Duggans Pty. Limited - Catos Hill Quarry – Public Environmental Report

Prepared By: Barry Williams

Date: 14 October 2025

Issue	Date	Recipient	Organisation
Incomplete	9 December 2024		Duggans Pty. Limited
Issue 2	3 February 2025		Duggans Pty. Limited
Issue 3	16 April 2025		Duggans Pty. Limited
Issue 4	14 October 2025		Duggans Pty. Limited

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1 INTRODUCTION

1.1 AFFIRMATION

This report has been reviewed by …… and its contents is acknowledged.

Signed …….

Date ……

GLOSSARY

ILMP – integrated land management & planning

MRT – Mineral Resources Tasmania

RCS – Respirable Crystalline silca

1.2 PROFILE OF COMPANY

TABLE 1: RESPONSIBLE PERSON OR COMPANY

Name	Duggans Pty. Limited
ABN	54 009 565 799
ACN	009 565 799
Address	8420 Channel Highway Cradoc Tas 7109
Phone	(03) 6266 3204
Contact	Mr Steve Duggan
Mobile	0409 663 204
Email	steveduggan@duggans.com.au

2 ENVIRONMENTAL POLICY

Duggans Pty Ltd Environmental Policy is included as Appendix 1.

The Environmental Policy is reviewed and renewed annually, if necessary and communicated to company employees at least annually. Contractors are presented with the Environmental Policy as part of their site induction and inductions are renewed annually.

3 REPORTING PERIOD

Reporting period	11 November 2022	11 November 2025

4 ACTIVITY PROFILE

4.1 OPERATIONS

TABLE 2: PLANT AND OPERATIONS

Extraction / processing	Catos Hill Quarry is a drill and blast operation, extracting dolerite rock and using a mobile primary crusher to process shot rock at the face and then cart to the secondary crusher and screener circuit which processes the rock to produce aggregates and gravels suitable for roadworks, concrete and other construction requirements.

Major Equipment	Rock drill (periodically), excavators, wheel loaders, off-road haul truck, mobile primary crusher, fixed secondary and tertiary crushers and screener, various on-road truck and trailer combinations.

Main equipment

Type	Make	Description
Wheel loader	Komatsu	25 tonne
Wheel loader	Komatsu	25 tonne
Hydraulic excavator	Komatsu	36 tonne
Hydraulic excavator	Komatsu	27 tonne
Articulated truck	Komatsu	28 tonne
Jaw crusher	Tesab	1100 x 700
Cone crusher	Jaques	35“
Impact crusher	Canica	2000
Primary screen	Jaques	8“ x 4”
3 Deck screen	Jaques	16” x 6”
3 Deck screen	Jaques	10” x 5”

Transport

The Catos Hill Quarry supplies gravel and aggregates to internal and external clients. Approximately 15 percent of production is consumed onsite through the concrete plant.

Trucks carting product from the quarry stockpiles to external markets travel from the quarry on the internal haul road to the weighbridge. From the weighbridge the trucks travel on the site access road to the junction with Channel Highway and then travel either north or south.

Stockpiles

The range of quarry products are stockpiled onsite prior to delivery to market including:

- Clean aggregates for road sealing and concrete
- Blended gravels including road base and pavement
- Shoulder gravels derived from weathered source rock
- Armour rock and spawls

During pit development phases, topsoils and vegetative matter is stripped and stockpiled separately to overburden. Both will be reused in future rehabilitation operations.

Infrastructure

Catos Hill Quarry will continue to utilise the machinery and infrastructure that has been established for the current operation.

Infrastructure includes:

- Water storage / recycling impoundment, pumps and pipelines.
- Internal haul roads to and from benches and primary crusher and secondary crusher circuit.
- Overhead gantry mist spray for dampening loads on trucks.
- Stockpile for sprays and road side sprinklers for dust suppression.
- Weighbridge and offices shared with other operations on site.

Operating hours	Weekdays	Saturdays
	7.00 am to 7.00 pm	8.00 am to 4.00 pm

TABLE 3: PERMITTED CAPACITY

Permitted capacity (max.) extraction	150,000 cubic metres	240,000 tonnes
Permitted capacity (max.) processing	150,000 cubic metres	240,000 tonnes

TABLE 4: CURRENT PRODUCTION

Extraction actual (2022)	130,000 cubic metres	208,000 tonnes
Processing actual (2022)	130,000 cubic metres	208,000 tonnes
Extraction actual (2023)	129,375 cubic metres	207,000 tonnes
Processing actual (2023)	129,375 cubic metres	207,000 tonnes
Extraction actual (2024)	130,000 cubic metres	208,000 tonnes
Processing actual (2024)	130,000 cubic metres	208,000 tonnes

TABLE 5: ACTIVITY DETAILS

Materials to be extracted	The Catos Hill Quarry exposes both weathered and fresh dolerite rock for extraction and processing. The current quarry plan estimates that 1.1 million BCM of source rock in reserve which translates to approximately 2.7 million cubic metres of product. At maximum production under the current mining plan Catos Hill Quarry has potential for 18 years active life. The weathered dolerite (gravel) is sourced predominantly from the southwest end of the quarry. The gravel product is lower value and is less consistent which makes compliance with specifications difficult. There is an opportunity to win some ground (reduce the area of disturbance) by abandoning the gravel end of the pit and commencing rehabilitation.

	This strategy is under consideration but no plan to increase the area of progressive rehabilitation beyond that included in the current rehabilitation plan are agreed.
Bulk density (loose)	Various products produced at Catos Hill Quarry have differing bulk densities. An assumed average bulk density of 1.6 tonnes per cubic metre (loose) is used in this document.
Market	Catos Hill Quarry has internal and external customers: The concrete batch plant located on the site is a major customer taken around 20 % of production to manufacture concrete for off-site clients and supply to the on-site precast panel yard. The balance of production goes off site as gravels, pavement materials and clean aggregates.
Seasonal variation	Demand will tend to diminish slightly during winter due to shorter work days and increase slightly during summer.

4.2 POLLUTION DISCHARGES AND WASTES

4.2.1 POTENTIAL EMISSIONS AND WASTES

Catos Hill Quarry is a combination of a hard rock extraction and gravel extraction operation that includes on site processing of materials to produce marketable products. The most recent assessment of potential pollution discharges and wastes was included in the environmental effects report produced to support an application to increase the annual production limit (ilm&p, March 2022):

- Air emissions
- Surface water emissions
- Groundwater impacts
- Mechanical noise emissions
- Blasting noise emissions
- Solids waste
- Hazardous substances
- Weeds and diseases
- Impact on natural values

4.2.2 POLLUTION CONTROL MEASURES

Control of environmental emissions is regulated through permit conditions imposed by Environment Protection Notice EPN No. 11756/1.

4.3 LOCATION AND PLANNING CONTEXT

Location	Catos Hill Quarry is located on private freehold land on the saddle between Catos Hill and Woodstock Hill. The quarry occupies an existing mining lease, number 1918P/M which is situated off the eastern side of the Channel Highway.
Address	8420 Channel Highway, CRADOC, Tas. 7109

Certificate of Title	46807/1, 47130/1, 114690/1, 163072/2, 163072/3
Property ID	3138507, 3138515, 1992574, 3156772, 3156780
Landowner	Private freehold land Duggans Pty. Limited (Proponent) through various entities has continued to operate the Catos Hill Quarry for over 40 years.

TABLE 6: LOCATION DETAILS

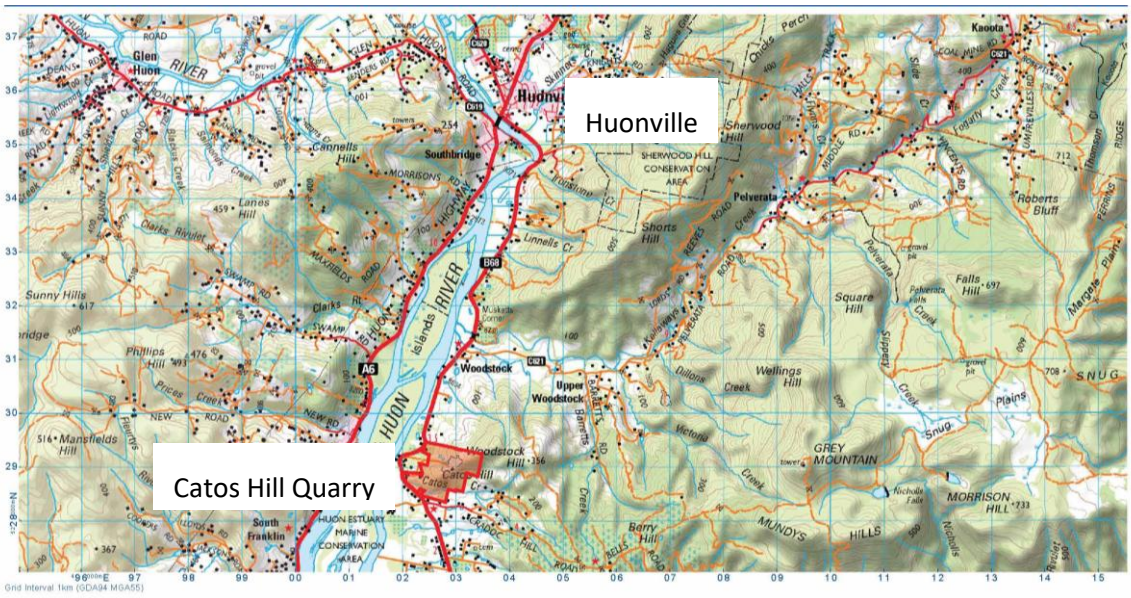

FIGURE 1: CATOS HILL QUARRY – LOCATION MAP

Mining Lease	1918P/M
Lease area	93 hectares

4.4 DESCRIPTION OF LOCAL ENVIRONMENT

Land use	Catos Hill Quarry is set in a rural environment surrounded by smaller scale agricultural holdings. The farms are variously orchards, small cropping operations or set down to grazing.
Climate data	Weather Station – Geeveston (Cemetery Road) 094137 (BOM, 2021)

Mean temperature (^{0}C)	January		July	
	Maximum	Minimum	Maximum	Minimum

	22.1	9.9	12.1	2.2
Mean Rainfall (mm)	August	February	Annual	
	104.6	49.2	881.1	

Wind speed & direction	Wind speed and direction - mornings(average)	Wind speed and direction - afternoon (average)
	Predominant wind direction is northwest at 10 to 20 km/hr.	Predominat wind direction is northwest at 20 to 30 km/hr.

Geology	Catos Hill Quarry is targeting a Jurassic aged dolerite formation which forms Catos Hill and Woodstock Hill and most of the saddle between. On the eastern flank a Permian aged quartz sandstone intrudes into the quarry footprint. The Huon River adjacent to the Catos Hill Quarry has deposited Quaternary alluvial mud, sand and gravel river flats. This feature is classified under the Geo-conservation database as a notable example of a Tidal Delta ID number 2200.
Soils	The saddle and ridge situation causes the soils to be thin and bleached. The site is adjacent to the Huon River which has alluvial deposits which are rated between low and high for Acid Sulphate Forming Potential. The quarry will have no interaction with the alluvial deposits and the dolerite resource rock is unlikely to contain PAF units see **Error! Reference source not found.**.
Hydrology	The existing floor of the quarry is approaching the water table at its highest elevation during extremely wet weather. The level of the first water storage / sediment pond is likely to be close to the normal high water table level. As the extraction progresses the source rock is becoming more massive with less fracturing and hence will retard groundwater flow.
Sensitive use	Normally quarry operations can take place anywhere within the mining lease boundary, hence it is normal practice to measure separation distance from the boundary. The Catos Hill Quarry has extractive and rock processing operations constrained to the 'development area' defined in the quarry plan. The separation distances will be measured from quarry development area including the new extraction area.
Other industries	Catos Hill Quarry is downstream from Huonville which is the Huon Valley region's business centre. Other major industries located in and around Huonville consist of fish processing plants and sawmills including timber treatment. These operations are regulated under separate development and environmental permits.
Significant changes	There has been no significant change in the industrial environment in Huonville within the previous reporting period.

5 EMISSIONS AND MITIGATION

5.1 AIR EMISSIONS

Quarry operations do not have stack emissions but air emissions are fugitive from processing and heavy earthmoving activities. The source rock at Catos Hill Quarry is mainly fresh and weathered dolerite. The dolerite source rock at Cartos Hill has an average silica content of ≈ 7% which is low and, in the analysis, Mineral Resources Tasmania commented that Respirable Crystaline Silica (RCS) risk was low.

Dust is managed to prevent visible dust from crossing the mining lease boundary to comply with the requirements of the Quarry Code of Practice (Environment Protection Authority, May 2017).

Air emissions are managed through EPN 11756/1, condition A1, A2, A3.

TABLE 7: AIR EMISSIONS AND MITIGATION

Emissions	Source	Mitigation measures
Exhaust fumes	Diesel powered machinery (mobile)	Late model well maintained machines.
Dust	Crushing / screening plant	Fixed water sprays at changes of process materials direction.
	Vehicles	A water spray gantry dampens each tray as truck leave the site.

The Operator made the following commitments to control air emissions:

No.	Management measure	Responsible	Date
1	Trafficked surfaces on the quarry floor, benches and haul roads are maintained in good condition and clean. Drop distances between buckets and hoppers and trays and off conveyor chutes are kept to a minimum.	Operator	As required
2	Trays carrying product off site will be loaded so the maximum height of the load does not exceed the height of the sides of the tray or have covers fitted. On dry windy days an overhead fog spray is used to dampen the surface of loaded trucks as they leave the quarry.	Operator	At all times

3	A purpose-built irrigation system is turned on dry windy high traffic days to suppress dust between passes of the water cart.	Operator	As required
4	A water cart is deployed on days where weather conditions are especially dry and windy.	Operator	As required

5.2 WATER EMISSIONS

Quarries can affect water quality by discharging stormwater which has been contaminated with sediment from areas of exposed soil within the catchment.

When sediment entrained runoff water is carried into waterways there can be a visual impact in low concentrations or in high concentrations aquatic flora and fauna can be affected.

The Catos Hill Quarry catchment is collected in a series of ponds, the first of which is located on the quarry floor, two more ponds are located downstream. The arrangement of sediment retention ponds is displayed in the quarry general arrangement plan Figure 2. These ponds provide capacity to retain runoff water and sediment allowing treatment of the runoff before discharge off site.

Managed through EPN 11756/1, condition SW1, SW2,

Emission	Source	Mitigation measures
Sediment transport	Rainfall runoff control	Cut-off drains or bunds are installed to minimise runoff entering areas disturbed by the activity.
		Stormwater control infrastructure has been designed to accommodate a 1 in 20 year event and is maintained to retain that capacity.
		Polluted stormwater is collected and treated prior to discharge off the Land to prevent discharge of sediment, oil, grease in concentration likely to degrade the receiving aquatic environment.
		Stormwater treatment infrastructure is designed to accommodate a 1 in 20 year event and maintained to retain that capacity.

The Operator made the following commitment to control stormwater emissions:

No.	Management measure	Responsible	Date
14	The level of sediment in Pond 1 will be monitored and accumulated sediment removed to maintain retention volume.	Operator	As required

5.3 IMPACT ON GROUNDWATER

Managed through EPN 11756/1, condition GW 1

Impact	Source	Mitigation measures
Groundwater disruption	Excavation	Excavation restricted to above Reduced Level 80.0 m (AHD[1]).
		If groundwater is encountered excavation level will be raised to prevent standing water.

The operator made the following commitment to mitigate potential impact on groundwater:

No.	Management measure	Responsible	Date
5	The quarry floor will remain at the existing surface level to minimise the potential for extraction to encounter the natural ground-water surface.	Operator	At all times

5.4 HAZARDOUS SUBSTANCES

Most hazardous substances used at quarries are managed through sub-contractors and are not stored on site. Herbicides are managed through the weed control contractor and explosives are managed by the blasting contractor. Hydrocarbons in the form of fuels and lubricants are managed by the quarry operator. Hydrocarbons can be either spilt or leak from machines or storage.

Hydrocarbons even in low concentrations can have a harmful effect on waterways for significant distances downstream.

Managed through EPN 11756/1, condition H1, H2, H3

Emission	Source	Mitigation measures
	Storage and transport of hazardous materials	Hazardous materials are stored such that leaks or spills are contained.

[1] AHD – Australian Height Datum elevation above assumed mean high water level

Hazardous materials contamination	The storage and transport of hazardous materials is managed to prevent contamination of soils, groundwater, waterways or beyond the boundary of the land.
	Reasonable management measures include spill kits, spill trays/bunds, absorbent pads, and automatic cutoff on pumping equipment.

The operator made the following commitment to control hazardous materials:

No.	Management measure	Responsible	Date
6	Lubricants and oils are retained on self-bunded pallets within storage containers on site.	Operator	At all times
7	A hydrocarbon spill lit is retained in the refuelling vehicle ready for immediate deployment if a spill occurs.	Operator	At all times
8	Hydrocarbon booms and matts are retained onsite ready for immediate deployment on unmade ground or across water bodies if a hydrocarbon spill occurs	Operator	At all times
9	Responsibility for explosives brought to the site remains with the Blasting Contractor, no explosives are stored on-site.	Blasting Contractor	At all times

5.5 NOISE EMISSIONS

Managed through EPN 11756/1, condition N1, N2, N3, N4, N5

Emission	Source	Mitigation measures
Environmental noise	Fixed and mobile equipment	Noise emissions from the activity to any noise sensitive premises in other ownership must not exceed 45 dB(A) between 7.00 am and 7.00 pm.
		Noise emissions from the activity to any noise sensitive premises in other ownership must not be audible between 7.00 pm and 7.00 am.
		Operating hours are restricted to between 7.00 am and 7.00 pm during weekdays and 8.00 am

		and 4.00 pm on Saturdays. Operation is not permitted on public holidays.
	Change to operation likely to alter noise emissions	A noise survey must be undertaken within 3 months of any change to the operation likely to alter noise emissions.
		Any complaint relating to noise must be reported to the Director (EPA) within 24 hours.

The operator made the following commitment to control noise emissions:

No.	Management measure	Responsible	Date
10	All equipment will be recent models, well maintained with proprietary silencers fitted.	Operator	At all times
11	Quieter alternatives will be used to replace obsolete equipment.	Operator	As required

5.6 BLASTING EMISSIONS

Managed through EPN 11756/1, condition B1, B2, B3, B4

Emissions	Source	Mitigation measures
Drilling noise	Mechanical drill	Drill restricted to operating hours 7.00 am to 7.00 pm weekdays and 8.00 am to 4.00 pm on Saturdays.
Blasting noise	Shot firing	Blasting times restricted to between 10.00am and 4.00 pm Monday to Friday
	Shot firing	All blasts must be monitored and the records maintained for at least 2 years.
	Shot firing	Air blast overpressure limited to 115 dB (Lin Peak) for 95% of blasts, maximum limited to 120 dB (Lin Peak).
Blasting vibration	Shot firing	Ground vibration limited to 10mm/sec peak particle velocity.
	Shot firing	Any exceedances must be reported to the Director (EPA) within 7 days

	Shot firing	All residents within 1 kilometre radius of the activity must be notified at least 24 hours prior to every blast. See table for residences included.

TABLE 8: SENSITIVE USES (RESIDENCES) WITHIN 1 KM

Location	Address	Distance
1	8520 Channel Highway, Woodstock	370
2	8480 Channel Highway, Cradoc (within the mining lease boundary)	570
3	8495 Channel Highway, Cradoc	640
4	8507 Channel Highway, Woodstock	691
5	8524 Channel Highway, Woodstock	720
6	8464 Channel Highway, Cradoc	715
7	8432 Channel Highway, Cradoc	750
8	8434 Channel Highway, Cradoc	750
9	'Charnwood Cottage', 8424 Channel Highway, Cradoc	775
10	20 Ferry Road, Cradoc	830
11	8391 Channel Highway, Cradoc	715
12	8377 Channel Highway, Cradoc	705
13	8367 Channel Highway, Cradoc	650
14	8369 Channel Highway, Cradoc	660
15	8359 Channel Highway, Cradoc	660
16	8349 Channel Highway, Cradoc	670
17	8366 Channel Highway, Cradoc	595
18	'The Willows' 19 Rowes Road, Cradoc	885
19	3 Rowes Road, Cradoc	885
20	8306 Channel Highway, Cradoc	995

21	8296 Channel Highway, Cradoc	850
22	4 Cradoc Hill Road, Cradoc	580
23	29 Cradoc Hill Road, Cradoc	576
24	54 Cherrys Road, Cradoc	525
25	67 Cradoc Hill Road, Cradoc	636
26	69 Cradoc Hill Road, Cradoc	675
27	90 Cradoc Hill Road, Cradoc	895
28	'Cradoc Cottage Ceramics' 92 Cradoc Hill Road, Cradoc	900
29	100 Cradoc Hill Road, Cradoc	950
30	16 Clarks Road, Cradoc	900
31	40 Clarks Road, Cradoc	1,000
32	58 Clarks Road, Cradoc	1,010
33	80 Clarks Road, Cradoc	970
34	77 Clarks Road, Cradoc	700

5.7 LAND AND SOIL CONTAMINATION

The operator and related individuals and companies own the land accommodating the Catos Hill Quarry. There is no record or knowledge of incidents or activities that may have caused soil or land contamination on the site.

5.8 WASTES

5.8.1 WASTE FROM EXTRACTION

The new area for development for the Catos Hill Quarry has a sparce regenerating shrubs in an abandoned exotic pasture. Extractive operations will generate amounts of stripping, topsoil and overburden which will be retained in windrows adjacent to the mining lease and cadastral boundary to the north of the site. Some of this material will be used to undertake rehabilitation and revegetation activities on the southeast flank of the quarry.

Catos Hill Quarry produces a range of products that offer opportunities to incorporate waste material such as dust, oversized, unsuitable into other products.

The source rock is igneous and unlikely to contain pyrite or any other potentially acid forming mineral.

5.8.2 SPARES AND LITTER

Machinery will be taken off site to the Operator's workshops for servicing and maintenance. Spares or waste generated through breakdowns or routine lubrication will be retained in the workers utes and taken off-site at the end of each working day.

Litter emanating from lunches and other amenities will be retained in enclosed containers and periodically disposed of to an approved disposal site.

5.8.3 CONTROLLED WASTE

The quarry operation will not produce any controlled waste products. Concrete wash out is retained onsite and recycled into new quarry and concrete products.

5.8.4 WASTE TYPES AND QUANTITIES

Waste type	Source	Volume (month)	Reduction strategy
Parts and packaging	Various	20 litre drums x 2 Cardboard boxes x3 Rubber screens x 1 Conveyor belt x 1	Return to supplier or recycle. Rubber and conveyor belts can be repurposed.
Hydrocarbons	Lubricant	40 litres	recycle

5.8.5 ENERGY USE AND SOURCES

Energy type	Source	Consumption (annual)	Reduction strategy
Diesel fuel	Bennetts Petrol	180 kL	Business case to convert primary crusher to electric. Excavators to hybrid models.
Electrical (grid)	Aurora	389 kWh	None
Electrical (solar)		100 kWh	Business case for second solar farm and battery storage.

5.8.6 WATER USE AND SOURCES

Source	Consumption (day)	Reduction strategy
Potable water (mains)	30 litres	None

Potable water (tanks)	N/A	
Process water (mains)	none	N/A
Process water (recycled)	none	N/A
Process water (recovered from storage)	Between 12 and 34 Kilolitres	None

5.9 GREENHOUSE GAS EMISSIONS

5.9.1 EXISTING ENVIRONMENT

Catos Hill Quarry operates mobile machinery and a fixed crushing plant. Emissions associated with cartage to client projects is accounted in the project GHG calculations. GHG emissions related to blasting occurring occasionally through the year are not considered.

There will be a small area of clearing associated with the proposed expansion of Catos Hill Quarry. The clearing will occur slowly over the next 5 years and then cleared areas will be progressively rehabilitated which will sequester carbon as the planting develops.

5.9.2 METHODOLOGY

Tasmania's climate change and greenhouse gas emission strategies and targets are set through the *Climate Change State Action Act 2008* and the *Climate Smart Tasmania: A 2020 Climate Change Strategy.*

Under the *Climate Change State Action Act 2008* Tasmania's emission reduction target is set at net zero greenhouse gas emissions, or lower, in Tasmania from 30 June 2030.

5.9.3 ASSESSMENT OF IMPACTS

Under the *National Greenhouse and Energy Reporting Act 2007* (Com) and using the *Australian National Greenhouse Accounts Factors* (DCCEEW, 2024) it is possible to calculate the contribution an operation makes to Tasmania's greenhouse gas emissions.

- Direct emissions (scope 1) – diesel

Using factors provided in (energy Scope 1) of (DCCEEW, 2024) for diesel fuel 69.9 for CO_2, 0.1 for CH_4, 0.2 for N_2O giving a total combined emission factor equalling - 70.2 CO_2 -e/GJ.

Table 8 of *Australian National Greenhouse Accounts Factors* gives an energy content factor for heavy duty vehicles consuming diesel fuel of 38.6 HJ per unit of fuel.

Catos Hill Quarry used 180 kilolitres of diesel last year to power the mechanical equipment.

Therefore, the total annual scope 1 emissions in CO_2 equivalent units (CO_2-e) are:

(180 x 38.6 x 70.2)/1000 = 487 tonnes

- Indirect emissions (scope 2) – electricity

From Table 1 of (DCCEEW, 2024) Scope 2 Emission Factors (kg CO_2 -e) for electricity purchased or acquired in Tasmania 0.12 kg CO_2-e/kWh.

Catos Hill Quarry uses on average 389 kWh of electrical energy annually to power the fixed crusher and all other electrical equipment.

Therefore, the total annual scope 2 emissions in CO_2 equivalent units (CO_2-e) are:

(389 kWh x 0.12)/1000 = 0.047 CO_2-e

Total annual average greenhouse gas emissions for the site is 487.05 tonnes of CO_2-e

The threshold of reporting under the *National Greenhouse and Energy Reporting Act 2007* is for years after the initial year (2008) is 50,000 tonnes CO_2-e.

5.10 Operations hygiene

Managed through EPN 11756/1, condition OP1, OP2

Emission	Source	Mitigation measures
Weeds	Transport of soil	The Land must be kept substantially free of weeds.
		Prior to entering the land machinery must be washed down in accordance with Weed & Disease Guidelines.

The operator made the following commitment to control site hygiene:

No.	Management measure	Responsible	Date
12	Hygiene protocols recommended in the *Weed and Disease Planning and Hygiene Guidelines 2015* (DPIPWE, March 2015) have been adopted.	Operator	At all times
13	Access to the site will be strictly controlled when the quarry is unattended by fastening a locked gate.	Operator	At all times

5.11 Flora, fauna and biodiversity

The operator of Catos Hill Quarry recently was granted a new Permit to operate with a higher level of annual production and expand into a new area for extraction. Ecological work as required for assessment of the proposed expansion found a new wedge-tailed eagle nest located near top the proposed expansion area.

TABLE 9: NATURAL VALUES (DPIPWE (A), 2021)

Threatened flora within 5000m	Species	Common name	TSPA	EPBCA
	Deyeuxia minor	small bentgrass	rare	-

Threatened fauna within 500 m	Species	Common Name	TSPA	EPBCA
	Accipiter novaehollandiae	grey goshawk	Enda.	
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Enda.	Enda.
	Dasyurus maculatus	spotted-tail quoll	Rare	Vuln.
	Dasyurus viverrinus	eastern quoll		Enda.
	Perameles gunnii	eastern barred bandicoot		Vuln.
	Sarcophilus harrisii	tasmanian devil	e	Enda.

Threatened fauna within 5000 m	Species	Common Name	TSPA	EPBCA
	Accipiter novaehollandiae	grey goshawk	Enda.	
	Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	Enda.	Enda.
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Enda.	Enda.
	Botaurus poiciloptilus	australasian bittern		Enda.
	Dasyurus maculatus	spotted-tail quoll	r	Vuln.
	Dasyurus viverrinus	eastern quoll		Enda.
	Gallinago hardwickii	lathams snipe		Vuln.
	Haliaeetus leucogaster	white-bellied sea-eagle	Vuln.	
	Hirundapus caudacutus	white-throated needletail		Vuln.
	Lathamus discolor	swift parrot	Enda.	CR
	Lissotes menalcas	mount mangana stag beetle	Vuln.	
	Neophema chrysostoma	blue-winged parrot		Vuln.
	Perameles gunnii	eastern barred bandicoot		Vuln.
	Sarcophilus harrisii	tasmanian devil	Enda.	Enda.
	Tyto novaehollandiae	masked owl	PEnda.	PVuln.

Raptor nests within 5000 m	Nest ID	Species	Common Name	Type
	1258	*Aquila audax subsp. fleayi*	tasmanian wedge-tailed eagle	Nest
	2716	*Accipiter novaehollandiae*	grey goshawk	Nest
	2795	*Accipiter novaehollandiae*	grey goshawk	Nest
	2796	*Accipiter novaehollandiae*	grey goshawk	Nest
	2812	*Accipiter novaehollandiae*	grey goshawk	Nest
	2822	*Aquila audax subsp. fleayi*	tasmanian wedge-tailed eagle	Nest
	3178	*Aquila audax subsp. fleayi*	tasmanian wedge-tailed eagle	Nest
	3383	*Accipiter novaehollandiae*	grey goshawk	Nest
	3384	*Accipiter novaehollandiae*	grey goshawk	Nest
	3408	*Accipiter novaehollandiae*	grey goshawk	Nest
	3490	*Aquila audax subsp. fleayi*	tasmanian wedge-tailed eagle	Nest

Declared weeds within 500 m	Species	Common name
	Cortaderia sp.	pampas grass
	Cytisus scoparius	english broom
	Echium plantagineum	patersons curse
	Echium vulgare	vipers bugloss
	Erica lusitanica	spanish heath
	Genista monspessulana	montpellier broom
	Hypericum perforatum	perforated st johns-wort
	Ilex aquifolium	holly
	Rorippa sylvestris	creeping yellowcress
	Rubus fruticosus	blackberry
	Salix caprea	goat willow
	Salix matsudana x alba	tortured willow
	Salix x fragilis nothovar. fragilis	crack willow
	Senecio jacobaea	ragwort
	Ulex europaeus	gorse

Geo-conservation sites within 1000 m

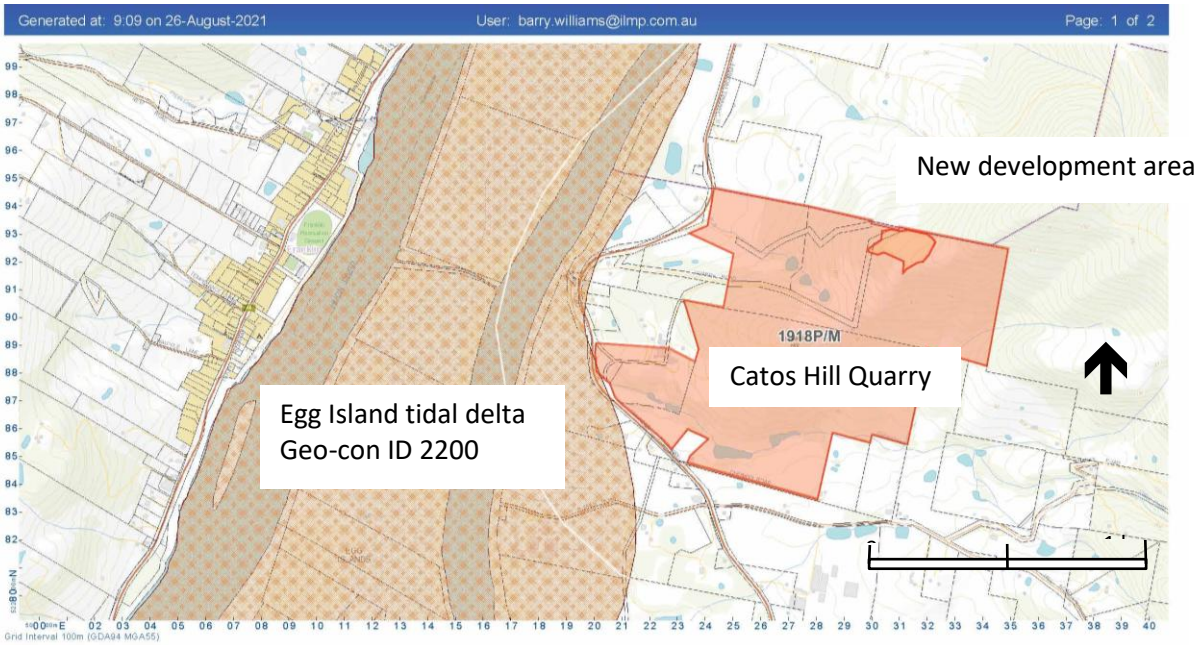

FIGURE 2: GEO-CONSERVATION SITES

Scheduled vegetation communities

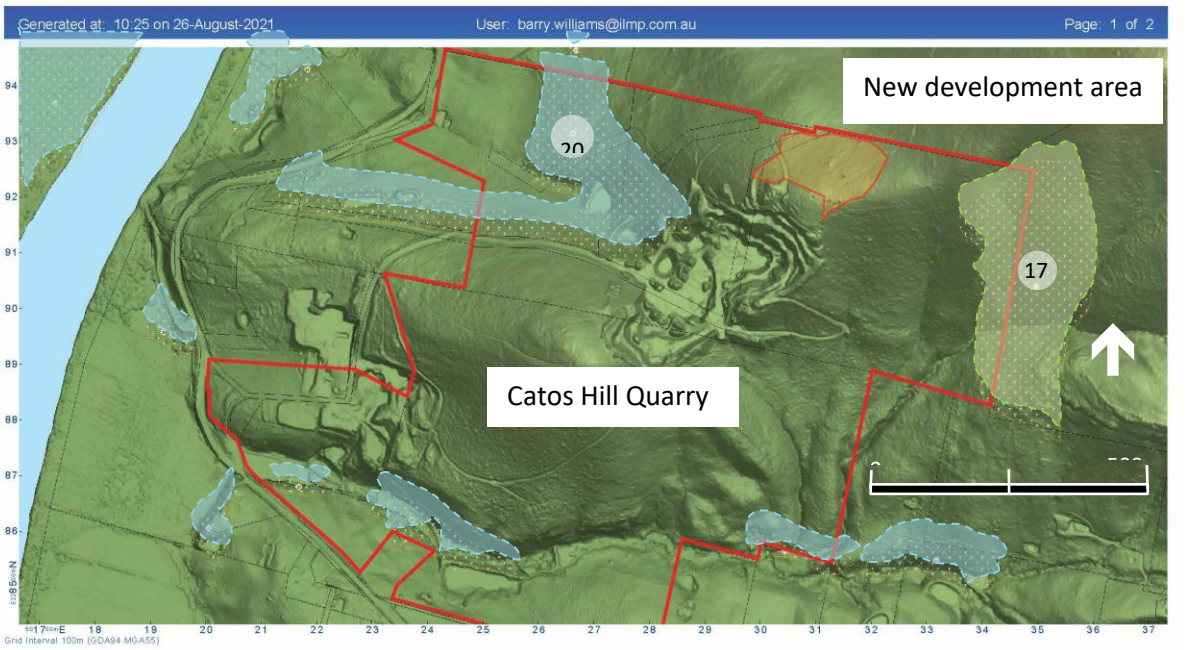

FIGURE 3: SCHEDULED COMMUNITIES

Vegetation communities listed under Schedule 3A of the *Nature Conservation Act 2002* located near the Catos Hill Quarry are represented in Figure 3: Scheduled communities.

Scheduled. communities within 1000 m	Scheduled Community ID	Scheduled Community Name
	14	*Eucalyptus amygdalina* forest and woodland on sandstone
	17	*Eucalyptus globulus* dry forest and woodland
	20	*Eucalyptus ovata* forest and woodland
	22	*Eucalyptus tenuiramis* forest and woodland on sediments
	39	Wetlands

Vegetation communities	The Ecological Assessment and report commissioned for this application will explain the relationship between the mapped and actual make-up of the vegetation communities on and surrounding the quarry development area.

5.12 Cultural and Aboriginal heritage

5.12.1 Historic heritage

Catos Hill Quarry has two historic heritage sites located near the operation:

ID number	Site name	Significance
11352	Egg Island Navigation Canal	An early and rare example of a navigation canal on the Huon River.
10329	Cradoc Cemetery	A cemetery with local community significance and research value.

5.12.2 Aboriginal cultural heritage

A T.A.S.I. search undertaken in 2011 found the Catos Hill Quarry site had a low probability of Aboriginal heritage being present and concluded no targeted Aboriginal heritage survey was required.

6 PERMIT CONDITIONS

Catos Hill Quarry (Duggans) operates under forma permits to operate scheduled premises Nos. 3307 and 3308 which were consolidated and varied by Environment Protection Notice 8720/1 which was subsequently replaced with Permit Conditions Environmental No. 10900 and then varied by Environment Protection Notice 11756/1.

Copies of the latter permit and notices are included as Appendix 2.

7 ENVIRONMENTAL LEGISLATION

Environmental performance at Catos Hill Quarry is regulated broadly under the Tasmanian Resource Management and Planning System enacted through the following legislation, polices and measures.

- *Land Use Planning and Approvals Act 1993*
- *Environmental Management and Pollution Control Act 1994*
- *State Policy on Water Quality Management*
- *Environment Protection Policy (Air Quality)*
- *Environment Protection Policy (Noise)*
- *National Environmental Protection Measures*

8 PUBLIC COMPLAINTS

Extract from complaints register for reporting period.

Report No.	Date	Description	Resolution	Date
23_24-071	16/02/2024	Public noise complaint, Tesab crusher working on ROM pad.	Issued notice that Tesab crusher is not to operate on or near ROM pad	20/02/2024
24-25-054	03/03/2025	2 potential loose rocks above haul road, maybe reachable with a digger from above.	Rocks have been cleared. SWMS will be revised after next blast.	03/04/2025
24-25_70	08/05/2025	Loader working in Batch Plant before 7:00am and noisily shaking bucket.	The issue has been discussed with the Loader Operators, and they have been instructed to not shake the bucket if possible.	30/06/2025
24-25_76	30/05/2025	Rubbish/water laying at Precast skip bin area.	Precast have cleaned up the	25/06/2025

			area and drilled in a drainage hole. Precast will inspect the area on Thursdays to ensure the skip bins are in the correct position for filling with rubbish.	
25-26_S010	29/07/2025	Employee while welding galvanised cast-in plates, has felt slightly ill afer inhaling welding fumes from the galvanised steel.	This was discussed at a Precast toolbox meetng. Welding galvanised steel is to be avoided if possible. If galvanised steel has to be welded, the galv needs to be ground off, respiraton welding helmets are to be worn, and the welded area is to be cold galv painted.	27/08/2025
25-26_E002	01/09/2025	The complaint relates to the discolouration of two dams south of Cato's Hill Quarry.	The EPA has been contacted and everything is okay. Dams to have their annual cleanout around December / January when things dry out.	03/10/2025
25-26_E003	15/09/2025	Oil stored incorrectly in container.	Oil bund has been purchased and installed.	03/10/2025
25-26_E004	10/10/2025	Truck #509 used the new auto wash out area. The valve did not stop, water continued to empty into the truck flooding down to the bottom quarry.	Work in Progress	

9 ENVIRONMENTAL INCIDENTS

List of all non-trivial environmental incidents and incidents of non-compliance with permit conditions recorded during the reporting period.

Report No.	Date	Description	Resolution	Date
22_23-45	10/01/2023	Excessive dust on quarry road, quarry floor, 2nd crusher bin.	Not closed-Plan to acquire water cart.	11/07/2023
22_23-85	30/03/2023	Excessive dust from Tesab conveyor.	Not closed.	16/05/2023
23_24-002	03/07/2023	Waste/rubbish in laydown area.	Rubbish removed spares sorted and area cleaned up.	31/07/2023
23_24-016	07/08/2023	Blast notification list not up-to-date.	Contacts list updated.	18/08/2023
23_24-060	31/01/2024	Time weighted personnel dust exposure exceedance	Cover placed over cone crusher belt. Dust control plan of quarry implemented	18/04/2024
23_24-026	07/09/2023	Domestic rubbish behind ROM pad	Unable to locate source, a manager must authorise any dumping	18/11/2023
23_24-040	27/11/2023	Hook truck picked up excavator before permitted operating hours start	Weighbridge operator to enforce operating hours	04/12/2023
23_24-49	06/12/2023	Excessive dust from cone crusher tail drum	Cover installed on cone crusher belt	10/04/2024
24_25-49	17/02/2025	Maintenance had collected #223 from the fuel yard to move to the workshop for maintenance. It was discovered on arrival that the fuel cap had come off, and some diesel has spilled out.	This was an oversight by the driver when he has filled the truck with fuel. The response to the spill was good.	20/02/2025

		Maintenance retraced the trucks movements and found the only spillage on the decline exciting the main site.		
24_25-55	24/02/2025	Rock from blast in Quarry has hit fixed plant damaging guards and conveyor scales	Fly rock can happen during a blast even though there are precautions. Our systems when blasting have prevented any injuries or major damage.	14/04/2025
24_25-59	20/03/2025	Sparks from oxy cutting have landed in a wheelie bin and then transferred to the waste skip bin. Smoke was observed in skip bin where other waste had caught alight or was smouldering.	This incident was discussed at Toolbox meetings in Precast & Concrete. Wheelie bin to be moved and lid to always be closed when not using.	14/04/2025
24_25-65	09/04/2025	Updating of Duggan's Asbestos Register has found that the floor tiles in the Quarry's Oil Shed contain Chrysotile Asbestos. The aluminium window putty in the Quarry's Oil Shed contains Chrysotile Asbestos.	It was decided to not pull up the tles in the oil shed as it is not a high traffic area and as long as they are not disturbed, they will be fine. Silicone of windows has been completed.	30/06/2025
25-26_S018	01/09/2025	Rockfall on southern face of Quarry. Overhanging Rocks Encroachment area is full.	Work in Progress	

10 INFRINGEMENT NOTICES

List of all environmental infringement notices and environmental protection notices issued under EMPC Act in relation to the activity during the reporting period.

Date	Description	Breach	Action
No infringement notices during the reporting period			

11 ACTIONS UNDER EMPC ACT

List any of the following actions relating to the activity during the reporting period:

- Environmental improvement programs
- Mandatory environmental audits, and
- Environmental agreements.

Date	Description	Breach	Action
18/12/2024	Contravention of permit condition under EMPC Act Section 51B, Conditions G8 and FF1.	Operator reported to EPA clearing had occurred in an unauthorised area.	Warning Notice

12 LEGAL PROCEEDINGS

Description of any proceedings (prosecutions) under Tasmanian or Commonwealth environmental legislation, environmental provisions other legislation or Council By-laws.

Date	Description	Breach	Action
No legal proceedings during the reporting period			

13 ENVIRONMENTAL MONITORING

A summary of data resulting from environmental monitoring as required under PCE or EPN conditions. Identify any results that breach permit conditions or EMP commitments.

Date	Parameter	Result	Reported
Low environmental risk - no environmental monitoring required			

14 STAFF AND CONTRACTOR ENVIRONMENTAL TRAINING

All employees are required to demonstrate understanding of the environmental awareness component of the site induction.

Quarry employees have read and understood the operating conditions included in the Environment Protection Notice.

15 COMMUNITY ENGAGEMENT

No community engagement programmes have been initiated in the period.

16 ENVIRONMENTAL MANAGEMENTS ACTIVITIES

Has the company undertaken any of the following:

- The company has implemented various dust reduction practices and systems during the reporting period.
- New plant deployed on site during the period have 'Adblue' atmospheric pollution reduction systems installed.
- The site practices wear part recycling to reduce waste and cost.
- The site is implementing an approved progressive rehabilitation plan for a worked-out portion of the quarry.
- A 100-kW solar array has been installed to offset electricity demand.
- Dust reduction and some process systems use recycled water from the sediment retention ponds to conserve potable water.

17 COMMITMENTS TO IMPROVE ENVIRONMENTAL PERFORMANCE

New technologies in excavator design are proving more reliable. Duggans Pty Ltd is preparing a business case to replace end of life diesel excavators with hybrid models which use less fuel and hence have lower emissions. Similarly, a hybrid dump truck will also be considered for transporting materials within the site.

A business case is also being prepared to change the diesel energised primary crusher to a system that is energised by electrical power. This initiative may be further supported by a second solar farm which may include battery storage.

FIGURE 4: CATOS HILL QUARRY - GENERAL ARRANGEMENT PLAN

FIGURE 5: CATOS HILL QUARRY - TYPICAL SECTIONS