CONCRETE BATCHING PLANT MANAGEMENT PLAN

DOCUMENT NO: DOPP-CONC-001

Recommended Documents to be Read in Conjunction

This management procedure should be read in conjunction with the DOPPELMAYR (DOPP) Concrete Integrated Management Systems Policy - IMS (Incorporating Quality, Health Safety and Environmental), DOPP plant risk assessments:

Distribution

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Revisions

DATE	REV	DETAILS	PREPARED	APPROVED
18/04/2024	A	Draft	S. Turner	
05/05/2024	B	Photos added, reference drawing added.	S. Turner	

Reference Drawings

Smiggin Holes Quarry Mobile Batch Plant	2021-15-C-100_A

1.0 Scope

This Concrete Batching Plant Management Plan is applicable for the batching of concrete at Smiggin Holes quarry for the delivery of concrete to the Mt Perisher-6 and associated works project. Project specific conditions and approvals are also to be addressed if required.
DOPP proposes the establishment of a mobile concrete batching plant. This will require the following plant and equipment:

- Mobile batch plant –MODEL – Thomas Manufacturing Top of The Range Batching Plant (40m3/hr)
- Loader
- 2x20,000L water tank
- Agitator Trucks
- 2xHorizontal cement silo – MODEL – 20ft Iso tank
- Material Storage Areas (Cementitious, Aggregate and Admixtures)
- 50KVA generator
- 2x washout skips
- 4x waste concrete block moulds

Water supply will initially be via water trucked in with a storage water tank located onsite. Partial re-use of process water is also proposed.
The batch plant will be powered by generators.
Hazardous goods onsite will be Diesel Fuel and Cement products such as Flyash and GP Cement. Additionally, admixtures for concrete batching that could include the following may also be stored onsite in bunded containment

- Master AIR
- Masterglenium
- Master Poz

2.0 Objectives

The objectives of this Concrete Batching Plant Management Plan are to:

- Identify potential environmental impacts of the concrete batching plant;
- Detail environmental controls to minimise impacts of the establishment and operation of the plant;
- Address any relevant project specific conditions regarding planning approvals;

3.0 Project Details

Produce and supply concrete for general works for the construction of the Mt Perisher 6 and associated works
Approximately 1000m^3 is to be delivered from the plant in a 5 month period
Undertake mix design trials and plant configuration setup.
Complete full risk assessment on plant and identify and potential hazards
Develop SOP's and training matrix to ensure all personnel understand the plant and are trained on environmental requirements.

3.1 Performance Criteria

1. Plant operations to occur within defined noise, air and water quality limits. As set by DOPP Concrete or project specific approval conditions. 2. Any and all complaints to be addressed within 48 hours
3. Waste management addressed as per this plan
4. Produce materials to meet internal requirements and agreed specifications.

3.2 Potential Environmental Impacts

- Dust – Impact air quality through the creation of dust.
- Noise – Increase in local noise levels due to plant operations.
- Water – Impact to water quality (increase in pH and suspended solids) as a results of wastewater runoff.
- Chemicals/Fuels – Impact to water quality as a result of water runoff.
- Traffic – Increased local traffic around plant area.
- Waste – Waste created by the plant i.e returned concrete, general rubbish.
- Cement / SCMs (Supplementary Concrete Materials) – Impact air and water quality through dust and fine particles into the environment.

4.0 Management Strategies		
Air Quality		
Actions	**Responsible**	**When**
Batch plants set up on hardstand to reduce dust	DOPP	Prior To Establishment
Enclose stockpiles and look at site set up position to minimise wind effects.	DOPP	Prior To Establishment
During all site operations and the operation of the plant, all reasonable and feasible measures will be implemented to minimise dust generation. This will include: • Use of watering systems as dust suppression on production belts, hoppers, stockpiles, unsealed hardstands and other exposed or trafficable areas (This may be by a watercart) • Re-use of process water for water for dust suppression (where possible) Use of filters on all silos • Use of air tight connections and valve systems	DOPP	At All Times
Monitoring of dust levels • Visual inspections to be done at all times • If required monitoring points are to be set up on site boundaries to monitor dust. These should be checked and recorded daily to insure activities are within limits.	DOPP	Visual – At All Times Monitoring – Daily/Weekly (If Required)
Weekly site Environmental Inspections to include assessment of dust suppression techniques and methods and report any positives or negatives – Issues to be raised with Plant Manger to review.	DOPP	Weekly
Implementation of additional techniques where dust suppression inadequate (monitoring results) i.e fencing / bunding	DOPP	If Required
Stabilised site entry / exit point established for entry onto public roads.	DOPP	Prior To Establishment
Public roads adjacent to site entry / exit to be kept free from dust, soil and mud build up as a result of plant operation	DOPP	At All Times & If Required
Minimise drop heights between plant conveyors and feed hoppers	DOPP	During Production
Silos must not be overfilled	DOPP	At All Times
All fine particle admixtures and chemicals to be stored in a building or container	DOPP	At All Times
All traffic on site will be restricted to 20km/h. As well as a safety condition this will help to control dust onsite and limit noise.	DOPP	At All Times
Noise		
Actions	**Responsible**	**When**
Batch plant to be restricted to hours 7am to 5:00pm Mon – Sat (unless additional approval licence granted or project approved)	DOPP	At All Times
Any out of hours works will be subject to noise monitoring and verification	DOPP	At All Times

Noise (Continued)		
Actions	Responsible	When
All plant and equipment to undergo a Plant Hazard Assessment before assessing site	DOPP	At All Times
Unless otherwise specified or approved, plant and equipment shall not be started or left operating during work hours unnecessarily.	DOPP	Prior To Establishment
Monthly monitoring of noise levels at project or property boundaries to ensure operations are within a reasonable limit – 58dBA		
All traffic on site will be restricted to 20km/h. As well as a safety condition this will help to control dust onsite and limit noise.	DOPP	At All Times
Water		
Actions	Responsible	When
Site to be bunded where possible and all stormwater to be directed to site sediment detention pond. Water to be reused onsite where possible or if tested and within required limits (treatment may also an option) discharged off site.	DOPP	Monthly
Waste water created onsite to be used onsite for dust suppression.	DOPP	At All Times
If drains present where plant site is established these should be cut off to prevent any unplanned discharge offsite	DOPP	Prior To Establishment
Monitoring of water run off as part of Monthly and post rain event environmental inspection.	DOPP	Monthly Or After Rain Event (+ 5mm)
Traffic		
Actions	Responsible	When
Local traffic impacts will be restricted to delivery of cementitious and aggregate materials and supply of concrete in agitators offsite. This is estimated at a maximum 10 truck loads (may vary depending on site requirements) per day. If plant is set up within a project this will eliminate the need for agitator trucks on main roads. All loads will be covered and be subject site and project specific rules and procedures.	DOPP	At All Times
All traffic to follow the traffic management plan (TMP) prepared for site and entry / exit onto local roads.	DOPP	At All Times
All traffic on site will be restricted to 20km/h. As well as a safety condition this will help to control dust onsite and limit noise.	DOPP	At All Times
Public roads adjacent to site entry / exit to be kept free from dust, soil and mud build up as a result of plant operation • Rumble grids maybe installed if required at exit points to control tracking of materials offsite onto public roads	DOPP	At All Times & If Required

Waste		
Actions	Responsible	When
Reuse of waste water within site for dust suppression, and mix design	DOPP	At All Times
Recycling of waste concrete via casting into Beton Blocks	DOPP	At All Times
All site bottles and can to be recycled where possible utilizing recycling containers provided in break rooms and site offices.	DOPP	At All Times
Chemicals		
Actions	Responsible	When
All fuels and chemicals onsite to be labelled correctly and should be accompanied by a SDS readily available for viewing. All fuels and chemicals are to be stored in a bunded area or bunded container.	DOPP	At All Times
All fine particle admixtures and chemicals to be stored in a bunded container storage.	DOPP	At All Times

5.0 Monitoring		
Requirements	Responsible	When
Monitoring of site at sensitive receivers may be undertaken to ensure levels are acceptable. This can be the DOPP HSE Manager or this maybe a site/project specific requirement.	DOPP	If Required Or If Directed
Any excessive noise, air quality or visual amenity issues shall be recorded on the Environmental Inspection. Informal daily observations are to be recorded in site diaries, these entries should include considerations of weather conditions and certain activities with a high noise or dust generation potential.	DOPP	At All Times & Weekly
If required dust deposition gauges maybe used to monitor sensitive receivers. This can be the DOPP HSE Manager or this maybe a site/project specific requirement. If sampling is undertaken, samples are to be sent to a NATA accredited laboratory for analysis and reporting.	DOPP	If Required Or If Directed
If a complaint is received, appropriate monitoring is to be undertaken to determine validity. Efforts should be made to address the complaint and any reasonable additional steps to prevent further complaints.	DOPP	If Required

6.0 Reporting		
Requirements	Responsible	When
Details of field observations shall be reported via Environmental Inspections and Housekeeping Inspections. These are to be communicated to all staff during pre-starts, toolbox and team meetings.	DOPP	At All Times
All complaints / Incidents regarding noise, air quality and visual amenity must be reported to the DOPP HSE Manger immediately. Relevant procedures for complaints handling / reporting should be followed.	DOPP	At All Times
DOPP Management Team is to be notified of any incident that has caused or is likely to cause material harm to the environment. Relevant regulators and stakeholders are to be notified (as required by the Protection of the Environment Operations Act 1997)	DOPP	At All Times
If DOPP is operating on a project site, DOPP will notify project management team of all valid incidents or complaints - verbally within 2 hours and in writing within 24 hours.	DOPP	If Required

7.0 Training		
Requirements	Responsible	When
All DOPP personnel and sub-contractors to be inducted before commencing works onsite. Inductions to include all relevant information regarding site safety and environmental requirements.	DOPP	At All Times
All DOPP personnel to be trained on Environmental requirements yearly. Records of completion of this training are to be kept for reference. Any new requirements or regulations will be toolboxed as soon as possible after changes are made and all personnel are to sign off on amendments.	DOPP	At All Times

8.0 Suggested Corrective Actions	
Example	Suggested Corrective Action
Community query / complaint on noise or dust levels	• Investigate the complaint • Monitor the site to confirm • Implement appropriate management and mitigation measures (where feasible)
Exceedance of air quality criteria	• Where there is a clear exceedance and impact of dust, cease dust generating activities where possible using existing controls i.e water cart. • Determine the source of the dust, stop work if necessary, identify appropriate alternative and implement controls or mitigation methods. • Solutions to be added to action plan, SMWS, SOP's and toolboxes. All staff to be trained regarding changes and sign onto new SWMS and SOP's.
Sediment run off	• Construct sediment fencing and retention pond at point of run-off • Clean sediment pond as required

Reviewed by – *Review of hazard and controls to be carried out by workgroup, prior to use on project*				
Name				
Role				
Signature				
Date				

9.0 Equipment Photos	
20ft Iso container for Cement storage	
Waste concrete Beton Block mould	

Mobile batching plant – Thomas manufacturing top of the line		
Beton block storage bay