

2022-Apr-25

Senior Environmental Engineer
Environmental Approvals Branch – Industrial and Wastewater Section
Manitoba Environment, Climate and Parks
1007 Century Street
Winnipeg, Manitoba R3H 0W4

RE: File 6140.00. Price Industries – SolutionAir Facility – EAP Acknowledgement

Dear Eshetu,

SolutionAir Group, a division of Price Industries Ltd., received your request for supplemental information related to the Environment Act Licence proposal dated 2022-Mar-24. The requested information is listed below for your review.

1. It is not clear what SolutionAir manufactures. Please provide detailed information on the raw materials received and the final product shipped.

SolutionAir manufactures:

- Custom air handling units;
- Roof top units;
- Air make-up units:
 - Heating (natural gas, hot water, or electric);
 - Cooling (using refrigeration or cold water);
- Price RegenCore™ – reverse flow energy recovery units; and
- Precision control units for indoor horticulture.

Units are constructed of various types of metals:

- Galvanized steel, painted;
- Galvannealed steel (painted);
- Stainless steel; and/or
- Aluminum.

Raw materials inputs include:

- Steel sheet (various thicknesses and sizes);
- Aluminum sheets (various thicknesses and sizes);
- Stainless steel (various thicknesses and sizes);
- Structural steel channels;
- Aluminum extrusions for posts;
- Various types of insulation;
- Copper tubing (various diameters);
- Stainless steel tubing (various diameters);
- Ozone depleting substances (Attachment B);
- Chemical products (Attachment B).

Purchased products/components include:

- Fans
- Motors
- Coils
- Burners
- Furnaces
- Calves
- Controllers
- Various electrical components

2. Provide a floor plan of the facility with clearly labelled locations of each operations.

[Please see Attachment A – SolutionAir Facility Overview.](#)

- 3. Provide the proximity of the facility to the residential neighbourhood. Please also indicate if any complaint has ever been received from the residential area and if any what was the concern?**

[Please see Attachment B – SolutionAir Neighbourhood Proximity.](#)

SolutionAir received two neighbourhood concerns in the past two years:

1. Early pandemic 2020 – A resident submitted a concern related to masks blowing from the SolutionAir parking lot into their front yard. SolutionAir installed dedicated mask disposal stations, sent an internal communication to all employees on the requirements for mask disposal and cleaned the lot. No additional concerns have been submitted following the initial report.
2. May 2021 – A resident submitted a concern related to litter blowing from SolutionAir into their front lawn. The concern was raised following an abnormally windy day. Perimeter fences were erected in December 2021 to capture any litter that is then removed and disposed by SolutionAir. All waste collection containers are located within the perimeter fence. No additional concerns have been submitted following the initial report.
3. As an additional commitment to the environment SolutionAir removed single use hearing protection in late 2021; replacing with reusable options. This initiative was implemented to reduce the environmental impact of improperly disposed hearing protection from the site.

- 4. Please provide the list of all chemicals used in the facility and the volume stored on site at any given time.**

[Please see Attachment C – SolutionAir Chemical Inventory.](#)

- 5. Provide more information regarding the specification of the filter used to control the fumes from the laser operation.**

Camfil cartridges are used in the CNC laser machine. Filter performance is monitored by a pressure monitoring gauge. The supplier has advised the filters must be replaced when the gauge indicates 6 water column. Readings are provided on an electronic display and are monitored by the operators. The differential pressure is noted daily on the equipment maintenance calendar.

[Please see Attachment D – Camfil Laser Cartridge Specification Sheet.](#)

- 6. Please also provide any other emission control equipment used in the facility. For example any filter used for the welding station.**

The CNC laser utilizes filters to control emissions. No additional emission control devices are located within the facility. The welding stations do not have emission controls. An indoor air quality study was completed in April and May 2021.

- 7. Provide traffic information for receiving and shipping.**

Shipping and receiving operations occur Monday to Friday during the hours of 7:30 am to 4:00 pm.

- Approximately four to five semi-trucks deliver and receive loads daily.
- Approximately ten to twelve delivery vehicles deliver and receive loads daily.
- A crane is utilized once a month for loading trailers. A crane company is hired to load units outdoors with a large crane truck. Loading occurs in the south-west near the shipping and receiving area.

- 8. Provide the information about the company picking the hazardous waste.**

Miller Environmental Corporation currently consigns, carries, and receives hazardous waste generated at SolutionAir.

- Miller Environmental Corporation Carrier License: MBC00202
- Miller Environmental Corporation Receiver Licenses: MBR30043 and MBR01829

9. Provide detailed information how potential spill can be handled.

SolutionAir currently provides in-house WHMIS 2015 training to all employees in accordance with the Workplace Safety and Health Regulation M.R. 217/2006. Employees who respond to spills receive additional in-house spill training.

Spill kits are located throughout the facility.

The foam insulation parts A and B are located on spill pallets.

The hazardous waste containment unit is a secured, hard-top unit with built in spill protection. A spill kit is located outside to respond to any spills in the containment unit. spill training.

Tervita will be contracted and provide remediation for large spills that cannot be handled in-house.

10. Provide detailed additional information regarding foam insulation.

SolutionAir utilizes the BASF ELASTOPOR® R 7183 System. The system is composed of a two-component HFO blown rigid polyurethane foam system.

Please see Attachment E – BASF ELASTOPOR® R 7183 SYSTEM Technical Data Sheet.

11. It is indicated that there is a spray booth in the facility currently not in use. Please elaborate on this. Is the spray booth will be decommissioned and removed from the facility or it will be used in the future. If it will be used provide a detail on its operation including the emission control system.

Painting services are currently outsourced to a vendor. The downdraft paint booth was decommissioned October 2019. The air handling unit dedicated to the booth was removed and sold. The air lines are operation but have been locked out to prevent use.

SolutionAir anticipates recommissioning the paint booth within the next five years. Recommissioning will require purchase of a new air make-up system, re-certification by the vendor, and a Notice of Alteration submission.

12. It is indicated that a number of vacuum pumps are in the facility. What are the purpose of these pumps?

Vacuum pumps (SuperEvac Pumps) are used for leak testing of refrigeration circuits prior to charging. The pumps are also used to withdraw unwanted contaminants, primarily dirt, moisture and excess air, from the circuits prior to shipping.

Please do not hesitate to contact me if you have any questions at SheenaP@priceindustries.com.

Sincerely,



Sheena Porco, C.E.T, EPt.
EHS Specialist

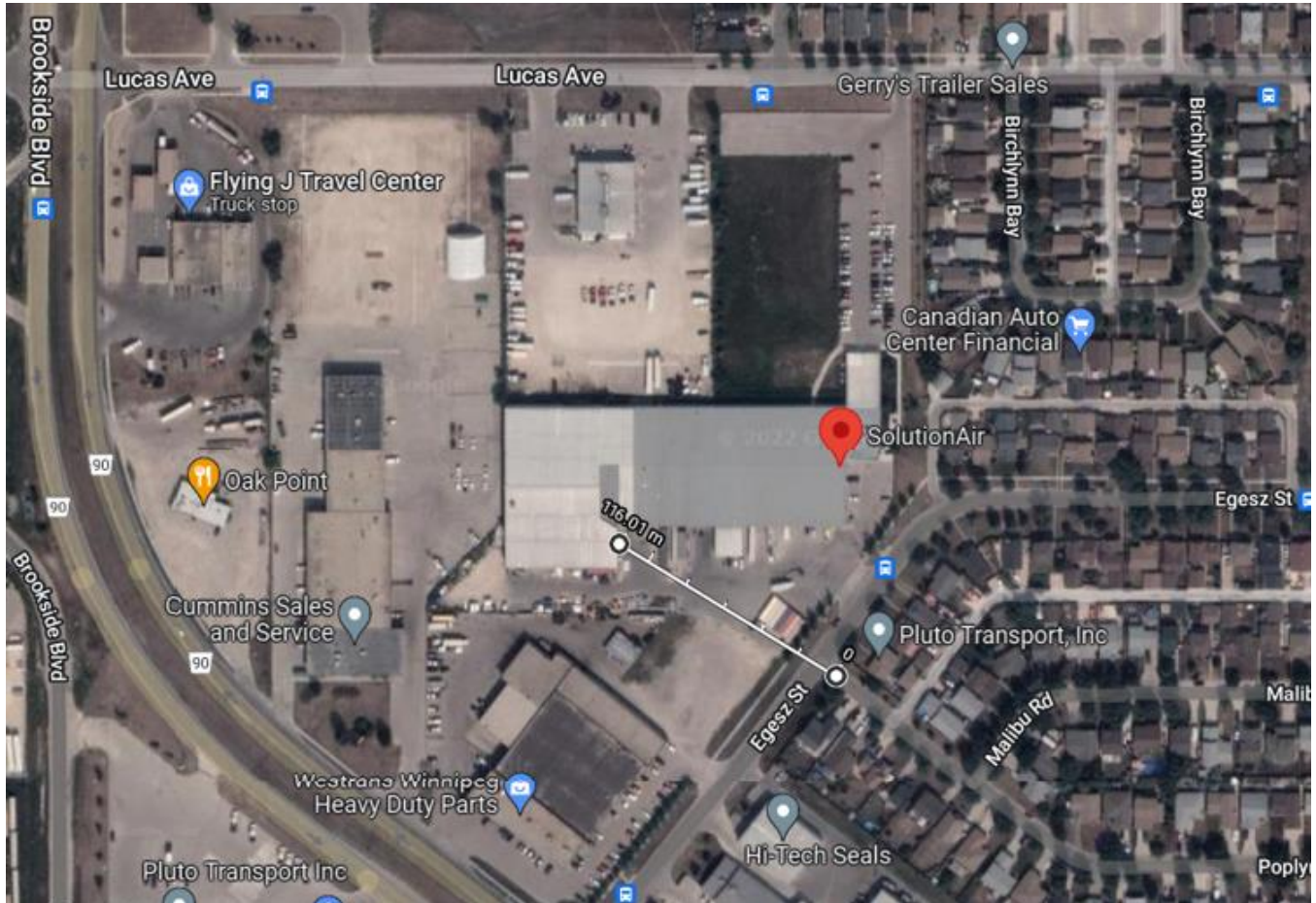
ATTACHMENT A

SolutionAir Facility Overview



ATTACHMENT B

SolutionAir Neighbourhood Proximity



ATTACHMENT C

SolutionAir Chemical Inventory

Product Identifier	Supplier	Storage Volume
Acrylic Latex With Silicone	CRLAURENCE	2 tubes
Cal-Blue Lt	Nu-Calgon	1 gallon
Copper Grade Ez Break	La-Co Industries	1 can
Elastopor Isocyanate	Basf	250 kg
Elastopor Resin	Basf	250 kg
Emkarate Refrigerant Lubricant	Nu-Calgon	6 gallons
Furnace Cement	Sos	3 pints
Hi-Strength Adhesive	3M	3
Isopropyl Alcohol Electronics Cleaner	Mg Chemicals	6 bottles (15.9 oz each)
Lepage Acoustic -Seal PL	Henkel	7 tubes (825 ml each)
Lockformer Galv-Off	Chase Products	1 can (12 oz)
Marine Adhesive Sealant Fast Cure	3m	14 tubes
Novalink SL	CHEM LINK INC	15 tubes
Nuflex Silicone Sealant High Temp Red	NUCO	9 tubes
Nuflex Bath & Kitchen Sealant - Clear	NUCO	9 tubes
Polyurethane Adhesive Sealant	3m	33 tubes
Polyurethane Adhesive Sealant (Various Colors)	3M	10 tubes
Quatromyicide II	Dustbane Products	1 gallon
Sanitizer Wipes		2 pails (800 sheets each)
Scotch Weld Acrylic Adhesive	3M	5 tubes
Scotch Weld Dp 8810	3m	9 tubes
Silvabrite	Lucas Milhaupt	2 bottles
Simple Green All Purpose Cleaner		1 bottle (16 oz)
Sprayway Glass Cleaner	Sprayway Inc	1 can
Stay Sillv White Brazing Flux	Harris Products Group	3 bottles (6.5 oz each)
Surfox-T	Walter Surface Technologies	1.5 L
Tempro Silicone High Temp Red	Tremco	9 tubes
Thinner For Clovazinc 2	Cloverdale	1 pail
Tremco Clear	Tremc Canadian Sealants	22 tubes
Tristar Coatings Medium Epoxy Reducer		25 gallons
Tristar Coatings Medium Epoxy Reducer Cleaner		3 gallons
Vacuum Pump Oil	Nu-Calgon	4 L
Starpoxy 430 Epoxy Primer	Tristar Coatings	55 gallons
Strathane 560 Semi Gloss	Tristar Coatings	50 gallons
Urethane Catalyst 560L5392	Tristar Coatings	40 gallons
Shell Tellus Hydraulic Fluid	Shell	10 gallons
List Of Refrigerants		600 lbs
Plastic Adhesive	3m	3 tubes (fl oz each)
Acrylic Adhesive Dp8425	3m	32 tubes
Polyurethane Sealant	3m	15 tubes
Polyurethane Accelerator	3m	24 tubes

Polyurethane Sealant	3m	2 tubes
Polyurethane Adhesive Sealant Fast Cure		3 tubes (fl oz each)
Zinc Galvanizing Spray	Better Than	12 cans
Spray Foam Silicone	Chem Trend	11 cans
Press Brake Productivity Wax	Wila	500 ml
E-Weld 3	Walter	1/2 gallon
520 Adhesive	Armaflex	1/2 pint
Hand Sanitizer Gel	Luxurion	8 bottles (16 oz each)
Sika Boom 3xl	Sika	30 oz
Thread Cutting Oil	Rigid	1 gallon
Eyesaline	Honeywell	10 bottles (32 oz each)
Plastic Dip	Performix	1 gallon
Gun Wash		10 L
Armourshield	Cloverdale	760 ml
Metal Reinforced Body Filler	Evercoat	1 can
Dynasolve CU-6	Bolair	1 jug
Motor Oil	Lubriplate	2 qt
Air Tool Oil	Kleen-Flo	500 ml
Hard Surface Cleaner	Dustbane Products	4 L
Triple Action Rtu	Dustbane Products	750 ml
Pro-Dope	Masters	3 cans
Tip Dip	Cantesco	1 can (16 oz)
Blue Chalk	Starrett	1 jug (5 lbs)
Compressed Gas - Oxygen		16 bottles
Tyvek Dessicant		1 pail
Lubricant (3160000)	T-Drill	1
Pipe Thread Compound	Blue Magic	1 jar

ATTACHMENT D

Camfil Laser Cartridge Specification Sheet



CARTRIDGE SPECIFICATION SHEET

Part Number:	325325016
Media:	HemiPleat eXtreme Flame Retardant (Camfil media part number 226062)
Model:	FLTR-GS-XF-325
Shape:	Cylindrical Filter, Gold Series top plate, Closed Bottom
Height:	39 Inches (990 mm)
Outside Diameter:	15 Inches (381 mm)
Effective Filter Area:	325 FT ² (30.2 M ²)
Liners:	Galvanized
End Caps:	Galvanneal
Gasket:	Polyurethane pour-in-place
Max. Temperature:	160 Deg. F.
Efficiency:	ASHRAE 52.2 MERV 15
Flame Retardancy:	F1 rating, DIN 53438 Part 3

Camfil APC
3505 South Airport Road, Jonesboro, AR 72401
Tel (870) 933-6048, Fax (870) 933-6381
www.farrapc.com

ATTACHMENT E

BASF ELASTOPOR® R 7183 SYSTEM Technical Data Sheet



BASF ELASTOPOR® R 7183 SYSTEM Technical Data Sheet

ELASTOPOR® R 7183 SYSTEM TECHNICAL DATA SHEET

MIX RATIO

Parts by Weight	100 Resin / 110 Isocyanate
Parts by Volume	100 Resin / 100 Isocyanate

HAND MIX REACTIVITY

Component Temperatures Resin / Isocyanate	13 / 23°C (55 / 73°F)
Cream Time	16 ± 4 s
Gel Time	115 ± 7 s
Rise Time	220 ± 20 s
Cup Density	2.00 ± 0.05 pcf (32.0 ± 0.8 kg/m³)

PROCESS RECOMMENDATIONS

This system processes well on high-pressure machine and on standard proportioning equipment using a pour gun.

Component Temperatures Resin / Isocyanate	18-30 / 18-30 °C (64-86 / 64-86°F)
Component Pressures (proportioning equipment)	55-85 bars (800-1200 psi)
Component Pressures (high pressure machine)	100-150 bars (1500-2200 psi)
Substrate Temperature	20-40°C (68-104°F)
Demould Time	20 minutes for 4"

For more information on this product, please contact the BASF Tech Desk at 800.527.8324 or techquestions.na@basf.com

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WARNING These products can be used to prepare a variety of polyurethane products. Polyurethanes are organic materials and must be considered combustible.

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BASF ELASTOPOR® R 7183 SYSTEM Technical Data Sheet

ELASTOPOR® R 7183 SYSTEM TECHNICAL DATA SHEET

TYPICAL PHYSICAL PROPERTIES

Physical properties were measured on a 12 x 12 x 4" block poured using a high-pressure machine.

Overall Density, ASTM D1622	2.77 pcf (44.3 kg/m³)
Core Density, ASTM D1622	2.56 pcf (41.0 kg/m³)
Parallel Compressive Strength @ 10%, ASTM D1621	180.6 kPa (26.2 psi)
Perpendicular Compressive Strength @ 10%, ASTM D1621	162.7 kPa (23.6 psi)
Flexural Strength, ASTM D790	296.8 kPa (43.0 psi)
Closed Cell Content, ASTM D6226	94 %
Initial Thermal Conductivity @ 22.5°C mean temperature, ASTM C518	0.0226 W/m.K 0.157 Btu.in/Hr.ft².°F
Initial Thermal Resistance @ 22.5°C mean temperature, ASTM C518	44.13 m.K/W 6.37 Hr.ft².°F/Btu.in
Water Absorption, ASTM D2842	3.85 %
UL 94 Flame Class	HF-1
MVSS 302, ASTM D5132	Pass
Dimensional Stability, 28 days, % Volume Change, ASTM D2126	-1.3 % @ -20°C (-4°F) -1.6 % @ 70°C (158°F) -6.1 % @ 70°C, 97% RH

For more information on this product, please contact the BASF Tech Desk at 800.527.8324 or techquestions.na@basf.com

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4

BASF ELASTOPOR® R 7183 SYSTEM Technical Data Sheet

ELASTOPOR® R 7183 SYSTEM TECHNICAL DATA SHEET

STORAGE RECOMMENDATIONS

Resin	- Shelf Life	6 months
	- Temperature	10 - 25°C (50 - 77°F)
Isocyanate	- Shelf Life	12 months
	- Temperature	10 - 25°C (50 - 77°F)

SAFETY AND HANDLING REDOMMENDATIONS

- For information regarding safe product handling, consult the product Safety Data Sheet.
- For severe spills and emergencies contact CHEMTREC at 1-800-424-9300 or the BASF HOTLINE: 1-800-832-HELP (4357).

For more information on this product, please contact the BASF Tech Desk at 800.527.8324 or techquestions.na@basf.com

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5