CONCRETE BATCHING PLANT SITE ENVIRONMENTAL MANAGEMENT PLAN

1.0 ENVIRONMENTAL RESPONSIBILITIES		
Title	**Name and Contact No.**	**Responsibility**
Perisher Operations Director	Michael Fearnside – 6459 4408 / 0428 484 273	Project Manager: • Oversee the project and manage contractors. • Liaise with Perisher staff and Contractors. • Respond to complaints & inquiries of environmental matters. • Liaise with DPIE and NPWS.
Mountain Manager, Perisher	Andrew Kennedy – 6459 4408	Site Supervisor: • Day to day supervision of the project. • Ensure conditions of consent are complied with. • Implementation and maintenance of environmental controls as detailed in the SEMP
Environmental Manager, Perisher	Liam Menhennitt – 6459 4487	Site Environmental Manager: • Site induction. • Oversee environmental management of the project. • Audit implementation and maintenance of environmental controls as detailed in the SEMP. • Manage rehabilitation and offsets program. • Monitor the site.

2.0 SCOPE

This Site Environmental 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. It is an addendum to the approved SEMP for the project.

Project specific conditions and approvals are also to be addressed if required.

Perisher proposes the establishment of a mobile concrete batching plant to be operated by Doppelmayr Australia for the construction of the Mt Perisher Six Seat Chairlift. 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 – 20 Iso tank
- Material Storage Areas (Cementitious, Aggregate and Admixtures)
- 50KVA generator
- 2x washout skips
- 4x waste concrete block moulds
- Additive storage – bunded pallets and enclosed container

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

3.0 OBJECTIVES

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

- Identify potential environmental impacts of the temporary 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;

4.0 PROJECT DETAILS

Produce and supply concrete for general works for the construction of the Mt Perisher 6 and works associated with DA10115.
Approximately 1000m3 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.

4.1 Performance Criteria

1. Plant operations to occur within defined noise, air and water quality limits. As set by Doppelmayr Aus, 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.

4.2 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 particles and washout being released into the environment.

5.0 MANAGEMENT STRATEGIES

5.1 Air Quality

Actions	Responsible	When
Batch plant set up will not require earthworks and will be operated in existing excavated area of the stockpile site to reduce dust.	Doppelmayr Aus	Prior To Establishment
Enclose stockpiles, use container silos and choose site set up position to minimise wind effects.	Doppelmayr Aus	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 dust suppression (where possible) • Use of filters on all silos. • Use of airtight connections and valve systems.	Doppelmayr Aus	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 ensure activities are within limits.	Doppelmayr Aus	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 Project Manager to review.	Perisher Blue Pty Ltd	Weekly
Implementation of additional techniques where dust suppression inadequate (monitoring results) i.e. fencing / bunding.	Doppelmayr Aus	If required
Stabilised site entry / exit point established for entry onto public roads.	Doppelmayr Aus	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.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times & If required
Minimise drop heights between plant conveyors and feed hoppers.	Doppelmayr Aus	During Production
Silos must not be overfilled.	Doppelmayr Aus	At All Times
All fine particle admixtures and chemicals to be stored in a building or container.	Doppelmayr Aus	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.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times
5.2 Noise		
Actions	**Responsible**	**When**
Batch plant will operate between the hours of 7.00 am and 6.00pm 7 days a week consistent with the development approval (condition D.2 DA10115) for the Mt Perisher Six Seat Chairlift.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times
Any out of hours works will be subject to noise monitoring and verification.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times
All plant and equipment to undergo a Plant Hazard Assessment before assessing site.	Doppelmayr Aus	At All Times
Unless otherwise specified or approved, plant and equipment shall not be started or left operating during work hours unnecessarily.	Doppelmayr Aus	Prior To Establishment
Monthly monitoring of noise levels at project or property boundaries to ensure operations are within a reasonable limit – 58dBA.	Doppelmayr Aus	Monthly
All traffic on site will be restricted to 20km/h. As well as a safety condition this will help to limit noise.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times
5.3 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 (treatment may also be an option) prior to being discharged off site.	Doppelmayr Aus/Perisher Blue Pty Ltd	Monthly
Wastewater created onsite to be used onsite for dust suppression and batching after ph testing and stabilisation.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times
If drains present where plant site is established these should be cut off to prevent any unplanned discharge offsite.	Perisher Blue Pty Ltd	Prior To Establishment
Monitoring of water run off as part of Monthly and post rain event environmental inspection.	Perisher Blue Pty Ltd	Monthly Or A er Rain Event (+ 5mm)
Concrete washout will be stored in NPWS approved washout skips to consolidate solids in accordance with NSW government guidelines.	Doppelmayr Aus	At All Times

5.4 Traffic

Actions	Responsible	When
Traffic to the stockpile site will not be impeded by the operation of the temporary plant.	Doppelmayr Aus	At all times
Additional local traffic impacts of the operation of the temporary plant will be limited to the delivery of cementitious and aggregate materials and supply of concrete in agitators offsite. This is estimated at a maximum 10 truckloads (may vary depending on site requirements) per day. The operation of the plant from the subject site will eliminate the need for agitator trucks to come from Jindabyne. Smaller agitator trucks will transport the concrete from the stockpile site to the construction site at Mount Perisher. All loads will be covered and be subject site and project specific rules and procedures.	Doppelmayr Aus/Perisher Blue Pty Ltd	At all times
All traffic to follow the traffic management plan (TMP) prepared for site and entry / exit onto local roads (Link Road) and Main Road 286 (Kosciuszko Road).	Doppelmayr Aus/Perisher Blue Pty Ltd	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.	Doppelmayr Aus/Perisher Blue Pty Ltd	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. No additional material transfer is expected as the site is currently used for material storage and stockpiling. If required rumble grids may be installed at exit points to control tracking of materials offsite onto public roads should the additional traffic generated by the temporary batching plant warrant such measures.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times & If required

5.5 Waste

Actions	Responsible	When
Recycling of waste concrete via casting into Beton Blocks which will be stored for future use on the project for construction of retaining walls and associated works.	Doppelmayr Aus	At All Times
All site bottles and cans to be recycled where possible utilizing recycling containers provided in break rooms and site offices.	Doppelmayr Aus/Perisher Blue Pty Ltd	At All Times

5.6 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.	Doppelmayr Aus	At All Times
All fine particle admixtures and chemicals to be stored in or on bunded pallets and enclosed container storage.	Doppelmayr Aus	At All Times

6.0 MONITORING

Requirements	Responsible	When
Monitoring of site at sensitive receivers may be undertaken to ensure levels are acceptable. This can be the Doppelmayr Aus HSE Manager or this maybe a site/project specific requirement.	Doppelmayr Aus	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. The closest residential/tourist accommodation buildings are approximately 490m from the operation site.	Doppelmayr Aus	At All Times & Weekly
If required dust deposition gauges maybe used to monitor sensitive receivers. This can be the Doppelmayr Aus 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.	Doppelmayr Aus	If Required or If directed
Monitoring of stormwater to ensure it is within limits prior to discharging off site	Doppelmayr Aus	Monthly / Post Rain Event
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.	Doppelmayr Aus	If required

7.0 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.	Doppelmayr Aus	At All Times
All complaints / Incidents regarding noise, air quality and visual amenity must be reported to the Doppelmayr Aus and Perisher HSE Manger immediately. Relevant procedures for complaints handling / reporting should be followed.	Doppelmayr Aus	At All Times
Doppelmayr Aus is to notify the Perisher Project Management Team 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)	Doppelmayr Aus	At All Times
If Doppelmayr Aus is operating on a project site, Doppelmayr Aus will notify the Perisher Project Management Team of all valid incidents or complaints - verbally within 2 hours and in writing within 24 hours.	Doppelmayr Aus	If required

8.0 TRAINING		
Requirements	**Responsible**	**When**
All DOPPELMAYR AUS personnel and sub-contractors to be inducted before commencing works onsite. Inductions to include all relevant information regarding environmental requirements.	Doppelmayr Aus	At All Times
All DOPPELMAYR AUS 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 tool boxed as soon as possible asper changes are made and all personnel are to sign off on amendments.	Doppelmayr Aus	At All Times

9.0 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	• Determine the source of the dust, stop work, if necessary, identify appropriate alternative and implement controls or mitigation methods. • Where there is a clear exceedance and impact of dust, address dust generating activities where possible using existing controls i.e. water cart. • 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