is authorised to do so and maintained in efficient operational order.

It is considered that the potential for impact to surface waters is low given existing on site surface water management and the nature of the receiving environment, however, there remains a risk that contaminated stormwater and wastewater may be discharged if management measures are not appropriately implemented. The EIS makes a commitment to only apply asphalt release agent (i.e., truck slip or truck release agent) over the contaminated drainage pad located in the central area of the site, however, the Supplement to the EIS states that the asphalt release agent Slipway is applied at the 'non-stick liner' location shown in Figure 5, which is not over the contaminated drainage pad. The Supplement to the EIS notes that the application of asphalt release agent is somewhat adhesive to the hardstand and has minimal runoff. However, if the area is washed or during rainfall events, there is potential for asphalt release agent to be entrained in runoff. Condition **EF4** is imposed which requires vehicle washing and the application of asphalt release agent to only be undertaken within bunded areas equipped to ensure that all wastewater and potentially contaminated stormwater is appropriately collected and treated prior to discharge.

Although granulated products such as crumb rubber are a recent addition to asphalt batching in Tasmania, granulated products are used as additives in other industries and have resulted in wind and water dispersed pollutants if not managed appropriately. Condition **OP2** has therefore been included in the Permit to require the appropriate storage and management of dry granular materials to prevent migration to stormwater or sewer systems.

The proponent is also made aware of legal obligations in relation to the transport of any controlled wastes from the site (**LO4**), and requirements for the discharge of wastewater to sewer (**LO5**).

Requirements for the management of emissions to air from fugitive sources are detailed under Issue 6.1: Air quality, and requirements for the storage and bunding of dangerous goods and environmentally hazardous materials are addressed under Issue 6.7: Dangerous goods and environmentally hazardous substances.

6.4.5 Conditions

The proponent will be required to comply with the following conditions:

EF1 Perimeter drains or bunds

EF2 Wastewater and stormwater

EF3 Design and maintenance of stormwater treatment system

EF4 Vehicle hygiene

OP2 Dry granular synthetic materials management

The proponent is made aware of the following:

LO3 Controlled waste transport

LO4 Discharges to sewer

6.5 Waste management

6.5.1 Potential impacts

Solid waste from the proposal may include refuse from yard and plant cleaning, triple interceptor trap maintenance, and waste asphalt material. Liquid waste generated from the proposal includes any contaminated material from the triple interceptor system that is not suitable for discharge to stormwater. Improper storage and disposal of solid and liquid wastes can potentially lead to contamination of land and waterways.

Controlled waste generated from the proposal includes waste oil, and waste from any fuel or chemical spill clean ups.

The EIS states any spilled asphalt material and or dust generated by operations will be collected and returned to the plant for reprocessing. Solid waste (fine particles) will also be captured by the baghouse as part of air emissions management. At the conclusion of the work day, any unmixed product (metal, sand, and crusher dust) will be returned to the storage bins for reuse. Unused asphalt, asphalt from test batches, and the solids removed from the triple interceptor traps will be transferred to Hardings Hotmix Pty Ltd for incorporation into road base materials.

6.5.2 Management measures proposed in EIS

Section 7.5 of the EIS includes the following:

- Currently there is minimal waste material generated by the asphalt plant as most materials that cannot be directly re-used or sold to customers, are recycled or sold as separate product. This aligns with the second tier of the hierarchy of waste management (i.e. recycling/reclamation).
- Any controlled wastes generated on site, including waste oil and contaminated liquid waste from the triple interceptor traps, are collected by licensed contractor for disposal and or recycling.

6.5.3 Public and agency comment

No comment received.

6.5.4 Evaluation

The reuse of waste materials in asphalt plant operations is appropriate and is in accordance with the waste management hierarchy. No conditions for solid waste management are considered necessary however the proponent is made aware of the legal obligation **O11** (waste management hierarchy) which is included in the Permit.

Requirements for the disposal of potentially contaminated stormwater from the triple interceptor trap systems are detailed under Issue 6.4: Surface and stormwater quality.

6.5.5 Conditions

The proponent is made aware of the following:

O11 Waste management hierarchy

6.6 Greenhouse gas emissions and climate change

6.6.1 Potential impacts

The production of asphalt generates greenhouse gases, including carbon dioxide, methane, nitrous oxide, sulphur dioxide, propane, ethane, and fluorinated gases, which contribute to global warming and climate change. For example, reporting for the existing operation indicates approximately 3,075 tonnes of carbon dioxide emissions were produced in the 2021/2022 year.

The EIS states that the proposal will increase greenhouse gas emissions, primarily due to the increase in diesel and petrol-fuelled transport associated with increased production. The operation of the plant uses natural gas as the main fuel source.

6.6.2 Management measures proposed in EIS

The following management measures are included in the EIS:

- Advocate for the use of low emissions vehicles with suppliers.
- The replacement of plant and equipment should favour low emissions alternatives where possible.

6.6.3 Public and agency comment

No comment received.

6.6.4 Evaluation

The proponent is not required to report to the Commonwealth Government under the *National Greenhouse and Energy Reporting Act 2007*, as its operations are below the reporting thresholds on both a facility and corporate group basis. There is currently no requirement under Commonwealth or State legislation for industry to demonstrate offsetting of emissions generated.

6.6.5 Conditions

No conditions in relation to greenhouse gases are imposed.

6.7 Dangerous goods and environmentally hazardous substances

6.7.1 Potential impacts

Improper storage and handling of dangerous goods and environmentally hazardous substances may cause pollution of air, water, and soil, and result in impacts to human health and safety.

The following dangerous goods and hazardous materials will be stored on site:

- Liquid petroleum gas stored in a 2.3 kilolitre (kL) tank and 1.35 kL tank.
- Hotmix bitumen stored in a holding tank.
- Liquid natural gas stored in a 45 kL tank.
- Bitumen stored above ground in two 30 kL tanks.
- Hot oil, up to a volume of 2.5 kL.

The EIS states that all dangerous goods and hazardous materials are stored within a specifically designed bunded area on site, and are loaded and unloaded on the transport vehicle loading apron. All minor amounts of hazardous materials held in discrete volumes between 25 and 250 litres are stored within the bunded area on site. The proposal does not require the use of new chemicals. The quantities of hazardous materials currently stored on site are sufficient to service the proposed intensification, however the proposal involves an increase in the frequency of delivery for these materials.

6.7.2 Management measures proposed in EIS

The following management measures are included in the EIS:

- Hazardous substance spills will not be released from bunded areas but will be pumped out by a licensed waste contractor.
- All hazardous materials will be stored within bunded areas in accordance with Australian Standard, *AS1940 The storage and handling of flammable and combustible Liquids*.
- Spill kits and substantial quantities of sand and crusher dust that can be utilised to contain spills will be kept on site in suitable locations and staff trained in their use

6.7.3 Public and agency comment

No comment received.

6.7.4 Evaluation

The measures proposed for the storage and management of dangerous goods and hazardous substances are appropriate and will be required through standard conditions imposed in the Permit.

Condition **H1** requires the appropriate bunding, storage, and handling of all environmentally hazardous materials in volumes exceeding 250 litres. Condition **H2** is included to specify requirements for the storage of hazardous materials in volumes less than 250 litres. The provision of spill kits is required by condition **H3**, and an inventory of hazardous materials will be required by condition **H4**.

Requirements to ensure the potential for pollutants to become entrained in surface and stormwater and released to the receiving environment is minimised are detailed under Issue 6.4: Surface and stormwater quality.

6.7.5 Conditions

The proponent will be required to comply with the following conditions:

H1 Storage and handling of hazardous materials

H2 Hazardous materials (<250 litres)

H3 Spill kits

H4 Inventory of hazardous materials

The proponent is also made aware of the following:

LO2 Storage and handling of dangerous goods, explosives and dangerous substances

O12 Notification of incidents under Section 32 of EMPCA

6.8 Decommissioning and rehabilitation

6.8.1 Potential impacts

Poor site closure and equipment decommissioning practices can lead to generation of solid wastes, and potentially soil, water, and air contamination if raw materials, chemicals, and final asphalt product are not removed from the site.

Decommissioning activities for the current proposal are not discussed in the EIS.

6.8.2 Management measures proposed in EIS

Section 9 of the EIS includes the following commitment:

- A Decommissioning and Rehabilitation Plan (DRP) will be prepared and submitted to the Director within 30 days of the Director being advised of the planned cessation of the activity.

6.8.3 Public and agency comment

No comment received.

6.8.4 Evaluation

Standard conditions relating to temporary and permanent site closure and rehabilitation are considered necessary and have been included in the Permit.

Condition **DC1** is included to require notification of the permanent cessation of the activity. Condition **DC2** specifies that a DRP must be submitted to the Director within 30 days of being notified of the planned cessation of operations. Condition **DC3** is requires rehabilitation of the site following permanent cessation. Condition **DC4** requires the proponent to notify the Director if a temporary suspension of the activity is likely to occur. Condition **DC5** is included in the Permit to ensure the DRP is implemented.

6.8.5 Conditions

The proponent will be required to comply with the following conditions:

DC1 Notification of cessation

DC2 DRP requirements

DC3 Rehabilitation following cessation

DC4 Temporary suspension of activity

DC5 Implementation of the DRP

6.9 Social and economic issues

6.9.1 Potential impacts

According to the EIS, the proposal has the potential to generate employment in the local area and result in wider economic benefits through contributions to the local economy, including the infrastructure and construction sectors. The proposal also has potential for negative impacts on the local community if it results in environmental nuisance or harm.

The proposal constitutes the intensification of an existing industrial activity in an industrial area. The proposed increase in production is within the capacity of the current plant and does not require capital works. The EIS states that Hardings Hotmix Group, which includes the proponent Asphalt Suppliers Pty Ltd, Hardings Hotmix Pty Ltd and Ulverstone Quarries Pty Ltd, directly employ 102 workers and a further 20 workers from contractors are employed on a regular basis. The entire workforce is based in the Northwest of Tasmania, and the number of workers employed will continue to grow to meet industry demand in the coming years.

6.9.2 Management measures proposed in EIS

None proposed.

6.9.3 Public and agency comment

No comment received.

6.9.4 Evaluation

The objectives of Tasmania's Resource Management and Planning System encompass the social and economic aspects of resource use and development, as well as the environmental aspects. It is therefore appropriate for the Board to consider the social and economic aspects of a proposal in its assessment process.

The Board has taken social and economic matters into account as relevant in making its determination and setting conditions on water quality, noise, and odour.

6.9.5 Conditions

No specific conditions in relation to social and economic issues are imposed.

7. Report Conclusions

This assessment has been based on the information provided by the proponent, Asphalt Suppliers Pty Ltd, in the permit application, the case for assessment (the EIS), and additional information provided (Supplement). This report also incorporates specialist advice provided by EPA scientific and regulatory staff.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposal has been undertaken in accordance with the Environmental Impact Assessment Principles; and
3. the proposal is capable of being managed in an environmentally acceptable manner such that it is unlikely that the RMPS and EMPCS objectives would be compromised, provided that the Permit Conditions - Environmental No. 10993 appended to this report are imposed and duly complied with.

The environmental conditions in Appendix 3 are a new set of operating conditions for the entire, intensified activity that will supersede the existing Permit Conditions – Environmental No. 7877, as varied by Environment Protection Notice No. 9761/1.

Report Approval

Environmental Assessment Report and conclusions, including environmental conditions, adopted:

CINDY ONG

A/EXECUTIVE DIRECTOR, ENVIRONMENTAL ASSESSMENTS

Acting under delegation from the Board of the Environment Protection Authority

Date: 7 August 2025

8. References

Environmental Service & Design (2023) *Asphalt Suppliers Environmental Impact Statement: Increase of Annual Production Limit at Asphalt Production Facility (Batch Plant), 34 Industrial Drive, Ulverstone* (dated 31 May 2023), prepared for Asphalt Suppliers Pty Ltd, Tasmania.

Environmental Service & Design Consulting (2025) *Supplement to the EIS* (dated 1 July 2025), prepared for Asphalt Suppliers Pty Ltd; Tasmania.

9. Appendices

Appendix 1 Table of proponent management measures

Appendix 2 Permit Conditions – Environmental No: 10993

Appendix 1: Proponent management measures

Table 7: Proponent management measures (Table 17 and Table 18 of EIS, and Table 1 of the Supplement to the EIS)

Number	Action	Timing
1	Hazardous substance spills will not be released from bunded areas but will be pumped out by a licensed waste contractor.	In the event of a hazardous substance spill
2	All hazardous materials will be stored within bunded areas in accordance with AS 1940.	Ongoing
3	Spill kits will be kept on site in suitable locations and staff trained in their use.	Ongoing
4	Potentially contaminating activities (e.g. spraying with truck slip) will be conducted over the contaminated drainage pad.	Ongoing
5	A third party certified Environmental Management System will be maintained for the operation.	Ongoing
6	Both Triple Interceptor Trap #1 and #2 will be pumped out every six months or as required to maintain the equipment.	Ongoing
7	Pretreatment infrastructure for trade waste will be installed as per the trade waste agreement, which includes a timeframe for installation.	As per trade waste agreement with TasWater.
8	If contamination is evident in the central bunded area (containing the asphalt tanks and the hot oil heater), an application will be made to TasWater to accept the contaminated water as tankered waste. TasWater might require the water to be tested prior to acceptance of the contaminated water.	Ongoing
9	Work with suppliers over time to reduce transport emissions.	Ongoing
10	As plant is replaced, low emissions technology will be considered.	Ongoing

Appendix 2: Permit conditions – Environmental No: 10993

PERMIT PART B
PERMIT CONDITIONS - ENVIRONMENTAL No. 10993

Issued under the *Environmental Management and Pollution Control Act 1994*

Activity: **The operation of an asphalt batch plant (ACTIVITY TYPE: Pre-mix Bitumen Plants)**
30&34 INDUSTRIAL DRIVE
ULVERSTONE TAS 7315

The above activity has been assessed as a level 2 activity under the *Environmental Management and Pollution Control Act 1994*.

Acting under Section 25(5)(a)(i) of the EMPCA, the Board of the Environment Protection Authority has required that this Permit Part B be included in any Permit granted under the *Land Use Planning and Approvals Act 1993* with respect to the above activity.

Municipality: **CENTRAL COAST**
Permit Application Reference: **DA 2021258**
EPA file reference: **21/4281**

Date conditions approved: 07 August 2025

Signed: _____

DELEGATE FOR THE BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

DEFINITIONS

Unless the contrary appears, words and expressions used in this Permit Part B have the meaning given to them in **Schedule 1** of this Permit and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Permit Part B, the EMPCA prevails to the extent of the inconsistency.

ENVIRONMENTAL CONDITIONS

The person responsible for the activity must comply with the conditions contained in **Schedule 2** of this Permit Part B.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

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Schedule 1: Definitions

In this Permit Part B:-

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Activity Area means the area to be used for the Activity when these conditions take effect, as depicted in Attachment 1.

Authorized Officer means an authorized officer under section 20 of EMPCA.

Background Noise Level is the level that is exceeded 90% of the time for each measurement interval when measured in the absence of the subject site noise. Background noise is described using the $L_{A90,T}$ descriptor.

Best Practice Environmental Management or '**BPEM**' has the meaning described in section 4 of EMPCA.

Control Location (Noise) means a location chosen to represent the general ambient sound without contribution from noise sources at the activity.

Controlled Waste has the meaning described in section 3(1) of EMPCA.

Director means the Director, Environment Protection Authority holding office under section 18 of EMPCA and includes a delegate or person authorised in writing by the Director to exercise a power or function on the Director's behalf.

Dominant or Intrusive Noise Characteristics means any noise characteristic that contributes to a noise being considered louder than would be indicated by the A-weighted sound pressure level measured, or that exacerbates nuisance or harm caused by the noise.

DRP means Decommissioning and Rehabilitation Plan.

Dry granular synthetic materials means crumbed, crushed or granulated materials such as rubber, glass, toner waste and plastic.

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Nuisance has the meanings ascribed to it in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

EPA Board means the Board of the Environment Protection Authority established under section 13 of EMPCA and includes a delegate or person authorised in writing by the EPA Board to exercise a power or function on the EPA Board's behalf.

Noise Measurement Procedures Manual means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

Noise Sensitive Premises means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Non-Trivial Environmental Incidents means an incident requiring the person responsible to implement actions to control or respond to the incident to minimise environmental harm and/or nuisance.

Normal Ambient Noise refers to the ambient noise of the receiver location in the absence of the subject site noise. Ambient noise level is measured in L_{Aeq}.

Northern industrial or commercial premises means the land located immediately north of the Activity Area's northern boundary and within the area defined by Certificate of Title 133218/1.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Planning Authority means the Council(s) for the municipal area(s) in which the Activity Area is situated.

Pollutant has the meaning ascribed to it in section 3 of EMPCA.

Reporting Period means the 12 months ending on 30 June of each year.

Stormwater means water runoff as a consequence of a rainfall event, whether surface flow, piped flow, or flow within conduits, including any contaminants collected by the water during its passage.

Waste has the meaning ascribed to it in section 3 of EMPCA.

Wastewater means spent or used water (whether from industrial or domestic sources) containing a pollutant and includes stormwater which becomes mixed with wastewater.

Water Sensitive Urban Design means the design of water infrastructure to minimise impacts on ecosystems while maximising efficient water use.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

1 The activity must not exceed the following limits :

1.1 30,000 tonnes per year of product produced

General

G1 Activity Area

The activity must be confined to the Activity Area.

G2 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work within the Activity Area, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G3 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G4 Proposed change to activity

1 The person responsible must notify the Director in writing prior to implementing any change to the activity authorised by this document that may cause or increase the emission of a pollutant or which may result in environmental harm or environmental nuisance (even temporarily). A change includes, but is not limited to, any of the following:

1.1 an increase in the discharge of a pollutant, or the location of its discharge.

1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity.

1.3 any clearance of native vegetation or earthworks.

1.4 a change in the quantity or characteristics of materials used in carrying out the activity.

2 The notification must be in an approved form and include the following:

2.1 details of the proposed change;

2.2 an assessment of the environmental impacts that may result from the change;

2.3 any relevant approvals held by the person responsible; and

2.4 any advice from the relevant planning authority to the effect that approval is not required.

3 The person responsible must provide additional information as requested by an Authorized Officer.

4 The proposed change must not be implemented until the Director has confirmed in writing that they are satisfied that no other approval or variation of this document is required.

5 For the avoidance of doubt, a notification of a proposed change under this provision is not required if the proposed change is part of a referral to the EPA Board for assessment under sections 24, 25, 27 or 27AA of EMPCA.

G5 Change of Responsibility

1 Within 30 days of becoming aware that the person responsible for the activity will cease or has ceased to be responsible for the activity, that person must:

1.1 notify the relevant planning authority in writing of the fact;

1.2 notify the Director in writing of the fact;

1.3 provide the relevant planning authority and the Director with full particulars in writing of any person succeeding him or her as the person responsible; and

1.4 notify any such person of the requirements of any relevant permit, environment protection notice or other environmental management obligations.

G6 Change of ownership

If the owner of the Activity Area changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of the Activity Area, the person responsible must notify the Director in writing of the change or intended change of ownership.

G7 Complaints register

1 A public complaints register must be maintained. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:

1.1 the date and time at which the complaint was received;

1.2 contact details for the complainant (where provided);

1.3 the subject matter of the complaint;

1.4 any investigations undertaken with regard to the complaint; and

1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.

2 Complaint records must be retained for a period of at least 3 years.

G8 Annual Environmental Review

1 Unless otherwise specified in writing by the Director, a publicly available Annual Environmental Review for the activity must be submitted to the Director each year within three months of the end of the reporting period. Without limitation, each Annual Environmental Review must include the following information:

1.1 a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the Annual Environmental Review;

1.2 subject to the *Personal Information Protection Act 2004*, a list of all complaints received from the public during the reporting period concerning actual or potential environmental harm or environmental nuisance caused by the activity and a description of any actions taken as a result of those complaints;

1.3 details of environment-related procedural or process changes that have been implemented during the reporting period;

1.4 a summary of the amounts (tonnes or litres) of both solid and liquid wastes produced and treatment methods implemented during the reporting period. Initiatives or programs planned to avoid, minimise, re-use, or recycle such wastes over the next reporting period should be detailed;

1.5 details of all non-trivial environmental incidents and/or incidents of non compliance with these conditions that occurred during the reporting period, and any mitigative or preventative actions that have resulted from such incidents;

1.6 a summary of the monitoring data and record keeping required by these conditions. This information should be presented in graphical form where possible, including comparison with the results of at least the preceding reporting period. Special causes and system changes that have impacted on the parameters monitored must be noted. Explanation of significant deviations between actual results and any predictions made in previous reports must be provided;

1.7 identification of breaches of limits specified in these conditions and significant variations from predicted results contained in any relevant EIS or EMP, an explanation of why each identified breach of specified limits or variation from predictions occurred and details of the actions taken in response to each identified breach of limits or variance from predictions;

1.8 a list of any issues, not discussed elsewhere in the report, that must be addressed to improve compliance with these conditions, and the actions that are proposed to address any such issues;

1.9 a summary of fulfilment of environmental commitments made for the reporting period. This summary must include indication of results of the actions implemented and explanation of any failures to achieve such commitments; and

1.10 a summary of any community consultation and communication undertaken during the reporting period.

G9 Amendment of required plans and reports

1 The plans and reports required by these conditions must be amended to address any matter required by the Director, as advised by notice in writing.

2 Amended plans and reports must be resubmitted within the timeframe that the Director specifies.

Atmospheric

A1 Control of dust emissions

Dust emissions from within the Activity Area must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of the Activity Area.

A2 Odour management

The person responsible must institute such odour management measures as are necessary to prevent odours causing environmental nuisance beyond the boundary of the Activity Area.

A3 Covering of vehicles

Vehicles carrying loads containing material which may blow or spill must be equipped with an effective control measure to prevent the escape of the materials from the vehicles when they leave the Activity Area or travel on public roads. The control measure must be implemented prior to leaving the Activity Area.

A4 Maintain emission control equipment

Unless otherwise approved in writing by the Director, the person responsible must ensure that emission control equipment, including the baghouse, is maintained in efficient operational order and employed at all times the drum dryer is in operation.

A5 Fuel

Any fuel burner within the Activity Area must only consume natural gas, or a fuel approved in writing by the Director.

A6 Dust and odour complaints

1 In the event that a dust or odour complaint is received in relation to the Activity Area, the complaint must be reported to the Director within 24 hours of the person responsible receiving the complaint.

2 If required by the Director, monitoring of dust or odour emissions must be undertaken using methods as detailed by the Director.

A7 Control of Odorous gases

1 Unless otherwise approved in writing by the Director:

1.1 the person responsible must ensure that all devices used for the heating of asphalt and bitumen products are operated at the lowest practicable temperature;

1.2 the person responsible must take all appropriate measures to prevent the production of avoidable fumes and odour; and

1.3 notwithstanding condition A3(1), vehicles that have been loaded with asphalt product must be immediately covered with a tarpaulin or similar cover, suitable to prevent the escape of fumes and odour.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 DRP requirements

1 Unless otherwise approved in writing by the Director, a Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity. The DRP must be prepared in accordance with any guidelines provided by the Director. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.

2 The person responsible may apply to the Director to vary or substitute the DRP. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

DC3 Rehabilitation following cessation

1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, the Activity Area must be rehabilitated including:

1.1 stabilisation of any land surfaces that may be subject to erosion;

1.2 removal or mitigation of all environmental hazards or land contamination, that might pose an ongoing risk of causing environmental harm; and

1.3 decommissioning of any equipment that has not been removed.

2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan.

3 The person responsible may apply to the Director to vary or substitute the DRP. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

DC4 Temporary suspension of activity

1 Within 30 days of becoming aware of any event or decision which is likely to give rise to the temporary suspension of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to suspend or has suspended.

2 During temporary suspension of the activity the Activity Area must be managed and monitored by the person responsible for the activity to ensure that emissions from the Activity Area do not cause serious environmental harm, material environmental harm or environmental nuisance.

3 If required by the Director, a Care and Maintenance Plan for the activity must be submitted to the Director for approval, by a date specified in writing by the Director. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.

3.1 The plan must be prepared in accordance with any guidelines provided by the Director.

3.2 Once approved the person responsible must act in accordance with the approved Care and Maintenance Plan.

3.3 The person responsible may apply to the Director to vary or substitute the Care and Maintenance Plan. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

4 Unless otherwise approved in writing by the Director, if the activity on the Activity Area has substantially ceased for 2 years, decommissioning of the activity and rehabilitation of the Activity Area must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

DC5 Implementation of the DRP

1 Following permanent cessation of the activity, the decommissioning of the activity and the rehabilitation of the Activity Area must be carried out in accordance with the most recent Decommissioning and Rehabilitation Plan (DRP) approved by the Director.

2 The person responsible may apply to the Director to vary or substitute the DRP. Any variation or substitution of the DRP approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

Effluent

EF1 Perimeter drains or bunds

1 Perimeter cut-off drains, or bunds, must be constructed at strategic locations within the Activity Area to prevent surface run-off from entering the area used or disturbed in carrying out the activity. All reasonable measures must be implemented to ensure that sediment transported along these drains, or bunds, remains within the Activity Area. Such measures may include provision of strategically located sediment fences, appropriately sized and maintained sediment settling ponds, vegetated swales, detention basins and other measures designed and operated in accordance with the principles of Water Sensitive Urban Design.

2 Drains, or bunds, must have sufficient capacity to contain run-off that could reasonably be expected to arise during a 1 in 20 year rainfall event. Maintenance activities must be undertaken regularly to ensure that this capacity does not diminish.

EF2 Wastewater and stormwater

1 All wastewater and contaminated stormwater that will be discharged from the Activity Area must be collected and treated prior to discharge to the extent necessary to prevent serious or material environmental harm, or environmental nuisance.

2 Notwithstanding the above, all stormwater and wastewater that is discharged from the Activity Area must not carry pollutants such as sediment, oil and grease in quantities or concentrations that are likely to degrade the visual quality of any receiving waters outside the Activity Area.

3 All reasonable and practical measures must be implemented to ensure that solids and pollutants entrained in stormwater and wastewater are retained within the Activity Area. Such measures may include appropriately sized and maintained sediment settling ponds, detention basins, vegetated swales or other measures designed and operated in accordance with the principles of Water Sensitive Urban Design.

EF3 Design and maintenance of stormwater treatment system

1 The stormwater treatment system must be designed and maintained to the satisfaction of the Director and in accordance with the following requirements:

1.1 the system must be designed and maintained to successfully treat the volume of stormwater which would result from a 1 in 20 year storm event;

1.2 discharge must occur via a stable spillway that is not subject to erosion; and

1.3 the system must be periodically cleaned out and maintained in efficient operational order. Material removed during this cleaning must be collected and removed from site by a person who is authorised to do so under EMPCA or subordinate legislation.

EF4 Vehicle hygiene

Unless otherwise approved by the Director in writing, vehicle washing and the application of asphalt release agent must only be undertaken within bunded areas to ensure all wastewater and potentially contaminated stormwater is collected and treated in accordance with the requirements of these conditions.

<u>Hazardous Substances</u>

H1 Storage and handling of hazardous materials

1 Unless otherwise approved in writing by the Director, all environmentally hazardous materials, including chemicals, fuels, and oils, stored within the Activity Area in volumes exceeding 250 litres must be stored and handled in accordance with the following:

1.1 Any storage facility must be contained within a spill collection bund with a net capacity of whichever is the greater of the following:

1.1.1 at least 110% of the combined volume of any interconnected vessels within that bund; or

1.1.2 at least 110% of the volume of the largest storage vessel; or

1.1.3 at least 25% of the total volume of all vessels stored in that spill collection bund; or

1.1.4 the capacity of the largest tank plus the output of any firewater system over a twenty minute period.

1.2 All activities that involve a significant risk of spillages, including the loading and unloading of bulk materials, must take place in a bunded containment area or on a transport vehicle loading apron.

1.3 Bunded containment areas and transport vehicle loading aprons must:

1.3.1 be made of materials that are impervious to any environmentally hazardous material stored within the bund;

1.3.2 be graded or drained to a sump to allow recovery of liquids;

1.3.3 be chemically resistant to the chemicals stored or transferred;

1.3.4 be designed and managed such that any leakage or spillage is contained within the bunded area (including where such leakage emanates vertically higher than the bund wall);

1.3.5 be designed and managed such that the transfer of materials is adequately controlled by valves, pumps and meters and other equipment wherever practical. The equipment must be adequately protected (for example, with bollards) and contained in an area designed to permit recovery of any released chemicals;

1.3.6 be designed such that chemicals which may react dangerously if they come into contact have measures in place to prevent mixing; and

1.3.7 be managed such that the capacity of the bund is maintained at all times (for example, by regular inspections and removal of obstructions).

H2 Hazardous materials (< 250 litres)

1 Unless otherwise approved in writing by the Director, each environmentally hazardous material, including chemicals, fuels and oils, stored within the Activity Area in discrete volumes not exceeding 250 litres, but not including discrete volumes of 25 litres or less, must be stored within bunded containment areas or spill trays which are designed and maintained to contain at least 110% of the volume of the largest container.

2 Bunded containment areas and spill trays must be made of materials that are impervious to any environmentally hazardous materials stored within the bund or spill tray.

H3 Spill kits

Spill kits appropriate for the types and volumes of materials handled within the Activity Area must be kept in appropriate locations and maintained in a functional condition to assist with the containment of spilt environmentally hazardous materials.

H4 Inventory of hazardous materials

An inventory must be kept of all environmentally hazardous materials stored and handled within the Activity Area. The inventory must specify the location of storage facilities and the maximum quantities of each environmentally hazardous material likely to be kept in storage and must include safety data sheets for those environmentally hazardous materials.

Noise Control

N1 Noise emission limits

1 Noise emissions from the activity when detected at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:

1.1 47 dB(A) between the hours of 0600 and 0700 (early morning period); and

1.2 55 dB(A) between the hours of 0700 and 1800 (day time); and

1.3 42 dB(A) between the hours of 1800 and 0600 (night time).

2 Noise emissions from the activity, when measured at any industrial or commercial premises and expressed as the equivalent continuous A-weighted sound pressure level must not exceed 65 dB(A).

3 Notwithstanding part 2, noise emissions from the activity when measured at the northern industrial or commercial premises and expressed as the equivalent continuous A-weighted sound pressure level must not exceed 68 dB(A).

4 Where the combined level of noise from the Activity Area and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the background noise level by at least 5 dB(A).

5 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.

6 Noise emissions from the site should not contain any dominant or intrusive noise characteristics when measured or observed at any noise sensitive premises as assessed in accordance with the *Noise Measurement Procedures Manual*. Where noise emissions from the site contain any dominant or intrusive noise characteristics at any noise sensitive premises, measured noise levels must be adjusted for tonality, impulsiveness, modulation, and low frequency in accordance with the *Noise Measurement Procedures Manual*.

7 All methods of measurement must be in accordance with the *Noise Measurement Procedures Manual*.

N2 Noise survey requirements

1 Unless otherwise approved in writing by the Director, a noise survey must be completed:

1.1 within six (6) months of any change to the activity which is likely to substantially alter the character or increase the volume of noise emitted from the Activity Area; or

1.2 where the Director is of the opinion that a noise survey must be completed within a specified timeframe.

N3 Noise survey method and reporting requirements

1 Noise surveys must be undertaken in accordance with a survey method approved in writing by the Director, as may be amended from time to time with written approval of the Director.

2 Without limitation, the survey method must address the following:

2.1 measurements must be carried out at day, evening and night times (where applicable) at each location; and

2.2 measurement locations, and the number thereof, must be specified, with one location established as a control location (noise).

3 Measurements and data recorded during the survey must include:

3.1 operational status of noise producing equipment and throughput of the activity;

3.2 subjective descriptions of the sound at each location;

3.3 details of meteorological conditions relevant to the propagation of noise;

3.4 the equivalent continuous (L_{eq}) and L_{max}, L_{1}, L_{10}, L_{50}, L_{90}, L_{99} and L_{min} A-weighted sound pressure levels measured over a period of 10 minutes or an alternative time interval approved by the Director;

3.5 a data set containing periods capturing normal and worst operating conditions;

3.6 A-weighted and C-weighted one-third octave spectra (including low frequency) over suitably representative periods of not less than 1 minute presented in tabulated and graph format; and

3.7 narrow-band spectra over suitably representative periods of not less than 1 minute.

4 A noise survey report must be forwarded to the Director within 30 days from the date on which the noise survey is completed.

5 The noise survey report must include the following:

5.1 the results and interpretation of the measurements required by these conditions;

5.2 a map of the area surrounding the activity with the boundary of the Activity Area, measurement locations, and noise sensitive premises clearly marked on the map;

5.3 any other information that will assist with interpreting the results and whether the activity is in compliance with these conditions and EMPCA; and

5.4 recommendations of appropriate mitigation measures to manage any noise problems identified by the noise survey.

N4 Noise complaints

In the event that a noise complaint is received in relation to the Activity Area, the complaint must be reported to the Director within 24 hours.

Operations

OP1 Hours of operation

1 Unless otherwise approved by the Director in writing, activities associated with the production of asphalt (including truck loading and unloading and deliveries to and from the premises) must only be operated between the hours of 0600 hours and 1800 hours on weekdays and Saturdays, and 0900 hours and 1800 hours on Sundays and local public holidays; operation outside of these hours may occur occasionally if in accordance with the following:

1.1 at least 24 hours written notice is given by the person responsible to the Director stating:

1.1.1 the date/s and times of the out-of-hours operations to take place; and

1.1.2 the reason/s necessitating the out-of-hours operations.

2 Notwithstanding the above, activities associated with the production of asphalt (including truck loading and unloading and deliveries to and from the premises) must not be carried out on public holidays that are observed state wide (Easter Tuesday excepted) without the prior written approval of the Director.

OP2 Dry granular synthetic materials management

1 Measures must be implemented and maintained to restrict or prevent the escape of dry granular synthetic materials from the Activity Area.

2 Unless otherwise approved in writing by the Director, control measures must include but are not limited to:

2.1 storage to restrict scattering of dry granular synthetic materials by wind;

2.2 appropriate management of granular material during transfer and batching to prevent spillage;

2.3 immediate clean up and segregation of spilt granular materials around bins, bunkers and within the plant activity areas; and

2.4 daily inspection during operations to ensure the stormwater network is kept free of granular materials.

Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with both the conditions in this document and the obligations of the *Environmental Management and Pollution Control Act 1994* (EMPCA) and subordinate regulations. The conditions of this document do not replicate legislated obligations; therefore, you should ensure you are aware of your obligations under EMPCA and subordinate regulations.

LO2 Storage and handling of dangerous goods, explosives and dangerous substances

1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:

1.1 *Work Health and Safety Act 2012* and subordinate regulations;

1.2 *Explosives Act 2012* and subordinate regulations; and

1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO3 Controlled waste transport

Transport of controlled wastes to and from the Activity Area must be undertaken only by persons authorised to do so under EMPCA or subordinate legislation.

LO4 Discharges to sewer

In accordance with the *Water and Sewerage Industry Act 2008* wastewater, including treated wastewater is not to be discharged to sewerage infrastructure without consent.

Other Information

OI1 Waste management hierarchy

1 Wastes should be managed in accordance with the following hierarchy of waste management:

1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;

1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

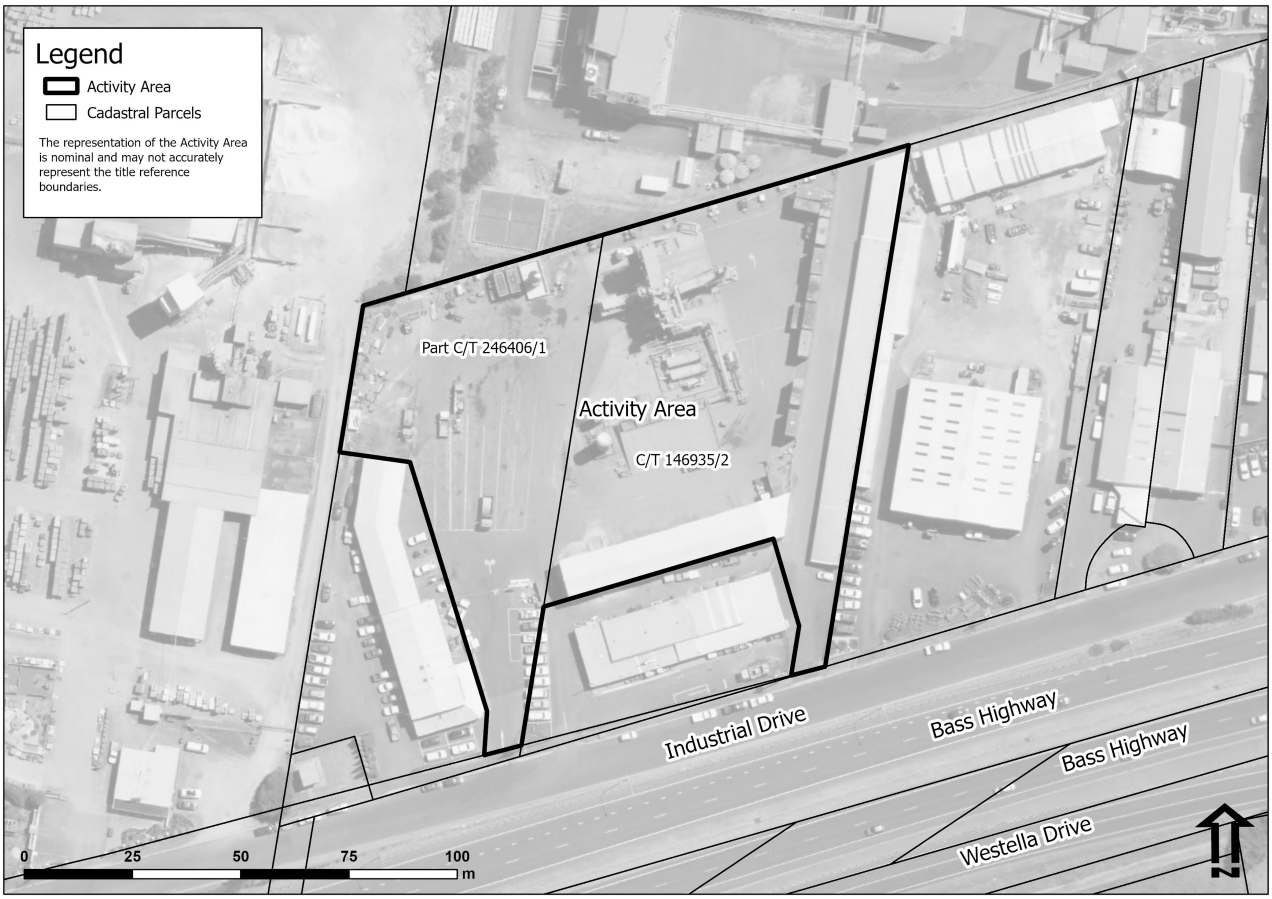
OI2 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning **1800 005 171** (a 24-hour emergency telephone number).

OI3 Release of Relevant Information

Under the provisions of section 23AA of EMPCA relevant information relating to monitoring of environmental impacts required under these conditions may be subject to publishing or public release by the Director.

Attachment 1: Activity Area



ENVIRONMENT PROTECTION AUTHORITY