Director
Environmental Approvals Branch
Manitoba Sustainable Development
Suite 160, 123 Main Street
Winnipeg MB R3C 1A5
CANADA

Attn: Tracey Braun, Director

CC: Eshetu Beshada, Environmental Engineer

June 6, 2017

Dear Ms. Braun,

Lafarge Canada Inc. is requesting the environmental license 3053 for the CCW Concrete Batch Plant (client file 5653.00) be split, to be used solely as portable concrete batch plant license. The previous project site that was on a two-and-a-half acre site is closed and was returned to the site owner. The portable concrete batching plant will be used in the province in temporary project locations for to supply concrete as needed. The current project it is being requested for use at the Richardson International Airport to support old Terminal 1 close out activities and an apron way expansion, for June 9-July 1st, 2017.

As required the NOA form and reports are attached for your consideration. Please do not hesitate to contact me if there are any questions.

Sincerely,

Dawn Fraser

Environment Manager
Lafarge Canada
204-391-5387

Notice of Alteration Form

Manitoba
Sustainable Development

Client File No. : 5653.00	Environment Act Licence No. : 3053

Legal name of the Licencee: Lafarge Canada Inc.

Name of the development: Lafarge Portable Concrete Plant

Category and Type of development per Classes of Development Regulation:

Manufacturing — Concrete batch plants

Licencee Contact Person: Dawn Fraser
Mailing address of the Licencee: 185 Dawson Rd N
City: Winnipeg Province: MB Postal Code: R2H0P9
Phone Number: (204) 958-6333 Fax: Email: dawn.fraser@lafargeholcim.com

Name of proponent contact person for purposes of the environmental assessment (e.g. consultant):

Phone: Fax:	Mailing address:

Email address:

Short Description of Alteration *(max 90 characters)*:

License be split from the site portion to operate solely as a portable concrete plant

Alteration fee attached: Yes: ☐ No: ☑

If No, please explain: Cheque has been requisitioned to be delivered by June 9, 2017

Date: June 6, 2017	Signature: Printed name: Dawn Fraser

A complete Notice of Alteration **(NoA)** consists of the following components:

- ☑ **Cover letter**
- ☑ **Notice of Alteration Form**
- ☑ **4 hard copies and 1 electronic copy of the NOA detailed report** (see "Information Bulletin - Alteration to Developments with Environment Act Licences")
- ☐ **$500 Application fee, if applicable** (Cheque, payable to the Minister of Finance)

Submit the complete NOA to:

Director
Environmental Approvals Branch
Manitoba Sustainable Development
Suite 160, 123 Main Street
Winnipeg, Manitoba R3C 1A5

For more information:

Phone: (204) 945-8321
Fax: (204) 945-5229
http://www.gov.mb.ca/sd/eal

Notice of Authorization Proposal Report

Lafarge Canada Inc

Portable Concrete Batch Plant

Table of Contents

1 Executive Summary

Lafarge Canada Inc. is requesting the environmental license 3053 for the CCW Concrete Batch Plant (client file 5653.00) be split into two, to be used solely as portable concrete batch plant license. The previous project site that was on a two-and-a-half acres is closed and was returned to the site owner. The portable concrete batching plant will be used in the province in temporary project locations to supply concrete as needed. The current project it is being requested to be used for at is the Richardson International Airport to support the old Terminal 1 close out activities and an apron way expansion.

Environmental effects are expected to be low to none in areas of water, dust, erosion, wildlife impact and pollution. Dust, water, fuel and chemical management plan updates are included as part of the set up of portable at any new project location.

2 Introduction and Background

In June of 2013, Lafarge Canada was granted an environmental license No. 3053 in regards to locating and operating a portable concrete plant for the Centre Port Way road construction project. At the time the license was tied to the site, a couple of acres of land just off of Sturgeon Rd had been leased. The project concluded in October of 2017 when the plant was removed and the site was given back to the owner.

Lafarge is requesting that the previous license be separated removing the site license and creating a separate portable concrete plant license that can be used according to the Manitoba Sustainable Development department guidelines for portable plants.

2.1 Products and Services

The portable plant produces concrete. The material inputs for the product will include cement, aggregates, admixtures and water. The plant will produce a maximum 75 m3 of concrete per hour during its operation.

3 Description of Portable Concrete Plant

3.1 Plant description

The portable concrete plant will consist of the following components:

- One (1) portable ready mix concrete batching plant having a maximum concrete production capacity of 75 cubic meters per hour, and consisting of the following components
    - One (1) cementitious material storage silo having a storage capacity of 65 tonnes, served by one (1) baghouse dust collector equipped with 10.6 square meters of polyester filter material and a pulse jet cleaning mechanism, discharging to the atmosphere at a volumetric flow rate of 0.28 cubic meters per second, through a stack having an exit diameter of 0.13 meter and extending to a maximum of 9.0 meters above grade;
    - One (1) cementitious material storage silo having a storage capacity of 65 tonnes, served by one (1) baghouse dust collector equipped with 10.6 square meters of polyester filter material and a pulse jet cleaning mechanism, discharging to the atmosphere at a volumetric flow rate of 0.28 cubic meters per second, through a stack having an exit diameter of 0.13 meter and extending to a maximum of 9.0 meters above grade;
    - One (1) diesel-fired emergency generator rated at 81 kilowatts, housed in a trailer and discharging to the atmosphere through a stack having an exit diameter of 0.1 metre and extending 2.1 metres above the trailer roof and 5.5 metres above grade;

4 Description of Environmental Effects of the Proposed Development

4.1 Water

Water will be trucked in to be used for production. All production water will be captured and removed from site.

4.2 Pollution and Hazardous Wastes

There are no hazardous wastes produced in the manufacture of concrete. All fuels and chemicals on site will be kept in secondary containment. See appendix E for list of chemicals and storage volumes.

Dust pollution is a possible environmental effect from the production of concrete. The gravel base pad is a possible source of fugitive dust and sediment erosion into nearby ditches.

5 Mitigation and Residual Environmental Effects

5.1 Environmental Management

Environmental management of the site will be consistent with all applicable federal, provincial and municipal laws and regulations. In addition it will also meet the standards of Lafarge's internal Environmental Management System to ensure the protection of the health of the environment.

5.2 Pollution and Hazardous Waste

Chemicals stored onsite will consist of admixtures for concrete production. See Appendix E for list of chemicals and storage volumes. All fuel containers and chemicals on site will be stored in secondary containment and be inspected weekly. All employees are trained in spill response techniques and spill response equipment will be on site and in their vehicles as per Lafarge's Environmental Management System requirements and procedures.

No hazardous waste will be produced during production. Should an uncontrolled release of any admixture, hydro-carbon or other chemical occur on site it will be contained, cleaned up, and removed immediately by a third party environmental disposal company for appropriate disposal in compliance with Lafarge EMS procedures and applicable hazardous waste legislation.

5.3 Erosion and Dust control

The movement of concrete trucks on the site could create fugitive dust. Water will be sprayed on the ground surface to suppress fugitive dust as required, spray is not sufficient to produce running water or erosion.

Production dust control will be managed by innovative design of the portable concrete plant, which removes the need for additional bag house filtration and maintenance for dust suppression. Industry standard dust collection bags will be placed on cement pump air outtake locations to stop dust releases during product delivery.

Dust control will be monitored by site employees through maintenance and routine inspections. Should a dust release occur, Lafarge EMS work procedures will be followed to mitigate the impact and identify the cause.

Appendix A – Plant specification brochures

Appendix B – Chemicals on site

Material	Storage Area	Maximum Quantity On-site / Storage Vessel
Grease	Compressor Room	1 case of grease tubes
AEA 200	Tank Trailer	8000 L
Pozzolith 210-N	Tank Trailer	10000 L
Flyash	Silo	64 tonnes
Type GU cement powder	Silo	64 tonnes
Diesel Fuel	Gen-set tank	100 L

AIR-DUST-TECK SERVICES

14822 RG. RD. # 1

UDORA, ONTARIO L0C 1L0

(UNIT: MODEL: **58-BV-16 IIG**

AIR VOLUME: **1000 ACFM**

DUST: **CEMENT**

DUST LOAD INLET: **UNKNOWN**

BULK DENSITY: **50 – 60 LBS. CU. FT. (ASSUMED)**

DESIGN PRESSURE: **+ / - 6" W.G.**

FILTER CLOTH AREA: **115 SQ. FT.**

AIR CLOTH RATIO: **8.69 / 1 (BASED ON 1000 ACFM)**

FILTER BAGS: **16 16 OZ. POLYESTER / SILICONIZED DUST SIDE TREATMENT**

5-7/8" DIA. X 58" O.A.L.

WEATHERHOOD / BIRDSCREEN OUTLET OR EXHAUST FAN

MATERIALS OF CONSTRUCTION: MILD STEEL

COLLECTION EFFICIENCY

AIR-DUST-TECH guarantees that the fabric filter dust collector, as quoted in our proposal (s), will collect, at minimum, 95%+ down to 1 micron based on the weight of the suspended solids contained in the gas entering the dust collector. An outlet loading of .02 grains per actual cubic foot or less shall constitute fulfillment of the guarantee and current requirements. This guarantee is based on the parameters as outlined in the proposal. The guarantee is invalid if the equipment is not installed properly and operated, or maintained within the guidelines of the installation, operation and maintenance manual.

Testing shall be done using EPA test method 5.

WAMGROUP

WAMGROUP Corporate

4b SILOTOP R03 - Silo Venting Filters

Building & Construction

Description

SILOTOP is a cylindrically shaped dust collector for venting 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.

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.

Application

With tens of thousands of units working worldwide, since first going into production back in 1998, SILOTOP® has become the world's favourite solution for silo venting. The latest model conserves the benefits of the previous version adding a few more such as the particularly flowdynamic polymer top cover.

Benefits

- Robust, particularly maintenance-friendly design;
- Low dust emission;
- Compliant with latest EU health and safety standards;
- Complete replacement of filter media by only one person within a few minutes.

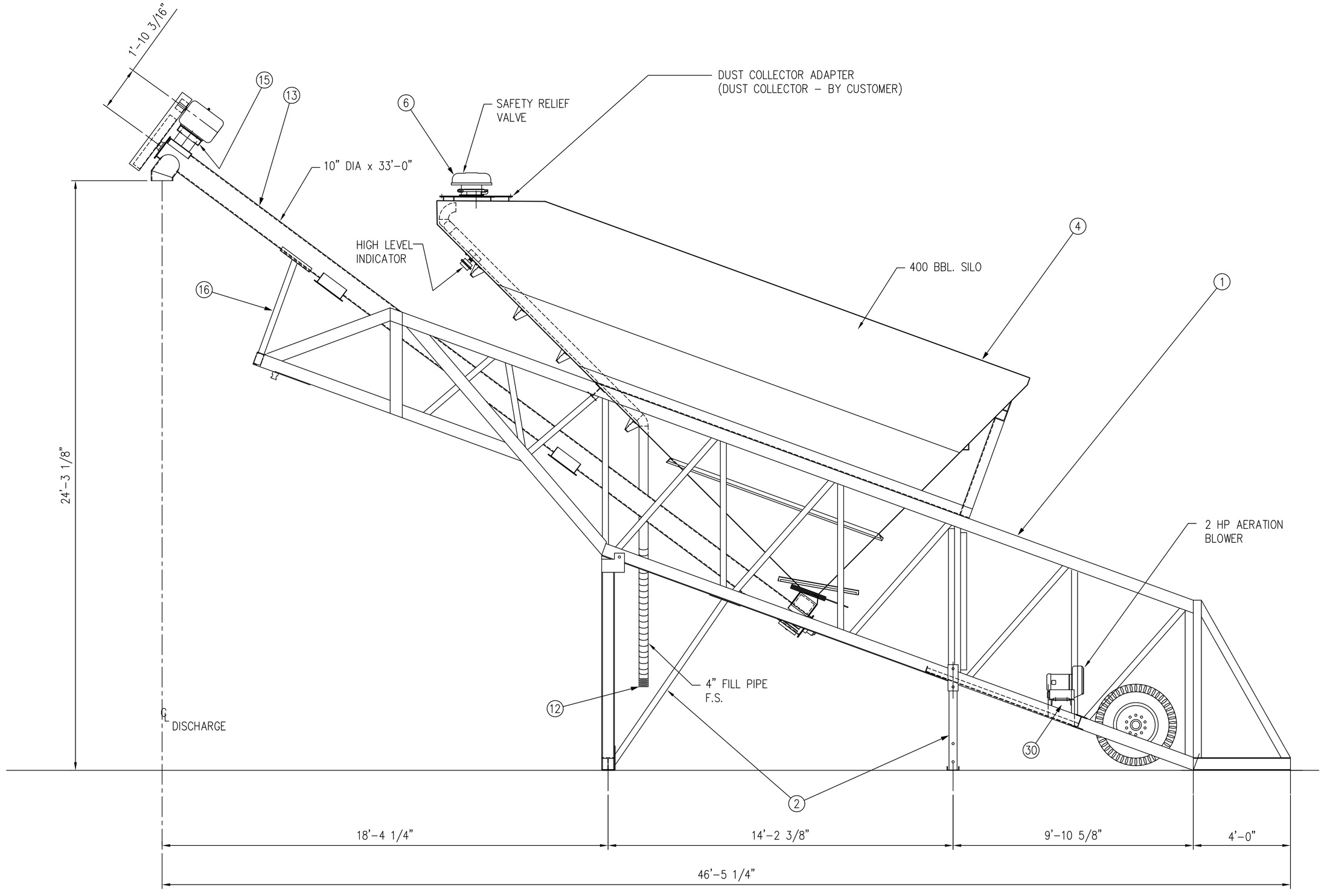
Technical features/Performance

- Compact 800 mm (30 in) diameter 304 SS body with bottom flange and 24.5 m^2 (264 sq ft) filter surface
- Maintenance height = 1,100 mm (3.6 ft)
- High filtration efficiency due to POLYPLEAT® filtering elements
- Low dust emission level due to B.I.A.-certified filter media
- Maintenance-free air jet cleaning unit integrated inside weather protection cover
- Safe weather protection cover with lockable snap hook

Technical table

BODY	FILTER SURFACE	MAX. HEIGHT WHEN CLOSED	MAX. HEIGHT WHEN OPEN	kg
Ø 800 mm	24.5 m²	1,100 mm	1,850 mm	79

DS.120.SILOTOP.EN.April 2014.R00



REV.	BY	DATE	DESCRIPTION

MADE FROM	REV.	THE VINCE HAGAN COMPANY		
JOB# 000418		DALLAS, TEXAS		
OWNER	LAFARGE CANADA			
DIST.				
MODEL NO.	HCA–400			
TITLE	PLANT GENERAL ARRANGEMENT			
DWN. BY	CKD. BY	DATE REL.	SCALE	DRAWING NO.
RSALVADOR 4/20.00	DCARDA	4/26/00	3/8"=1'-0"	HCADA012

CATERPILLAR®

Arrangement shown
with optional trailer

XQ300
SOUND ATTENUATED

50/60 Hz

FEATURES

EMISSIONS
- EPA Tier 3 and CARB Emissions Certified for non-road mobile applications at all 50 Hz and 60 Hz ratings

CAT C9 ATAAC DIESEL ENGINE
- Utilizes ACERT® Technology
- Reliable, rugged, durable design
- Field-proven in multiple applications worldwide
- Four-stroke-cycle diesel engine combines durability with minimum weight while providing dependability and economy
- 50/60 Hz convertibility

CAT SR4B GENERATOR
- Designed to match performance and output characteristics of Caterpillar diesel engines
- Permanent magnet excitation
- Segregated AC/DC, low voltage accessory box provides single point access to accessory connections

ENCLOSURE
- Made with 12-gauge steel
- Single point lifting eye
- Sound attenuated
- Convenient hand holds and steps for safe operation
- Two coat polyester powder-coated finish

ENVIRONMENTALLY FRIENDLY DESIGN
- Sound attenuated for low noise operation
- OSHA compliant safe design
- 110% spill containment for coolant and oil
- UL 142 certified dual wall fuel tank

MULTI-VOLTAGE DISTRIBUTION PANEL
- Dual voltage, manual changeover board
- Load door safety switch
- Rust-free hinges on rear opening door
- Adequate space for line and plug connection without interference
- Remote start and stop contacts

SINGLE-SOURCE SUPPLIER
- Complete systems designed at Caterpillar ISO 9001:2000 certified facilities
- **Certified Prototype Tested** with torsional analysis

WORLDWIDE PRODUCT SUPPORT
- Worldwide parts availability through the Caterpillar dealer network
- With over 1,875 dealer outlets operating in 200 countries, you're never far from the Caterpillar part you need.
- 99.7% of parts orders filled within 48 hours. The best product support record in the industry.
- Caterpillar dealer service technicians are trained to service every aspect of your electric power generation system.

FACTORY INSTALLED STANDARD AND OPTIONAL EQUIPMENT

STANDARD FEATURES	
Air Inlet System	Air cleaner, dual element Turbocharger
Charging System	Battery charger Heavy duty charging alternator
Control Panel	Generator controls and monitoring Fuel tank monitoring Engine controls and monitoring Digital displays
Cooling System	Fan and belt guards Base mounted radiator Air to air aftercooling
Distribution Panel	Lockable doors Load door safety switch (trips breaker upon door opening) Individual bus bar connections Circuit breaker with 24 VDC shunt trip Remote start/stop contacts Shore power connections
Enclosure	Sound attenuated 12-gauge steel Lockable doors Separate vented battery compartment Single point lifting Exterior oil and water drains with interior valves Hidden exterior fuel drain Hand holds and steps Powder-coated finish
Fuel System	Primary fuel filter/water separator UL142 dual wall fuel tank, 1667 L (440 g) Radiator-mounted fuel cooler
Generator	Brushless, permanent magnet Coastal corrosion protection Shock mounted VR6 voltage regulator Space heater UL approved Reconnectable 240-480 volt
Mounting System	Generator soft mounted to base Base contains integral fuel tank Skiddable structural steel design 110% oil and coolant spill containment
Starting System	Electric starting motor Battery set with disconnect switch Jacket water heater with thermostat, shut-off valves

OPTIONAL FEATURES	
Trailer	Full frame support Independent tandem axle trailer frame with tongue Electric actuated hydraulic brakes with rechargeable battery backup breakaway system Overcenter mechanical parking brake Full length fenders Non-skid surface on steps Heavy duty safety chains and grab hooks Reinforced 4540 kg (10,000 lb) top wind drop jack

SPECIFICATIONS

CAT SR4B GENERATOR

Frame size 449
Type..... Permanent magnet brushless
Construction..... Single bearing, close coupled
Three phase ..... 12 lead reconnectable
Insulation ..... Class H with coastal insulation protection
IP rating..... 22
Alignment..... Pilot shaft
Voltage regulator ..... 3-phase sensing with Volts-per-Hertz
Voltage regulation..... ± ½% steady state/± ½% no load to full load
TIF ..... Less than 50
THD ..... Less than 5%

CAT ENGINE

C9 ATAAC, 4-stroke-cycle watercooled diesel
Bore – mm (in)..... 112 (4.41)
Stroke – mm (in)..... 149 (5.87)
Displacement – L (cu in) 8.8 (537)
Compression ratio 16.1:1
Aspiration..... Turbocharged-ATAAC
Engine control ..... ADEM™ A4

CAT CONTROL PANEL – EMCP 3.2

24 Volt DC Control
NEMA 1, IP22 enclosure
Lockable hinged door
Enclosure mounted
Single location customer connector point
16 light alarm module with alarm horn
Electric fuel level gauge

Consult your Caterpillar dealer for available voltages.

TECHNICAL DATA

		XQ300			
Power Rating		**Standby**	**TMI Ref.**	**Prime**	**TMI Ref**
60 Hz	ekW	300	DM8168	275	DM8500
50 Hz	kVA	310	DM8503		
Engine and Container Information					
Engine model		C9			
Container dimensions		see chart on page 6			
Shipping Weight (Dry)					
Unit with trailer	kg (lb)	6210 (13,690)			
Unit without trailer	kg (lb)	4980 (10,980)			
Maximum Fuel Capacity Weight					
Unit with trailer	kg (lb)	7506 (16,550)			
Unit without trailer	kg (lb)	6278 (13,840)			
Engine Lubricating Oil Capacity	L (qts)	40 (10.55)			
Engine Coolant Capacity with Radiator	L (gal)	36 (9.5)			
Fuel Tank Capacity	L (gal)	1516 (400)			
Fuel Consumption	L/hr (gal/hr)	89.1 (23.5)		81.3 (21.5)	
Fuel Consumption (75% Prime)	L/hr (gal/hr)	63.5 (16.8)			
Running Time @ 75% Prime	hours	24			
Sound Level					
Standby	dB(A)	74.72			
No load @ 7 m (23 ft)	dB(A)	70.20			
Prime	dB(A)	73.49			
Ambient Capability	Deg C (Deg F)	43 (109.4)			

RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications:

- NEMA MG1-32, IEC 60034, CSA, 98/37/EEC, 72/23/EEC, UL 508, UL142, ISO3046/1, ISO8528, 89/336/EEC

Standby – Output available with varying load for the duration of the interruption of the normal source power. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046/1, AS2789, DIN6271, and BS5514.

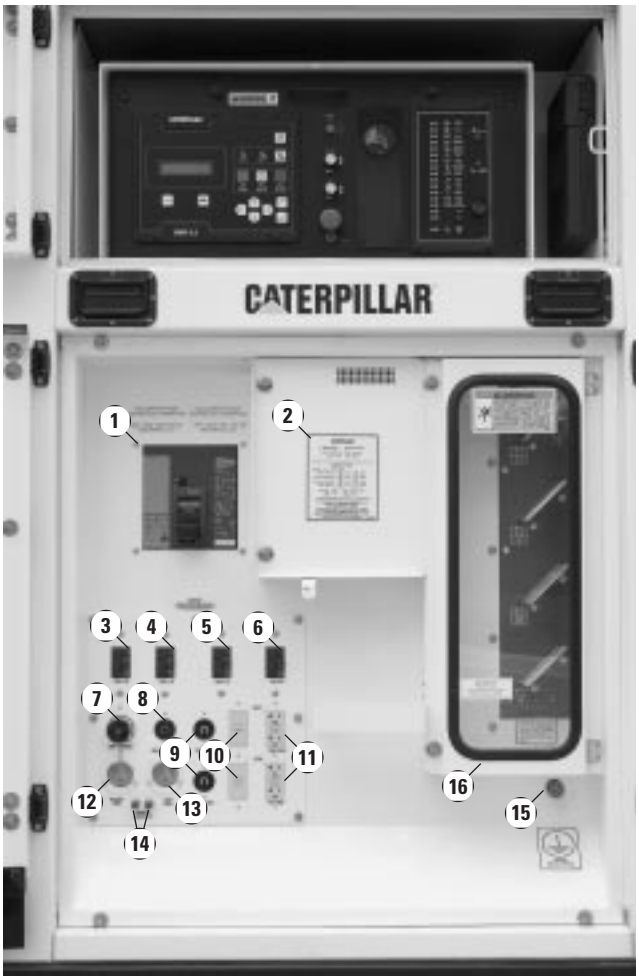
Prime – Output available with varying load for an unlimited time. Prime power in accordance with ISO8528. 10% overload power in accordance with ISO3046/1, AS2789, DIN6271, and BS5514 available on request.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard conditions.

Fuel rates are based on fuel oil of 35° API [@ 16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lb/U.S. gal).

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for details.

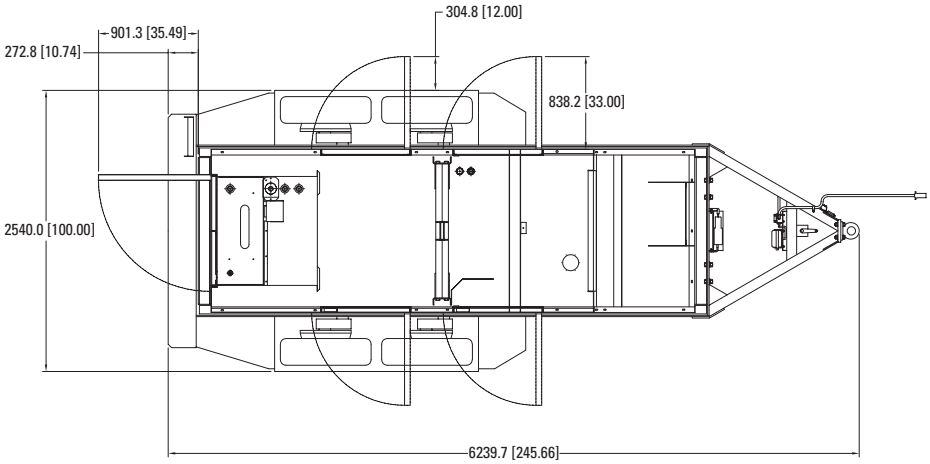
DISTRIBUTION PANEL



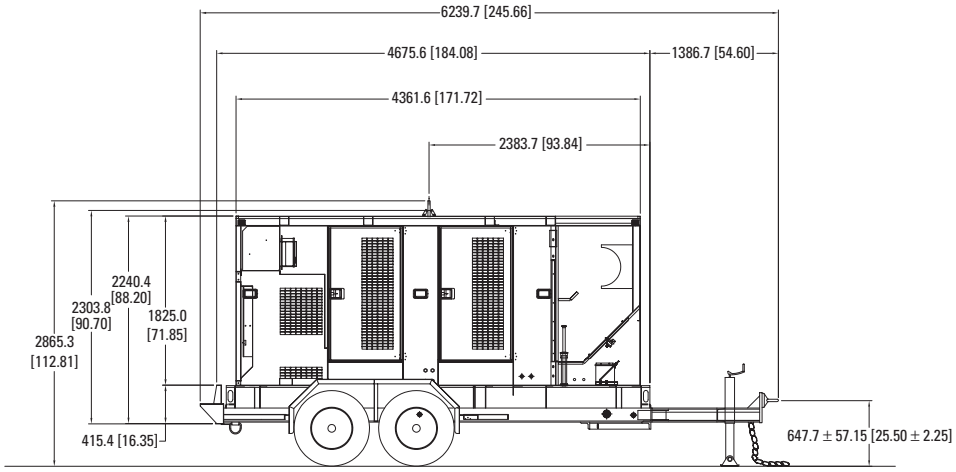
Wiring Descriptions

1. 1200A main breaker 240V/480V with adjustable trip and 24V DC shunt trip
2. Voltage change over board
3. 50 amp 240V branch breaker
4. 20 amp 240V branch breaker
5. 20 amp 120V branch breaker
6. 15 amp 120V branch breaker
7. 50 amp 240V twistlock receptacle
8. 20 amp 240V twistlock receptacle
9. 20 amp 120V twistlock receptacle (2x)
10. 20 amp 120V ground fault interrupter, (2x)
11. 15 amp 120V ground fault interrupter, duplex receptacle (2x)
12. 30 amp 120V battery charger/generator space heater receptacle
13. 30 amp 120V JWH receptacle
14. Remote start/stop contacts
15. 12.7 mm (½") ground stud
16. Load connection bus board [6.35 mm × 101.6 mm × 101.6 mm (¼" × 4" × 4") bus bars]

CONTAINER DIMENSIONS — TOP VIEW



CONTAINER DIMENSIONS — RIGHT SIDE VIEW



Overall Dimensions				
	Package		With Trailer	
Length	4597.4 mm	181 in	6248.3 mm	246 in
Width	1498.6 mm	59 in	2540.0 mm	100 in
Height	2387.6 mm	94 in	2882.8 mm	113.5 in

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U.S. Sourced

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