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1 Introduction

This report supports the Works Approval application for a concrete batching plant at Lot 1032 Murrena Street, Wedgefield. It contains information required for the Department of Environment and Conservation (DEC) to assess the application under Part V of the *Environmental Protection Act 1986* (EP Act).

1.1 Project Background

Mobile Concreting Solutions Pty Ltd (MCS) proposes to construct and operate a concrete batching plant at Lot 1032 Murrena Street, Wedgefield. The land is owned by E R Dillon as trustee for The Complete Trust and is located in the middle of Wedgefield in the Pilbara region of Western Australia. MCS has leased this land over a three year period for the purpose of establishing a concrete batching plant. Lot 1032 Murrena Street is an established light industrial site which contains existing staff accommodation. These facilities have been taken over by MCS as part of the three year lease.

1.2 Purpose of Application

The production of concrete is the key to MCS's business and the construction of a commercial scale concrete batching plant at Lot 1032 Murrena Street will enable MCS to provide concrete to a variety of customers in and around Port Hedland.

The purpose of this Works Approval application is to obtain approval for the construction and operation of the proposed concrete batching plant under Part V of the EP Act. The application will also demonstrate compliance with the Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998 (Concrete Batching Regulations).

2 Administration

2.1 Applicant/Occupier Details

The applicant and occupier of the premises for which this application is made, is:

Mobile Concreting Solutions Pty Ltd
PO Box 1435
KARRATHA WA 6714
Australian Business Number: 50 130 398 266
Australian Company Number: 130 398 266

MCS's registration details with the Australian Securities and Investments Commission (ASIC) are provided in Appendix A.

All correspondence in relation to this application should be addressed to the key contact for this application:

Richard Clarke
Managing Director
Ph: (08) 9185 0400
Fax: (08) 9185 0450
Email: rjc@mobileconcrete.com.au

2.2 Prescribed Premises Details

The location of the prescribed premises boundary for the proposed concrete batching plant is the boundary of Lot 1032 Murrena Street, Wedgefield, 6721, as shown in red in Figure 1.

The concrete batching plant will be designed to produce a maximum of 100,000 tonnes of concrete per year. Under Schedule 1 of the Environmental Protection Regulations 1987, the concrete batching plant will become a prescribed premises under Category 77, as the design capacity is greater than the 100 tonnes threshold as detailed in Table 1 below.

Table 1: Prescribed premises category

Category	Description	Category Threshold	Design Capacity	Expected Throughput
77	Concrete batching or cement products manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises.	100 tonnes or more per year	150,000 tonnes	35,000 tonnes

Figure 1: Location of prescribed premises

2.3 Stakeholder Consultation

The proposed location of the concrete batching plant will be at Lot 1032 Murrena Street, Wedgefield. This land is owned by E R Dillon as trustee for The Complete Trust and is located in the centre of Wedgefield, approximately 2 km north of South Hedland and 16 km from the Town of Port Hedland. Wedgefield has a small residential population and is zoned as a light industrial area (LIA) and a concrete batching plant is a permitted use under the Town of Port Hedland Town Planning Scheme No.8.

Other key stakeholders include DEC, sensitive receptors and surrounding businesses.

2.4 Other Approvals

In addition to the Works Approval and operating licence from DEC, the concrete batching plant may also require development approval and a building licence from the Town of Port Hedland.

3 Site Environmental Characteristics

Lot 1032 Murrena Street was cleared prior to MCS accessing the land, therefore it is assumed that it has gone through the necessary government and Town of Port Hedland approval processes, with environmental assessments carried out where required.

3.1 Physical Environment

The Wedgefield LIA is located in the Pilbara bioregion (WAPC, 2009).

3.1.1 Climate

The Pilbara has an arid climate with two distinct seasons: a pronounced dry spell between August and October, and a wet season between December and March, continuing through until June and accounting for much of the average annual rainfall. The average annual rainfall is 290 mm and the mean number of days where rainfall reaches or exceeds 1 mm is 38. The region is characterised by low and variable rainfall, generally resulting from local thunderstorms and occasional high intensity cyclonic events (BoM, 2013).

Port Hedland's climate is characterised by hot summers where the January temperature has a mean minimum of 25.6°C and a mean maximum of 36.4°C, and warm winters where July temperature averages range from 12.3°C to 27.1°C (BoM, 2013).

The BoM weather station adjacent to the site that has consistently recorded monthly rainfall data is Port Hedland Airport (BoM, 4032), which is located approximately 5.3 km south east of the Wedgefield LIA. Data has been recorded from the Port Hedland Airport weather station since 1942 (BoM, 2013).

3.1.2 Surface Water and Groundwater

The closest permanent natural watercourse is a portion of South Creek that typically flows following significant rainfall events (and some high tides) and is located approximately 500 m west of the Project Area.

The depth to groundwater is unknown, however it is expected to be relatively shallow due to the site's low elevation and proximity to the coast.

3.1.3 Geology and Soils

The topography of the area around Port Hedland is generally flat sandy lowlands, with broad areas of bare coastal mudflats, intertidal mudflats and tidal creeks (BHP, 2009).

The Pilbara bioregion comprises predominantly quaternary alluvial and older colluvial coastal and sub-coastal plains. Resistant linear ranges of basalts occur across the coastal plains, with minor exposures of granite (Kendrick and Stanley, 2001).

3.2 Biological Environment

3.2.1 Flora and Vegetation

The site is located within the middle of an established LIA and there is no native vegetation in close proximity.

3.2.2 Fauna

As the site was cleared prior to being leased, no significant fauna species have been observed or are likely to permanently reside within the site. MCS assumes that necessary flora and fauna investigations have previously been carried out as part of the site development process.

3.3 Social Environment

The proposed concrete batching plant will be located within a LIA where the construction and operation of industrial facilities is generally accepted by key stakeholders. The layout of the site is shown in Figure 2.

3.3.1 Aboriginal Heritage

MCS assumes that the development of the Wedgefield LIA was carried out in accordance with the *Aboriginal Heritage Act 1972* (WA). The construction and operation of the proposed concrete batching plant will therefore not impact on any known Aboriginal heritage sites.

3.3.2 Sensitive Receptors

The nearest potential sensitive receptors are listed in Table 2.

Table 2: Sensitive receptors

Receptor	Distance from prescribed premises
South Hedland residential area	~ 2.7 km
Hedland Senior High School	~ 3.2 km

4 Design, Construction and Operations

The scope of this application includes the key components listed in Table 3. The sections below provide detail regarding the design, construction methods and operation of these components. Figures 2 and 3 show the location and layout of these facilities.

Table 3: Key components of the concrete batching plant

Component	Description
Aggregate bins	4 aggregate bins, each capable of holding 260 t of sand and Aggregate. The bins have a concrete floor, tilt panel sides and a shaded roof.
Weigh hopper	Weighs aggregate and sand to ensure correct mixing ratios.
Cement silos	2 x 26 m^3 enclosed cement silos, measuring 12 m in length and 4 m in height.
Surge hopper	Transfers the aggregate, sand and cement from the batching plant to the trucks. Expected to be 10 m in length and uncovered, as the material is conditioned with water in the process.
Gob hopper	The gob hopper is fitted to the conveyor and allows material to be held for a period of time (i.e. until the next truck is in position).
Dust extraction system	Fitted to the cement silos and the gob hopper.
Water storage tanks	4 x 23 kL water storage tanks.
Wedge pit	Gathers excess batch and slump water before it is pumped into a storage tank adjacent to the pit. The wedge pit is made of concrete with dimensions 6.5 m long, 4 m wide and 1 m deep.
Washout pits	2 x pits used for washing concrete out of the trucks. The washout pits are made of concrete with dimensions of 4.2 m long, 10 m wide and 1.2 m deep.
Settling ponds	Treats water from the washout pits. Three 4 kL settling ponds in total, each with rebates at gradual levels to allow clean water to flow into the adjacent pond. The settling ponds are made of concrete with dimensions of 4.2 m long, 3 m wide and 0.9 m deep.
Holding tanks	1 x 23 kL tank that accepts treated water from the settling ponds.
Fuel storage area	8 kL self bunded diesel tank.

4.1 Inputs and Outputs

Key inputs and outputs for the concrete batching plant are listed in Table 4. Materials are all sourced from offsite, with water supply being provided by the Town of Port Hedland or subsequent scheme water.

Table 4: Expected annual inputs and outputs

Inputs		Outputs	
Material	Volume (m^3)	Material	Volume (m^3)
Aggregates	12,200	Concrete	30,000 (35,000 tonnes)
Sand	12,000		
Water	6,000		
Admixtures	42		
Cement	2,857		

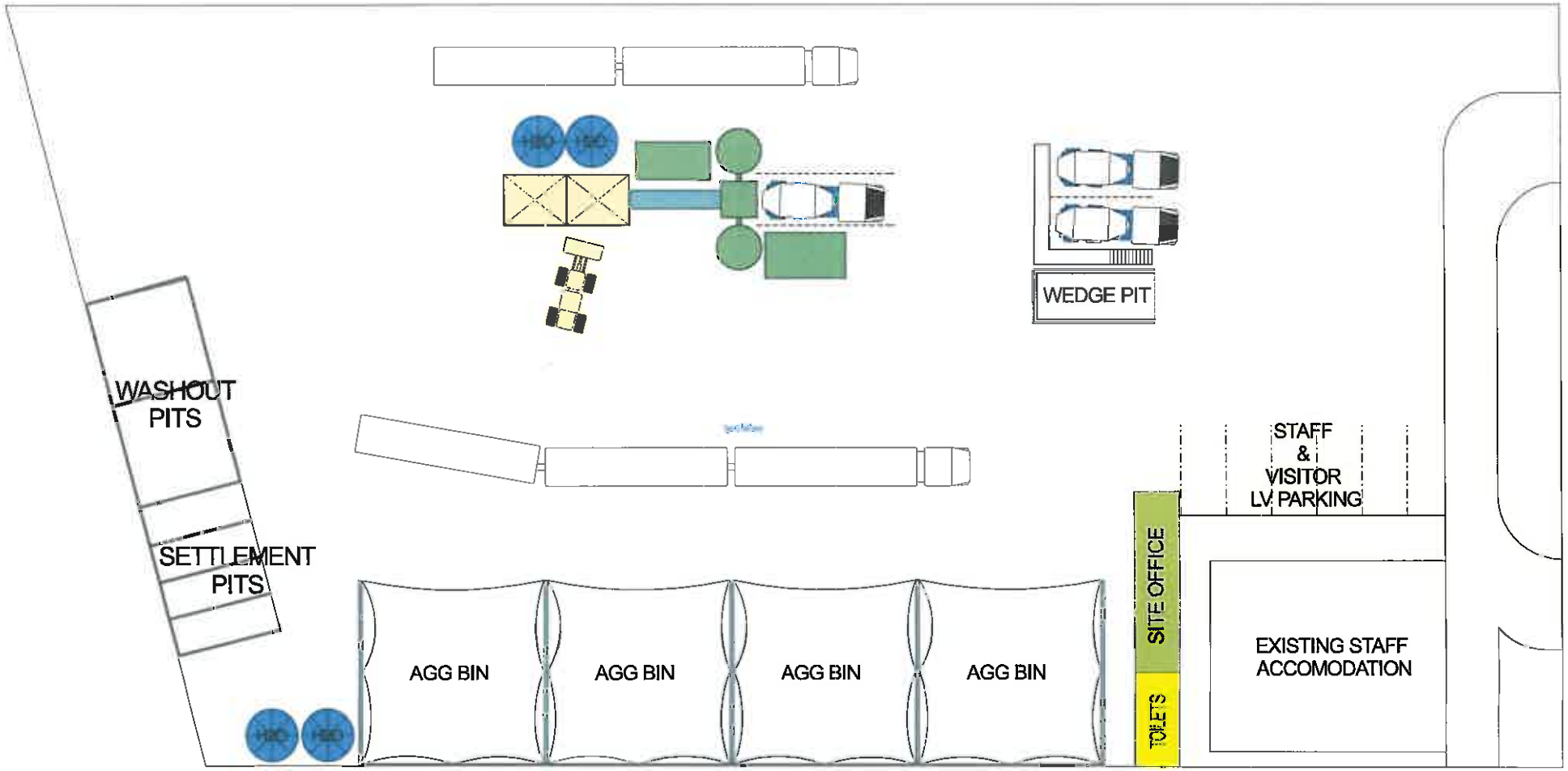


Figure 2: Site layout

MCS Mobile Concrete Solutions PTY LTD
Need some concrete? We'll be there!
PO Box 1435
Karratha 6714
Ph: (08) 9185 0400
Fax: (08) 9185 0450
www.mobileconcrete.com.au

Project	MCS PORT HEDLAND LOT 1032 MURRENA STREET WEDGEFIELD		
Date	Scale	Drawn By	Draw No.
	N/A	RP	1/1

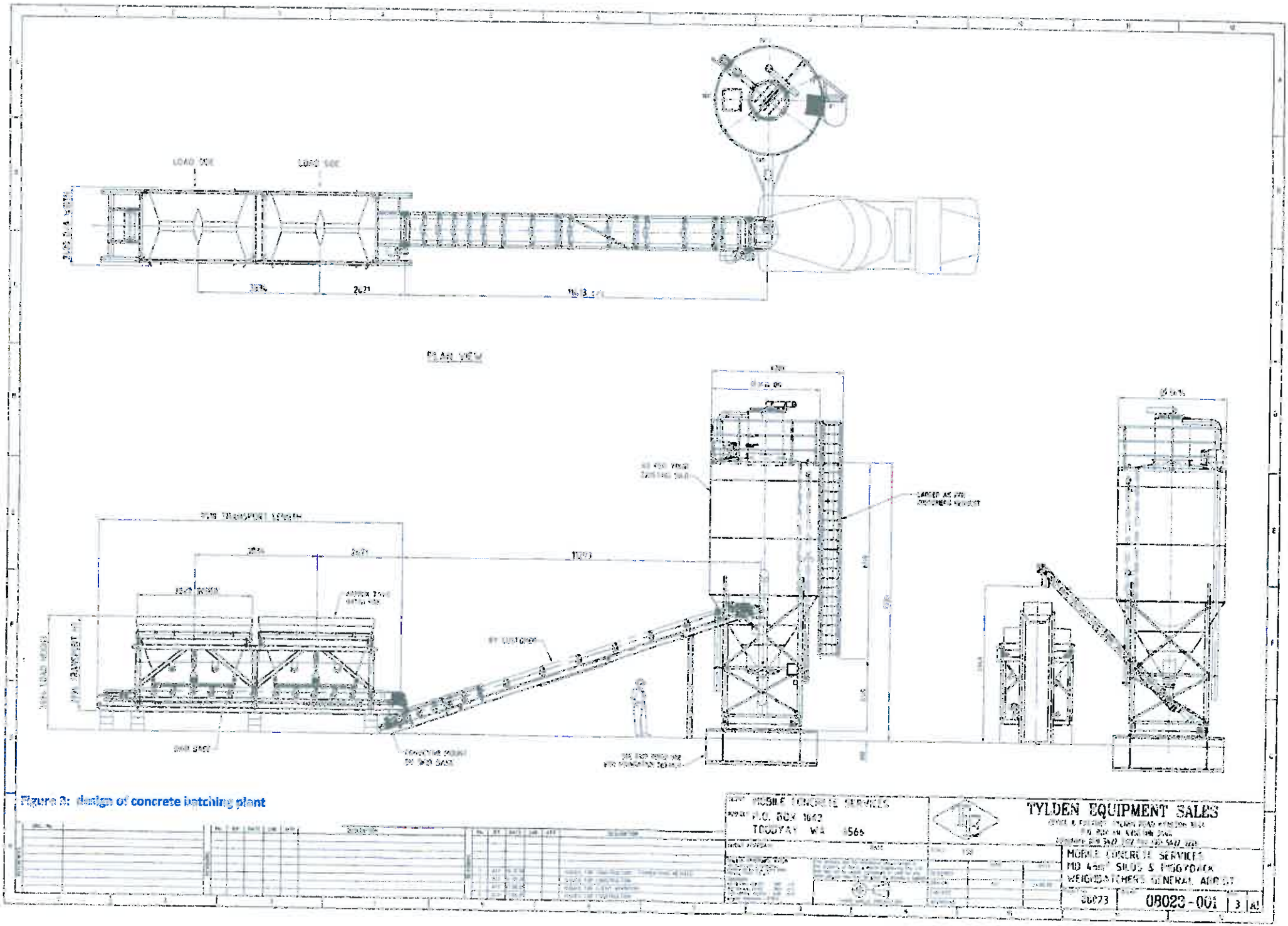


Figure 3: design of concrete batching plant

4.2 Construction

Site preparation prior to construction will be minimal as the site has already been cleared and levelled as part of the existing arrangement on Lot 1032 Murrena Street. Construction is planned to commence in Q2 2013, as soon as a Works Approval has been obtained.

Construction is expected to only take several weeks, as the concrete batching plant has already been pre-constructed off-site. Construction works are expected to be carried out from between 7 am and 5pm Monday to Saturday until the works have been completed.

4.3 Operation

4.3.1 Material Delivery

Aggregates and natural sand are delivered to site via Heavy Haulage tipping trucks. The product is tipped onto a hardstand surface and then loaded into its respective aggregate bin which will be clearly labelled. The aggregate bins are built with a concrete floor, tilt panel sides and a shaded roof. They will also be marked with maximum fill heights below the height of the walls, to minimise contamination and wind-blown dust emissions. The bins will also be sprayed regularly to suppress dust and also to cool and maintain a consistency through the aggregates. Therefore, the aggregates will ideally be stored in a wet condition to prevent dust emissions.

Cement shall be transported to site in pressurised bulk containers. The cement will then be transferred from the tanker to the concrete silos using air pressure. The silos will each be fitted with their own dust filter system. Dust will be separated from the air flow by specialised POLYPLEAT® filter elements. An integrated automatic reverse air jet cleaning system inside the weather protection cover will then remove it from the filter elements, allowing the cement dust to drop back into the silo. Each silo will be clearly labelled for their respective products. Air systems, filter maintenance and alarms are inspected during daily operational pre-start forms.

Admixtures are delivered in 1,000 L containers, once offloaded they are placed in the bunded admixture area. The admixtures will be kept out of direct sunlight and used as per the manufacturer's specification.

4.3.2 Concrete Batching Process

The concrete mixing and dispatching process begins when MCS receives an order from a customer. The operator then enters the order into the Batch Computer System which sends a message to the weigh hoppers regarding the weight of aggregate and sand required. Aggregate and sand is then loaded into the hopper with a front end loader. Aggregates and sand will be in a saturated surface wet condition ensuring there is no dust generated throughout this process.

The cement is generally formed in agitator trucks. Water and admixtures are added to the agitator truck which will be set mixing at full speed. Admixtures and water are both dispensed by a flow meter which is calibrated every six months by a certified technician.

Aggregates, sand and cement are then loaded by auger and conveyor into the agitator truck. Aggregates and sand will be loaded by conveyor to the gob hopper, which is fitted to the conveyor and allows materials to be held for a period of time (i.e. until the next truck is in position). Cement

is then transferred to the gob hopper by auger. The gob hopper then discharges the material into the agitator truck. The remaining required water is then loaded into the agitator truck, and the concrete is ready for slumping.

A dust extraction system will be utilised at the gob hopper to minimise dust emissions from the dispatch point. This dust extraction system will consist of a Drybatch® R01 system which consists of an extraction fan via a horizontal filter bag/cartridge with front removal. The particulate emissions from this Drybatch® R01 system are predicted to be < 10 mg/m^3. A 15.0 HP suction fan will be operated to draw the air through the filters with a maximum air volume capacity of 6,000 m^3/h. There will be 36 bags/cartridges x 1,500 mm long, each inserted in to the steel cage and clamped to the front. Potential for tears and blockages of the filter bags/cartridges will only occur during maintenance activities, not during operation. Please see Appendix 4 for a detailed description of the Drybatch® R01 dust extraction system.

Operational performance criteria will be set for the dust extraction system, including measuring the air flow at the inlet of the duct to the collector to confirm air flow speed (air speed subject to size of duct used). MCS will ensure that the Drybatch® R01 system is operating to its optimal capability by completing daily pre-start checks, continued servicing and maintenance as per the manufacturing specifications and if abnormal dust emissions are sighted. Please see Appendix 3 for a diagram showing the filter system for the gob hopper and silos.

Once all other input materials have been added into the agitator truck, it is driven to the slump stand for final inspection. The slump stand is located immediately adjacent to dispatch. Once at the slump stand the external surfaces of the bowl and fins are given a quick rinse, and the concrete is then brought to its final target slump. Excess batch and slump water is directed to a wedge pit where it is gathered and pumped into a storage tank. The stored water is recycled and used to wash out agitator bowls as required.

The operational process for mixing and dispatching concrete is summarised in Figure 4.

Figure 4: Concrete batching process

4.3.3 Truck Cleaning Process

On return from delivery, the agitator trucks will go straight to the washout pits. Approximately 1,000 L of water will be added to the bowl and then discharged into one of the two main pits as shown in Figure 5 below. The water will filter out through the front gate of the pits and travel along the gutter into the first of three 4 kL settling ponds.

The settling ponds have rebates at gradual levels that allow water to transfer between them. Once the water has moved to the third pond it is relatively clear and suitable for reuse. A submersible pump is fitted to the third settlement pond and that water is then transferred to the 23 kL holding tank. Water from the holding tanks is then reused at the washout pits.

Washout pits will gradually fill with cement material, and when this material reaches the maximum operating level (300 mm from the top of the structure) it will be removed and taken to a licensed facility.

Vehicles will be refuelled in a designated concrete bunded area that will drain into a sump with an oily water separator. Spill kits will also be located adjacent to this bunded refuelling area.

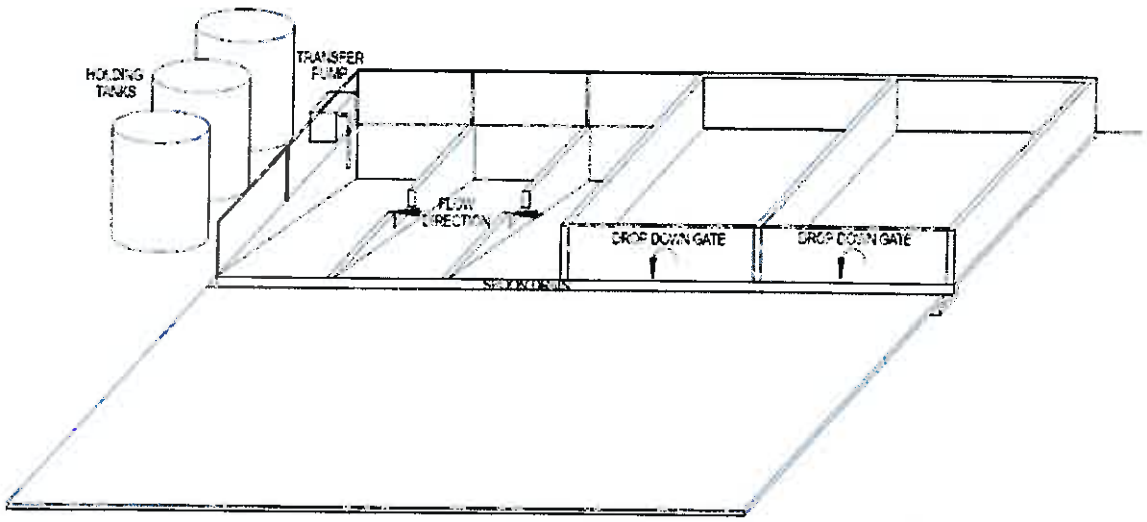


Figure 5: Wastewater washout system

Cleaning of the external surfaces of the agitator trucks will take place at the slump stand so the excess water is trapped by the wedge pit. The wedge pit will be fitted with an oily water separator where treated water will be directed to an adjacent storage tank for reuse and the excess oil will be disposed of offsite by a licensed contractor. The oil water separator is designed to meet a total petroleum hydrocarbon (TPH) concentration of 5 mg/L.

4.4 Cost of Works

The cost of the concrete batching plant and associated facilities is estimated to be $250,000.

4.5 Timing of Construction and Operation

MCS proposes to construct the concrete batching plant in Q2 2013, as soon as the works approval is granted.

Operation is expected to vary according to customer orders, although generally the plant will operate between the hours of 6:00 am to 5:00 pm Monday to Saturday.

5 Environmental Management

This section contains an assessment of the potential emissions and discharges relevant to the construction and operation of the concrete batching plant.

MCS is a certified Quality Assured Company (Certificate No QEC27796) which complies with the requirements of ISO 9001:2008. MCS is also National Association of Testing Authorities (NATA) accredited (Accreditation No 18231) demonstrating compliance to ISO/IEC 17025 in the field of Construction Materials Testing.

5.1 Point Source Air Emissions

There are no point source air emissions expected during the construction or operation of the concrete batching plant, with the exception of vehicle and pump exhaust fumes.

5.2 Dust Emissions

5.2.1 Construction

Construction of the concrete batching plant will require some earthmoving, which has the potential to cause dust emissions.

Water is proposed to be used as the primary dust suppression method for the construction of the proposed works. Water will be used on a regular basis as required, to keep onsite traffic and construction areas damp. The site supervisor will be responsible for dust control, assessing dust prone conditions and visual monitoring of emissions.

Roads within the Wedgefield LIA are sealed which minimises the traffic dust from construction vehicles exiting or entering the site.

5.2.1 Operation

Given the nature of the concrete batching process, dust emissions have the potential to occur during operations. Potential dust sources include:

- Cement silos;
- Stockpiling or handling of aggregates and materials;
- Cement bulk containers; and
- Uncovered loads (road trains with materials).

The Concrete Batching Regulations contain specific requirements for dust management. Table 5 below details how each of these requirements will be met at the MCS site.

Table 5: Concrete batching regulations – dust management

Regulation No.	Requirement	Comment
3 (1)	An operator must not carry on concrete batching or cement product manufacturing unless it is carried on in such a manner that no visible dust escapes from the premises (or if there are no defined boundaries to the premises, no such dust escapes onto any place to which the public has access).	The proposed design and operating methods will ensure that this requirement is complied with.
3 (2)	An operator must immediately clean up any material spilt during concrete batching or cement product manufacturing.	MCS commits to this requirement.
4 (1)	An operator must ensure that all parts of the premises to which vehicles have access — a. are either — i. paved or sealed; or ii. treated with water or surfactants as often as is necessary; and b. are swept, hosed or otherwise cleared of any loose aggregate, sand, cement, concrete or other material as often as is necessary, to prevent loose material adhering to vehicles and to minimize dust.	Vehicle access areas on the site will be treated, and any loose aggregate, sand, cement, concrete or other material will be swept, hosed or otherwise cleared as often as is necessary to minimise dust emissions.
4 (2)	An operator must not allow any vehicles carrying concrete, or any of the ingredients of concrete, to leave the premises until it has been washed free of cement slurry and dust.	As stated in Section 4.3.2, external surfaces of the trucks will be washed prior to leaving the site.
5 (1)	An operator must store all aggregate and sand kept on the premises in storage bins or bays which are designed to minimize airborne dust, or where the use of such bins or bays is not practicable, in stockpiles on the ground.	All aggregate and sand kept on the premises will be stored within aggregate bins.
5 (2)	An operator must not allow the height of aggregate or sand in a storage bin or bay to exceed the height of the bin or bay (including any windshields fitted to it).	The height of aggregate or sand in the storage bins will not exceed the height of the bin.
5 (3)	Where aggregate or sand is stored in a stockpile on the ground the operator must keep it covered or damp, or otherwise treat it, so as to minimize airborne dust.	N/A, all aggregate and sand kept on the premises will be stored within the aggregate bins.
5 (4)	If, during the unloading of aggregate or sand, any visible dust escapes from the premises the operator must ensure that unloading stops immediately and does not resume until appropriate measures have been taken to prevent the escape of the dust from the premises.	MCS commits to this requirement.
6 (1)	An operator must store all cement kept on the premises — a. in bags; or b. in a cement storage silo — i. which complies with sub regulation (2); or ii. which is one of a series of interconnected silos at least one of which complies with sub regulation (2).	All cement kept on site will be stored in the cement storage silos or in bags if the cement silo is temporarily out of service.
6 (2)	To comply with this sub regulation a cement storage silo must be fitted with — a. an air cleaning system, which complies with regulation 7, through which all air extracted from the silo while it is being filled must pass before it is discharged into the environment; and b. either — i. a level indicator which complies with regulation 8(1); or ii. a relief valve, which complies with regulation 8(3).	MCS commits to this requirement. Additional information is provided in Section 5.2.1.1 below.

Regulation No	Requirement	Comment
6 (3)	An operator must seal all inspection ports, hatches and other openings to a cement storage silo while cement is being unloaded into the silo.	MCS commits to this requirement.
6 (4)	If, during the filling of a cement storage silo, any visible cement dust escapes from the silo the operator must ensure that no further loads of cement are unloaded into the silo until appropriate measures have been taken to prevent the escape of dust from the silo.	MCS commits to this requirement.
7 (1)	The air cleaning system for a cement storage silo must — a. be either — i. a mechanical rapping air cleaning system with a minimum filter area of 23 square metres; or ii. a reverse pulse air cleaning system which reduces dust emissions to less than 50 milligrams of particulate matter per cubic metre; and b. discharge air from the system into a weigh hopper or to an outlet which is within one metre of the ground.	MCS commits to this requirement. Additional information is provided in Section 5.2.1.1 below.
7 (2)	An operator must inspect the filters, or if the system is fitted with pressure gauges for the detection of blockages or leaks, check those gauges, at least weekly and immediately clean, repair or replace any filter which is blocked or damaged or has an excessive build-up of dust.	MCS commits to this requirement.
7 (3)	An operator must test the air cleaning system for a cement storage silo at least weekly and if it is not working efficiently, must not unload any cement into the silo until the system is repaired.	MCS commits to this requirement.
7 (4)	An operator must keep on the premises, or in a readily accessible place, sufficient spare filters to replace all such bags or cartridges used in the air cleaning systems of all cement storage silos on the premises.	MCS commits to this requirement.
8 (1)	A level indicator system for a cement storage silo must include — a. an audible alarm which sounds if cement stored in the silo reaches — i. 0.6 m below the inlet to the silo's air cleaning system; or ii. 2 tonnes less than the silo's maximum capacity; and b. a test circuit which indicates whether the level indicator and alarm are working correctly.	MCS commits to this requirement. Additional information is provided in Section 5.2.1.1 below.
8 (2)	Where a level indicator is used to comply with regulation 6(2) (b) the operator must ensure that the test circuit is activated before a load of cement is unloaded into the silo and that no cement is unloaded into the silo if the level indicator or alarm is not working correctly.	MCS commits to this requirement. A level indicator will be used to comply with regulation 6(2) (b).
8 (3)	A relief valve for a cement storage silo must be designed — a. to automatically prevent the level of cement in the silo rising above the level referred to in sub regulation (1)(a)(i) or (ii); and b. so that any excess cement is piped into a weigh hopper or to an outlet which is within one metre of the ground.	See above.
9 (1)	An operator must not use — a. a hopper, conveyor, chute, bucket elevator or transfer point to move material on the premises; or b. any area of the premises to load agitators, unless it is — c. enclosed; d. fitted with wind shields, water sprays or a dust extraction system; or e. otherwise designed and operated, so as to prevent the escape of any visible dust.	MCS commits to this requirement. Additional information is provided in Section 5.2.1 following this table.
9 (2)	An operator must maintain in good working order all wind shields, water	MCS commits to this

Regulation No.	Requirement	Comment
	sprays, dust extraction systems and other devices used to comply with sub regulation (1).	requirement.
10 (1)	An operator carrying on cement product manufacturing must regularly clean all inside areas on the premises to prevent the accumulation of dust on any surface.	MCS commits to this requirement.
12 (1)	An operator must not allow settled material in a slurry pit to — a. dry out (except when the pit is dried out to allow the settled material to be removed)	MCS commits to this requirement. The material will be kept damp if the pit is not in use.

5.2.1.1 Cement Silos

Cement shall be transported to site in pressurised bulk containers. The cement will then be transferred from the tanker to the concrete silos using air pressure. The silos will each be fitted with their own mechanical rapping air cleaning system with a minimum filter area of 23 m^2. Dust will be separated from the air flow by seven specialised POLYPLEAT® filter elements which are not susceptible to tears and blockages. An integrated automatic reverse air jet cleaning system inside the weather protection cover will then remove it from the filter elements, allowing the cement dust to drop back into the silo. (Please refer to Appendix 3 for a diagram of the silo filter system).

The predicted particulate dust emissions from the dust extraction system are expected to be < 5 mg/m^3 during operation. Air from the system will be discharged to the weigh hopper, or an outlet which is within one metre off the ground.

Air systems, filters and alarms are inspected and maintained during daily operational pre-start forms.

The cement silo will include a level indicator system that complies with Regulation 8 (1). The level indicator system will include an audible alarm which sounds if cement stored in the silos reaches 0.6 m below the inlet to the silo's air cleaning system. A test circuit will also be installed which indicates whether the level indicator and alarm are working correctly.

Operators will be properly trained to ensure that the test circuit is activated before a batch of cement is unloaded into the silo and that no cement is unloaded into the silo if the level indicator and/or alarm are not working correctly.

5.2.1.2 Material Storage and Transfer

Water sprays will be the primary method used to control dust, with a sprinkler/misting system installed at the loading area, aggregate bins, weigh hopper and transfer conveyor. Water will be manually used throughout the site as required to ensure visible dust does not cross the boundary of the site. Therefore, the aggregates will be stored in a wet condition to prevent dust emissions.

Incoming loads will also be covered to reduce dust lift off.

5.3 Odour Emissions

No significant odour emissions are expected during the construction or operation of the concrete batching plant.

5.4 Light Overspill

No significant light overspill is expected to impact sensitive receptors during the construction or operation of the concrete batching plant given the significant distance to sensitive receptors.

5.5 Noise and Vibration

5.5.1 Construction

A certain level of noise is expected by key stakeholders as the area surrounding the site is zoned as light industrial.

Noise during construction is not expected to impact sensitive receptors due to the sufficient buffer distance. Nevertheless, works that have the potential to cause unreasonable noise will generally be conducted between the hours of 7 am and 5 pm Monday to Saturday (excluding public holidays).

5.5.2 Operation

There is the potential for noise and vibration emissions during operation of the concrete batching plant, specifically during material transfer and mixing operations.

Low-noise equipment will be used where practicable to minimise noise during operation. Most components with the potential to produce high noise levels, such as moving parts, will need to be enclosed or screened for safety and operational purposes (e.g. prevent projectiles), which will reduce the noise emissions of the equipment.

MCS is aware of its obligations under the Environmental Protection (Noise Regulations) 1997, and will ensure that noise levels from the concrete batching plant comply with these regulations at all times.

5.6 Discharges to Surface Waters

There are no planned discharges to surface waters during construction and operation of the concrete batching plant. There are no sensitive wetlands or significant drainage lines in close proximity.

During construction of the concrete batching plant there is the possibility for stormwater to flow from the site carrying elevated levels of sediment, however this is expected to be minor.

There is the potential for surface water drainage during operation to contain sediment, therefore all drainage of operational areas within the site is proposed to be captured, treated (if required) and reused.

The Concrete Batching Regulations contain specific requirements for surface water management. Table 6 below details how each of these requirements will be met at the MCS site.

Table 6: Concrete batching regulations – surface water management

Regulation No.	Requirement	Comment
11 (1)	An operator must ensure that — a. all water draining off any area where agitators, mixers or moulds are loaded or where concrete is batched drains into a slurry pit; b. all water used to wash out agitators, mixers or moulds or to clean up spilt material drains into a slurry pit; c. all other water draining off sealed or paved areas of the premises and which is likely to contain waste material drains into a slurry pit or settling pond; and d. any water removed from, or which might overflow from, a slurry pit drains into a settling pond.	Any drainage within the operational areas of the site will drain into the wedge pit, which will be cleaned out regularly. The wedge pit will be fitted with an oily water separator where treated water will be directed to the recycled water holding tanks and the excess oil will be disposed of offsite by a licensed contractor.
11 (2)	An operator must ensure that no water used in concrete batching or cement product manufacturing is discharged from the premises until — a. it has been — i. through a silt trap; or ii. contained in a settling pond for long enough to allow all particulate matter to settle out; and b. if the water is likely to contain hydrocarbons, it has been through an oil interceptor.	Water is not proposed to be discharged from the site, however settling ponds and an oil water separator are proposed to ensure reused water on site is free of contaminants.
12 (1)	An operator must not allow settled material in a slurry pit to — b. be higher than 30 cm below the top of the slurry pit walls.	MCS is committed to this requirement to prevent the overflowing of washout pits. The washout pits system will be cleaned out on a reguiar basis with a front end loader/bobcat. When one washout pit reaches its maximum operating level of 300 mm from the top of structure, the solid concrete build up will be loaded into trucks and delivered to a quarry licensed to accept and crush concrete waste.
12 (2)	An operator must ensure that a settling pond is large enough to contain all water which might drain into it for long enough to allow all particulate matter to settle out.	The settling ponds have been sized (4 kL each) to ensure that this requirement is complied with.
12 (3)	An operator must ensure that slurry pits, settling ponds, silt traps and oil interceptors are maintained, and emptied or cleaned as often as necessary, to ensure their efficient operation.	MCS commits to this regulation.

The capacity of the holding and raw water tanks are expected to be sufficient to hold all captured water from most rainfall events.

The dust management requirements in the Concrete Batching Regulations indirectly minimise the potential for discharges to surface waters, such as the cleaning of spills, and maintaining the general cleanliness of the site.

5.7 Discharges to Land

No planned discharges to land are proposed. The water supply for the area is expected to be slightly saline, however this is not expected to cause significant issues.

The dust management requirements in the Concrete Batching Regulations indirectly minimise the potential for discharges to land, such as the cleaning of spills, and maintaining the general cleanliness of the site.

Approximately 8,000 L of diesel may be stored on site. Section 5.8 below discusses the management measures proposed.

5.8 Hydrocarbon/Chemical Storage

Hydrocarbons and chemicals are not expected to be stored onsite during construction. Refuelling of construction vehicles will not occur at this site.

During operation diesel will be stored in a self-bunded 8,000 L tank onsite for refuelling of vehicles.

MCS will implement the following control measures to ensure that hydrocarbons are stored and handled correctly:

- The fuel storage tank will comply with Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 and AS1940:2004;
- An Emergency Response Procedure will be implemented at the site to ensure that any hydrocarbons are cleaned up as soon as possible in the event of a spill. Spillage of concrete additives during transport to site is also included in the Emergency Response Procedure;
- Other miscellaneous hydrocarbons (oils, greases etc.) will be stored within a sealed area;
- Admixtures will be stored in a bunded area;
- Spill kits will be kept on site;
- Spillages will be cleaned up and disposed of as per appropriate Material Safety Data Sheet (MSDS) and any other relevant environmental and safety guidelines; and
- Vehicles will be serviced regularly offsite and coolants/oils will be drained and replaced.

The admixtures are classified as non-hazardous (see MSDS attached in Appendix 2), however management measures are still recommended for storage and use. The admixtures will be stored within sealed containers on site, within a bunded hardstand area.

5.9 Solid/Liquid Waste

No significant volumes of solid or liquid waste will be produced during construction or operation of the concrete batching plant. All construction waste will be disposed of offsite at an appropriately licenced landfill facility in Port Hedland.

Any spills of materials will be cleaned up immediately. Solid concrete waste will be removed from site regularly and disposed of at an appropriately licensed facility.

All wastewater will be recycled unless contaminated by hydrocarbons (e.g. in the event of a hydrocarbon spill). A licensed contractor will be engaged to collect the contaminated water and dispose of it appropriately.

5.10 Native Vegetation Clearing

No native vegetation clearing is required as the site has already been cleared as part of the development of the Wedgefield LIA.

6 References

BHP Billiton (BHP) (2009) *Port Hedland Outer Harbour Development – Preliminary Acid Sulphate Soil Investigation*, 02 October 2009

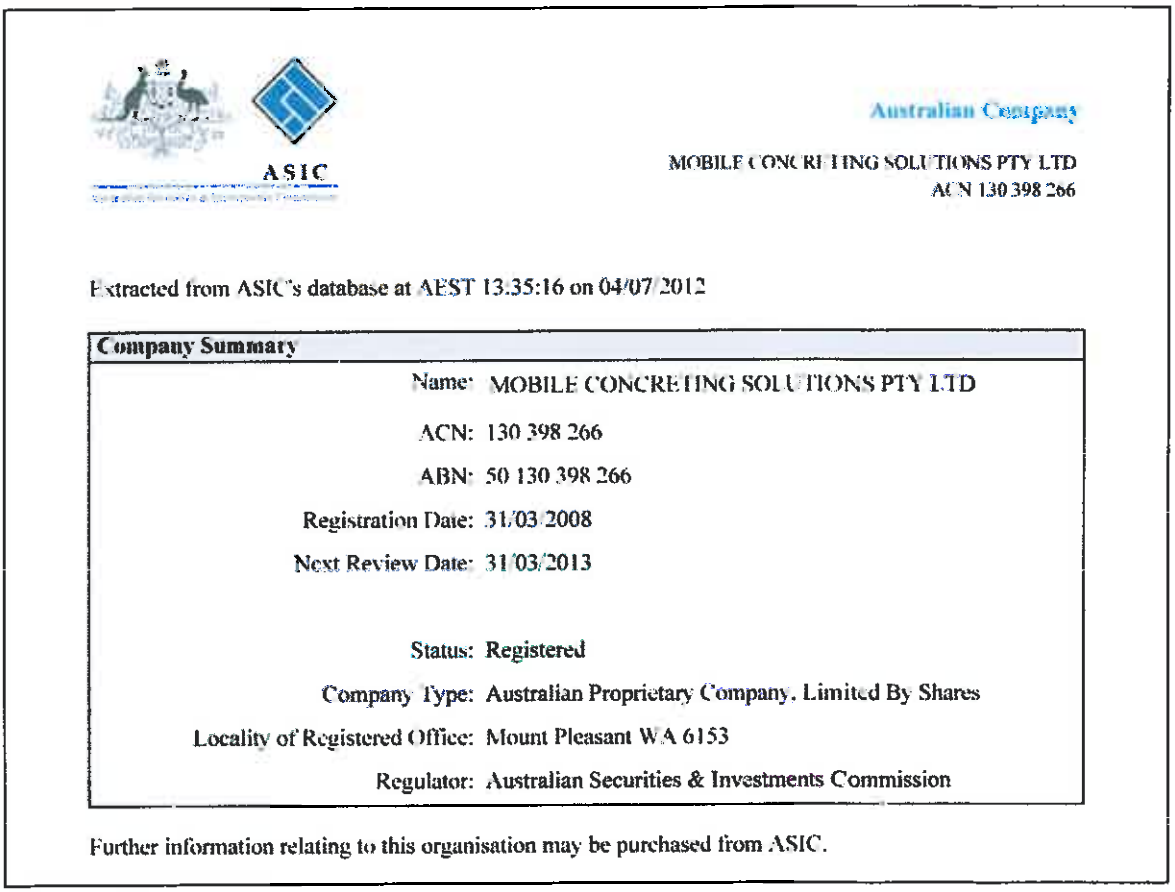
Bureau of Meteorology (BoM) (accessed 10 January 2013) 'Climate statistics for Australian locations: Port Hedland Airport' (Online) http://www.bom.gov.au/climate/averages/tables/cw_004032.shtml

Kendrick, Peter and Stanley, Fran (2001) 'Pilbara 4 (PIL4-Roebourne synopsis)' (Online) http://www.dec.wa.gov.au/pdf/science/bio_audit/pilbara04_p581-594.pdf

Western Australian Planning Commission (WAPC) (2009) *Pilbara Framework: Regional Profile* (Online) http://www.planning.wa.gov.au/dop_pub_pdf/pilbara_framework_appendix_a_maps_11_to_15.pdf

Appendices

APPENDIX 1: MCS Company Registration Details



ASIC

Australian Company

MOBILE CONCRETING SOLUTIONS PTY LTD
ACN 130 398 266

Extracted from ASIC's database at AEST 13:35:16 on 04/07/2012

Company Summary

Name:	MOBILE CONCRETING SOLUTIONS PTY LTD
ACN:	130 398 266
ABN:	50 130 398 266
Registration Date:	31/03/2008
Next Review Date:	31/03/2013
Status:	Registered
Company Type:	Australian Proprietary Company, Limited By Shares
Locality of Registered Office:	Mount Pleasant WA 6153
Regulator:	Australian Securities & Investments Commission

Further information relating to this organisation may be purchased from ASIC.

Material Safety Data Sheet

1. Identification of the material and supplier

Names

Product name	: Sika Plastiment BV35

Supplier

Supplier/Manufacturer	: Sika Australia Pty. Ltd. 55 Elizabeth Street (Locked Bag 482 BDC) Wetherill Park, NSW 2164 Australia
Telephone no.	: +61 2 9725 11 45
Fax no.	: +61 2 9725 33 30
Emergency telephone number	: +61 1800 033 111
Use of the substance/preparation	Chemical product for construction and industry

2. Hazards identification

Classification	: Not regulated.
Risk phrases	: Not classified.
Statement of hazardous/dangerous nature	: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture	: Yes.

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid measures

First-aid measures

Inhalation	: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Extinguishing media

Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. In a fire or if heated, a pressure increase will occur and the container may burst.

5 . Fire-fighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazardous combustion products : No specific data.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Occupational exposure limits : **No exposure standard allocated.**

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Exposure controls

Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

8 . Exposure controls/personal protection

Eyes	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Hands	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Respiratory	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	: Liquid.
Colour	: Brown.
Odour	: Characteristic.
Density	: 1.15 g/cm³ [20°C (68°F)]
Flash point	: Closed cup: Not applicable.
pH	: 5

10 . Stability and reactivity

Stability	: The product is stable.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Potential acute health effects

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.

Acute toxicity

Conclusion/Summary	: Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary	: Not available.

Carcinogenicity

Conclusion/Summary	: Not available.

Mutagenicity

Conclusion/Summary	: Not available.

Teratogenicity

Conclusion/Summary	: Not available.

Reproductive toxicity

Conclusion/Summary	: Not available.
Chronic effects	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.

11 . Toxicological information

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Other ecological information

Biodegradability

Conclusion/Summary : Not available.

Other adverse effects : No known significant effects or critical hazards.

13 . Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

ADG

Not regulated.

ADR

Not regulated.

IMDG

Not regulated.

Marine pollutant : No.

IATA

Not regulated.

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name	Schedule
No listed substance	

Australia inventory (AICS) : All components are listed or exempted.

EU Classification : Not classified.

16 . Other information

Person who prepared the MSDS : Validated by Boon on 12.04.2010.

Date of previous issue : No previous validation.

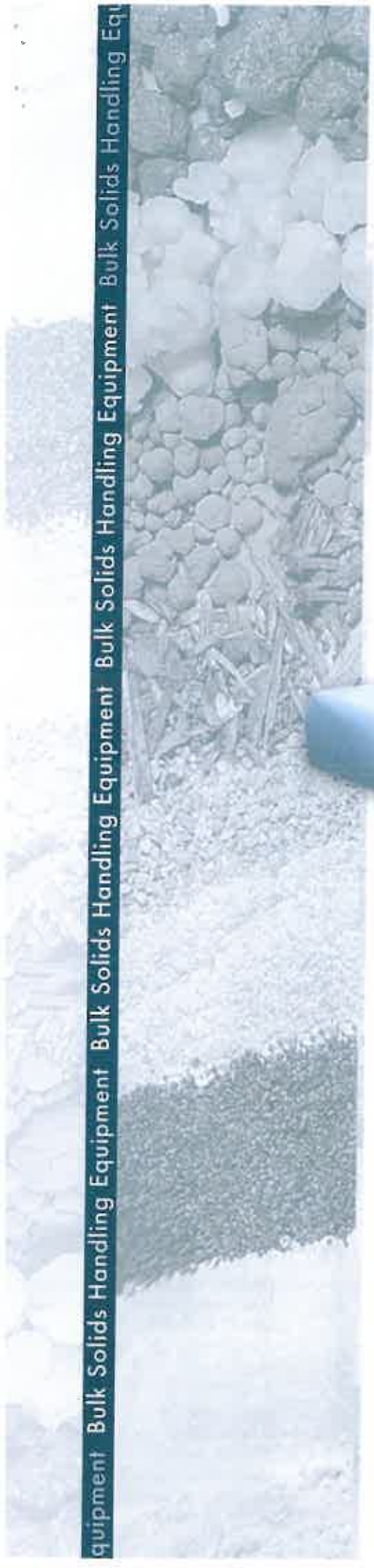
☑ Indicates information that has changed from previously issued version.

Disclaimer

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy. MSDS may be obtained from the following website: www.sika.com.au

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

APPENDIX 3: Silo Venting Filters (SILOTOP®)



SILOTOP®

Silo Venting Filters

Silostaubungsfilter

Filtres dépoussiéreurs pour silo

Filtri depolveratori per silo

WAMGROUP®

WAM®

Description

SILOTOP® is a cylindrically shaped dust collector for venting of pneumatically filled silos. The stainless steel body contains vertically mounted, POLYPLEAT® filter elements. The air jet cleaning system is integrated in the hinged weather protection cover.

Beschreibung

SILOTOP® ist ein zylindrischer Oberflächenfilter für durchlüften von pneumatisch aufgefüllten Silos. Rostfreies Stahlkörper beinhaltet senkrecht montierte POLYPLEAT® Filterelementen. Air jet Reinigungssystem ist integriert in klappbare Wetterschutzdeckung.

Déscription

SILOTOP® est un collecteur de poussière cylindrique pour la ventilation des silos remplis pneumatiquement. Le boîtier en acier inoxidable contient, montés verticalement, les éléments filtrants POLYPLEAT®. Système de nettoyage par jets d'air est integré dans le couvercle à charnière qui protège des agressions atmosphériques.

Descrizione

SILOTOP® è un colettore di polvere a forma cilindrica per la sfiato dei silo a carico pneumatico. Il corpo in acciaio inossidabile contiene elementi filtranti in POLYPLEAT® montati verticalmente. Il sistema di pulizia ad aria compressa è integrato nel coperchio per la protezione da agenti atmosferici.

Function

Dust separated from the air flow by special POLYPLEAT® filter elements drops back into the silo after an integrated automatic reverse air jet cleaning system inside the weather protection cover has removed it from the filter elements.
Originally designed for cement and similar materials, SILOTOP® can be used with any dust generating material as long as it is dry and does not pack under pressure.

Funktion

Staub, das aus dem Luftfluß, mit spezialen POLYPLEAT® Filterelementen, separiert wurde, tropft in das Silos zurück, nachdem das integrierte Air jet Reinigungssystem mit automatischem Rückkehr, das sich in dem Wetterschutzdeckung befindet, den Staub aus Filterelementen entfernt hat.
Dieser Filter ist ursprünglich für das Zement und ähnliche Materialen entworfen. SILOTOP® kann man für jedes Material, das die Staub produziert, benutzen, so lange es sich um die Materialen, die trocken sind und die sich unter dem Druck nicht verdichten, handelt.

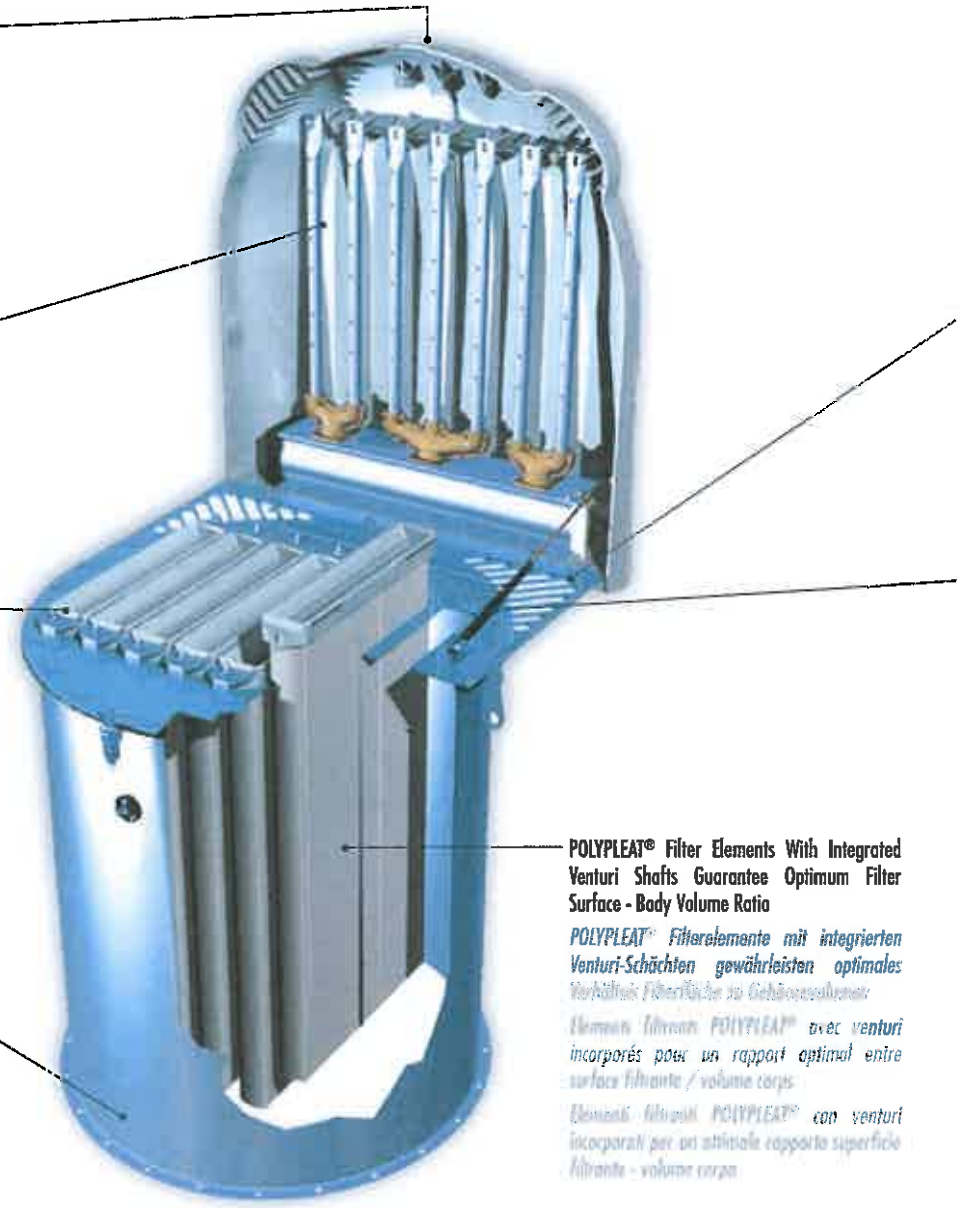
Fonction

Une fois enlevée des éléments filtrants par le système de nettoyage par jets d'air intégré et à retour automatique, la poussière séparée de l'air par des éléments filtrants POLYPLEAT® retombe dans le silo.
Conçu originairement pour le cement et des matériaux similaires, SILOTOP® peut être avec tous les matériaux generateurs de poussière pourvu qu'ils soient secs et résistant à la pression.

Funzione

La polvere separata dal flusso d' aria tramite gli elementi filtranti speciali in POLYPLEAT® cade di nuovo all'interno del silo, dopo che è stata separata dall' elemento filtrante da un flusso automatico inverso dell' aria compressa "sparata" dal sistema di pulizia integrato nel coperchio per la protezione da agenti atmosferici
Originariamente disegnato per il cemento e materiali simili, SILOTOP® può essere usato con ogni polvere di materiale asciutto e non impaccante sotto pressione.

BODY GEHÄUSE CORPS CORPO	FILTER SURFACE FILTERFLÄCHE SURFACE FILTRANTE SUPERFICIE FILTRANTE	MAX. HEIGHT WHEN CLOSED MAX. HÖHE GESCHLOSSEN HAUTEUR MAXI CAPOT FERME ALTEZZA MAX. COP.CHIUSO	MAX. HEIGHT WHEN OPEN MAX. HÖHE OFFEN HAUTEUR MAXI CAPOT OUVERT ALTEZZA MAX. COP.APERTO	kg
Ø 800 mm	24.5 m²	1100 mm	1850 mm	79



Maintenance-Free Air Jet Cleaning Unit Integrated Inside Weather Protection Cover

Wartungsfreie, in die Wetterhaube integrierte Abblaseinheit

Groupe de soufflage intégré au capot de protection pour une maintenance plus simple

Gruppo di sparo inserito all'interno del coperchio non necessita di manutenzione

Extruded 304 Stainless Steel Blow Pipes

Extrudierte Abblasrohre aus Edelstahl 1.4301

Tubes d'injection d'air de soufflage en acier inox 304

Tubi di sparo in acciaio inox AISI 304.

Filter Element Fixing Clamps Reduce Maintenance Time

Klemmspanzen zur Befestigung der Filterelemente verkürzen die Wartung

Les crapauds de fixation des éléments filtrants autorisent des opérations de maintenance rapides

Graffetti di fissaggio elementi filtranti che consentono una rapida manutenzione

Robust 304 Stainless Steel Body With Bottom Flange

Robustes Edelstahlgehäuse mit Flanschverbindung

Corps filtre en acier inox 304 avec bride inférieure percée pour fixation par boulons

Corpo filtro robusto in AISI 304 con connessione flangiata

POLYPLEAT® Filter Elements With Integrated Venturi Shafts Guarantee Optimum Filter Surface - Body Volume Ratio

POLYPLEAT® Filterelemente mit integrierten Venturi-Schächten gewährleisten optimales Verhältnis Filterfläche zu Gehäusevolumen

Eléments filtrants POLYPLEAT® avec venturi incorporés pour un rapport optimal entre surface filtrante / volume corps

Elementi filtranti POLYPLEAT® con venturi incorporati per un ottimale rapporto superficie filtrante - volume corpo

DUST FILTRATION - DUST FILTRATIO

Dry-Batch Concrete Plant Dust Collectors

DRYBATCH® R01

WAMGROUP

WAM®

APPENDIX 4: Dry-Batch Concrete Plant Dust Collectors DRYBATCH® R01

Dry-Batch Concrete Plant Dust Collectors

DRYBATCH® R01

The DRYBATCH® R01 Dust Collector has been specially designed for dust collection from the truck mixer inlet zone in dry batch plants during filling of the truck mixer.

Features

- The installation do not require special foundations
- The access door, supported by a robust hinge, allows free and easy access to the filter element, reducing the maintenance time.
- Reduced overall dimensions due to the special geometry and positioning of the filter elements.

- After market availibility of filter elements
- Easy handling of filter elements
- Compressed air consumption: 210 l/min

- Easy replacement of the filter elements through the access door
- Air jet cleaning system inside maintenance access door

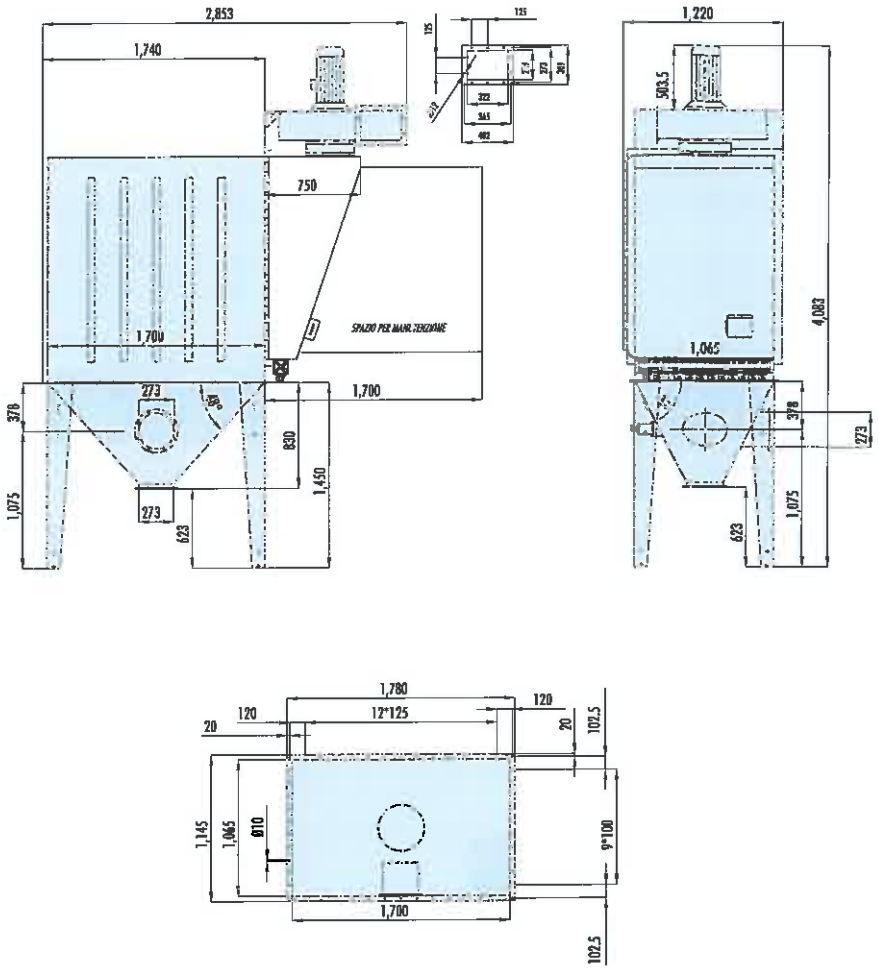
Benefits

- **LOW MAINTENANCE COSTS AND OPERATIONS**
- **LOWER ENERGY CONSUMPTION**
- **HIGHER WORK SAFETY CONDITIONS FOR THE OPERATOR**
- **PROLONGED LIFE DURATION**

DUST EMISSION
< 10 mg/Nm³

COMPLIANT WITH HEALTH AND SAFETY STANDARD

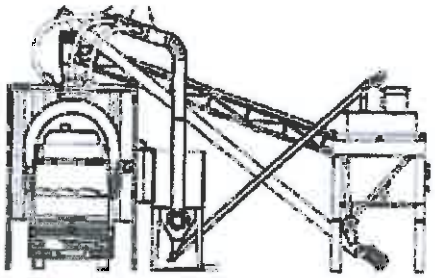
Technical Data



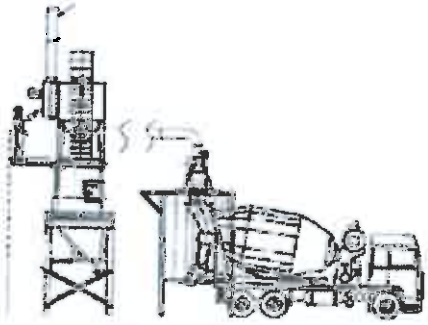
POLYGONAL SHAPE DUST COLLECTOR	Horizontal
FILTER ELEMENT	Pocket
FILTER SURFACE	54 m^2
FILTER MEDIA	Polyester felt 500 gr/m^2
CLEANING SYSTEM	Reverse air jet (min. 5 - max. 6 bar)
TIMER	Electronic multivoltage 24 V - 260 V DC/AC 50/60 Hz
SOLENOID VALVE NUMBER	12
DIFFERENTIAL PRESSURE DEVICE	Electronic with display and exit 4-20 mA
FAN	11 kW
FAN MAXIMUM AIR CAPACITY	6,000 m^3/h
CASING AND DOOR MATERIAL	STAINLESS STEEL 304
SEAL FRAME MATERIAL	Carbon steel powder-coated RAL 7001

Applications

GROUND INSTALLATION



WEIGH HOPPER INSTALLATION



WAMGROUP

WAM FLITECH MAP EXTRAC SPECO TOREX OLI RONCUZZI TECNO CM

WAM

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