



**WINSTONE**  
**AGGREGATES**

# **BURNHAM QUARRY**

## **QUARRY MANAGEMENT PLAN**

**DRAFT**

Burnham Quarry  
Aylesbury Road  
Burnham

Rev.	Version	Summary of Revision
August 2023	1.0	Draft for comment



## CONTENTS

1	CONTACT DETAILS .....	1
2	LEGAL DESCRIPTION & LOCATION.....	1
3	REQUIREMENT FOR QUARRY MANAGEMENT PLAN .....	1
4	QUARRY MANAGEMENT PLAN AIM .....	1
5	LINES OF RESPONSIBILITY.....	1
5.1	WINSTONE AGGREGATES.....	1
5.2	BURNHAM QUARRY STAFF & CONTRACTORS.....	2
5.3	TECHNICAL EXPERTS.....	2
6	HOURS OF OPERATION.....	2
7	TRAFFIC MANAGEMENT.....	2
7.1	SITE ACCESS, QUEUING, PARKING AND LOADING ARRANGEMENTS.....	2
7.2	SITE ACCESS, QUEUING, PARKING AND LOADING ARRANGEMENTS.....	3
7.3	MANAGING DEBRIS SPILLS ON ROADS.....	3
8	REHABILITATION.....	3
9	CULTURAL MATTERS .....	3
10	MANAGEMENT OF DUST.....	4
11	MANAGEMENT OF NOISE.....	4
11.1	NOISE EFFECTS.....	4
11.2	NOISE OBJECTIVE & MEASURES .....	4
11.3	NOISE PERFORMANCE STANDARDS – GENERAL OPERATIONS .....	4
12	SPILL CONTINGENCY.....	5
12.1	INVENTORY OF HAZARDOUS SUBSTANCES USED ON SITE.....	5
	LUBRICANTS AND OILS .....	5
	DIESEL .....	5
12.2	SAFETY.....	5
12.3	POTENTIAL SPILL SOURCES AND RISKS.....	5
12.4	PREVENTATIVE MEASURES IN PLACE .....	5

12.5	SPILL RESPONSE EQUIPMENT AVAILABLE ON SITE .....	6
	LAND-BASED SPILLS .....	6
	WATER-BASED SPILLS .....	6
12.6	EQUIPMENT AND OPERATORS AVAILABLE ELSEWHERE .....	6
13	QUARRY MANAGEMENT PLAN REVIEW .....	6
	APPENDIX A – BURNHAM QUARRY SITE PLAN.....	8
	APPENDIX B – BURNHAM QUARRY AIR QUALITY MANAGEMENT PLAN .....	9

## 1 CONTACT DETAILS

Burnham Quarry Manager - TBC

- [Mobile]
- [Email]
- [Postal Address]

## 2 LEGAL DESCRIPTION & LOCATION

- Legal Description: RS 27777, 27776, 19387, 25412, 27724 and 27725
- Location: Aylesbury Road, Burnham

## 3 REQUIREMENT FOR QUARRY MANAGEMENT PLAN

This Quarry Management Plan (“QMP”) has been prepared in accordance with [ ].

## 4 QUARRY MANAGEMENT PLAN AIM

It is the aim of this QMP that all works be undertaken in a manner that ensures compliance with all regulatory and consenting requirements. The regulatory and consenting requirements have a common aim which is to avoid, remedy or mitigate adverse effects on the environment including effects on the health of people and ecosystems and amenity effects.

## 5 LINES OF RESPONSIBILITY

### 5.1 WINSTONE AGGREGATES

Overall management of the site is the responsibility of the General Manager of Winstone Aggregates (a division of Fletcher Concrete and Infrastructure Ltd) (“Winstone”). Operations on site are to be managed by Winstone, with the Burnham Quarry Manager (see Section 1 above) responsible for the specific operation and management of the quarry, rehabilitation and any associated activities.

Winstone, as the consent holder, has a general responsibility to implement all consent conditions, to abide by this QMP, as well as all other Management Plans relevant to the Burnham Quarry.

This responsibility includes ensuring that all contractors operating on site are familiar with the requirements of these documents and are undertaking their activities in accordance with those requirements.

## 5.2 BURNHAM QUARRY STAFF & CONTRACTORS

Every Winstone employee and contractor at the Burnham Quarry has a duty to avoid, remedy or mitigate any adverse environmental effects arising from an activity carried out by them or on their behalf. This includes, but is not limited to:

- Attending inductions and training relating to managing potential environmental effects such as the timing and duration of dust and noise.
- Observing and reporting environmental issues such as excessive dust or noise, whether or not these have led to off-site effects when noticed.
- Reporting all incidents relating to environmental issues such as excessive dust or noise
- Ensuring processes for managing environmental issues such as excessive dust or noise are understood and adhered to.

Every Winstone employee has a duty to adopt the best practicable option to ensure that any effects remain within consented levels.

All personnel will be required to be appropriately qualified and/or trained for their role. The following systems will be implemented to manage environmental matters on site:

- Inductions;
- Project briefing;
- Job safety and environmental training including site-specific dust and noise issues;
- On the job training; and
- Posters and information leaflets.

Staff training records will be maintained on-site. The records will include:

- Who was trained;
- When the person was trained; and
- General description of training content and whether follow up/refresher courses are required later.

## 5.3 TECHNICAL EXPERTS

Technical experts will from time to time provide advice and technical expertise on the operation. An understanding of consent conditions and this QMP as well as all other Burnham Quarry Management Plans relevant to the site, is required.

## 6 HOURS OF OPERATION

As per relevant conditions of consent.

## 7 TRAFFIC MANAGEMENT

### 7.1 SITE ACCESS, QUEUING, PARKING AND LOADING ARRANGEMENTS

Access to Burnham Quarry is via Aylesbury Road. The long access road inside the quarry means queuing of trucks on Aylesbury Road is not an issue at Burnham Quarry. Customer trucks are loaded in the quarry stockyard, located adjacent to the processing area (see Site Plan at **Appendix A**).

### **7.2 SITE ACCESS, QUEUING, PARKING AND LOADING ARRANGEMENTS**

The site access off Aylesbury Road is level and has good sightlines on both directions. The access road within the quarry is sealed for the first 150m and includes speed humps and is maintained to a high standard. Burnham Quarry. All Winstone machinery and vehicles is regularly maintained to a high standard.

### **7.3 MANAGING DEBRIS SPILLS ON ROADS**

All material spillage onto public roads originating from Burnham Quarry is removed immediately to the satisfaction of the Selwyn District Council Transport Manager.

## **8 REHABILITATION**

A Landscape and Site Rehabilitation Management Plan will be developed and subject to certification by Selwyn District Council prior to the commencement of quarry operations.

## **9 CULTURAL MATTERS**

Winstone will inform mana whenua prior to the commencements of overburden stripping works and offer them the opportunity to monitor these works.

Should archaeological remains or features be uncovered during quarry operations, the following procedure must be followed;

- a. All works in the immediate vicinity of the discovery will cease immediately
- b. Immediate steps will be taken to secure the area to ensure the archaeological material is not further disturbed
- c. The consent holder or the consent holder's representative is to contact mana whenua and the Area Archaeologist of Heritage New Zealand (Heritage NZ). In the case of koiwi (human remains) the New Zealand Police must also be notified;
- d. Mana whenua and Heritage NZ will jointly appoint/advise a qualified archaeologist who will confirm the nature of the accidental discovery material
- e. If the material is confirmed as being archaeological, the consent holder will ensure an archaeological assessment is carried out by a qualified archaeologist, and if appropriate, an archaeological authority is obtained from Heritage NZ before work resumes (as per the Heritage New Zealand Pouhere Taonga Act 2014);
- f. The consent holder will also consult with mana whenua on any matters of tikanga (protocol) that are required in relation to the discovery and prior to commencement of any investigation
- g. If koiwi (human remains) are uncovered, in addition to the steps above, the area must be treated with utmost discretion and respect, and the koiwi dealt with according to both law and tikanga, as guided by mana whenua;

- h. Works in the area shall not recommence in the immediate area until authorised by mana whenua, Heritage New Zealand (and the NZ Police in the case of koiwi) and any other authority with statutory responsibility, to ensure all statutory and cultural requirements are met;
- i. All parties will work towards work recommencing in the shortest possible timeframe while ensuring that any archaeological sites discovered are protected until as much information as practicable is gained and a decision regarding their appropriate management is made, including obtaining an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 if necessary. Appropriate management may include recording or removal of archaeological material.

## 10 MANAGEMENT OF DUST

Please refer to the Burnham Quarry Air Quality Management Plan at Appendix B.

## 11 MANAGEMENT OF NOISE

### 11.1 NOISE EFFECTS

Noise is generated by several different activities carried out at the quarry including crushing, extraction, mobile plant, machinery, sales operations, and restoration activities. If noise is not controlled at the quarry there is the potential for noise to cause a nuisance to people who live near the quarry.

### 11.2 NOISE OBJECTIVE & MEASURES

Noise mitigation measures are intended to avoid, remedy, or mitigate adverse effects of noise generated by on-site activity on the residents of dwellings and on business activities in the vicinity of the quarry. Measures to assist in meeting this objective include:

- Managing the time and location of particularly noisy operations around the site to ensure compliance with the performance standards.
- Fixed processing plant, excluding conveyors are located in places that reduce the noise level at the boundary of the quarry.
- Machinery is regularly maintained to ensure that noise produced from machinery is kept to a practicable minimum.
- Bunds are constructed where appropriate to reduce the effects of noise beyond the boundary of the quarry.

### 11.3 NOISE PERFORMANCE STANDARDS – GENERAL OPERATIONS

Burnham Quarry is located in the Rural (Outer Plains) Zone of the Operative Selwyn District Plan. The permitted activity noise limits for the Rural Zone are reproduced in Table below, from Table C9.3 of Rule 9.16.1. These limits are assessed at *“the notional boundary<sup>1</sup> of any dwelling, rest home, hospital, or classroom in any education facility except where that dwelling, rest home, hospital or classroom is located within a living zone”*

• Daytime	0730AM - 8.00PM	60 dB (L <sub>10</sub> )
		85 dB (L <sub>AMAX</sub> )
• Night	8.01PM - 0729AM	45 dB (L <sub>A10</sub> )
		70 dB (L <sub>AFMAX</sub> )

## 12 SPILL CONTINGENCY

### 12.1 INVENTORY OF HAZARDOUS SUBSTANCES USED ON SITE

#### LUBRICANTS AND OILS

Lubricants and oils are present in on-site storage tanks and various equipment including excavators, loaders and dump trucks. This includes greases as well as hydraulic, engine, and transmission oils.

#### DIESEL

Diesel fuel is present in all on-site machinery and is identified as a potential environmental contaminant.

### 12.2 SAFETY

The safety of people overrides all other considerations. In the event of spillage of flammable or explosive hydrocarbons, all sources of ignition must be shut down and the area checked for flammable vapours before deploying machinery in the area. Operations in conditions that endanger personnel must be suspended until conditions improve.

Personnel involved in a clean-up must be appropriately trained and issued with the appropriate protective clothing and safety equipment.

### 12.3 POTENTIAL SPILL SOURCES AND RISKS

The presence of diesel and other hazardous substances present on site are considered to have a low potential risk of environmental impact due to spills, as there is generally an opportunity to prevent the spill from getting into open water and ground water. The following are situations where there is potential for a spill of oil onto land:

- Re-fuelling (excavators) and servicing (excavators)
- Rupture (e.g. hydraulic line)
- Vandalism
- Equipment malfunction

Spill procedures set out below have taken into consideration all the different potential spill scenarios. It is not considered necessary to have different spill procedures for each scenario.

### 12.4 PREVENTATIVE MEASURES IN PLACE



When re-fuelling, the plant operator is required to remain in attendance in accordance with Winstone's standard operating procedure for re-fuelling.

Additional measures to prevent spills include:

- All mobile plant is locked overnight.
- Regular preventative maintenance is carried out on all mobile plant to ensure plant failure is minimised.
- There are weekly checks of all mobile plant, which are signed off by the Burnham Quarry manager.
- Plant operators are required to inspect their vehicles daily for any obvious signs of wear and tear.
- Any major equipment failures are reported to the Burnham Quarry manager as soon as possible.

## **12.5 SPILL RESPONSE EQUIPMENT AVAILABLE ON SITE**

### **LAND-BASED SPILLS**

The spill kits for land-based spills (e.g., engine oil or diesel) contain Spill-Sorb, a non-toxic, field proven, industrial absorbent. Spill-Sorb is spread over the affected area as quickly and evenly as possible to a sufficient depth to allow for immediate absorption. After use the absorbent/spill mix can be containerised for removal; either to be incinerated or sent to a land fill.

### **WATER-BASED SPILLS**

Both Spill Sorb and floating booms will be used to contain any water-based spill (e.g., oil). Spill-Sorb is scattered across the surface of the water to a sufficient depth so as to ensure that full absorption will take place. Spill Sorb floats and the contaminated material will be contained using floating booms before being removed for disposal.

## **12.6 EQUIPMENT AND OPERATORS AVAILABLE ELSEWHERE**

Environment Canterbury has equipment and resources to deal with spills that are considered more significant than Winstone can cope with itself. Environment Canterbury's Environmental Team manages incidents via a 24-hour, 7-day incident response service. To report an incident, phone the environmental protection team on 0800 765 588.

## **13 QUARRY MANAGEMENT PLAN REVIEW**

This QMP will be reviewed annually, with review parameters including, but not limited to:

- Any internal and external audit reports;
- Reports of Council officers;
- Review of work practices against industry best practice;
- Environmental incident reports; and

- Complaints received.

APPENDIX A – BURNHAM QUARRY SITE PLAN

APPENDIX B – BURNHAM QUARRY AIR QUALITY MANAGEMENT PLAN