### Toxic Reduction Plan (Furfuryl alcohol) For Magellan Aerospace, Haley

## **PLAN SUMMARY**

## **BASIC FACILITY INFORMATION**

Name & CAS # of substance(s)	Furfuryl alcohol (Part 5 VOC)	98-00-0
	Facility Identification and Site Addres	\$\$
Company Name	Magellan Aeros	pace
Facility Name	Haley	N & 2 1 1
2	Physical Address:	Mailing Address (if different):
Facility Address	634 Magnesium Road, Haley, Ontario K0J 1Y0	Same as physical address
Spatial Coordinates of Facility	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a North American Datum 82 (NAD82) datum
Number of Employees	469	Number of full-time employee equivalents
NPRI ID	7080	lf known
Ontario MOE ID Number	more n/a	If known
22 H	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace Limited 3160 Derry Road, Mississauga, ON	
Percent Ownership for each PC	100	
<b>Business Number for PC</b>	870261690	)
Primary North A	merican Industrial Classification Sys	tem Code (NAICS)
2 Digit NAICS Code	33 - Manufacturing	
4 Digit NAICS Code	3315 - Foundries	
6 Digit NAICS Code	331529 - Non-Ferrous Foundries (except Die-Casting)	
	Company Contact Information	
	Name: James Lemenchick	Contact address if different from Facility
	Title: General Manager	Address:
Facility Public Contact	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

Toxic Reduction Plan (Furfuryl alcohol) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Furfuryl alcohol prepared by Magellan Aerospace Limited dated December 23, 2014.

## STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley with continue to assess environmentally-friendly alternatives on an on-going basis.

### **DESCRIPTION OF SUBSTANCES**

Furfuryl alcohol is a component of the binder chemicals used at the facility.

## TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of Furfuryl alcohol. A rationale as to why no option could be identified is provided for each category.



Toxic Reduction Plan (Furfuryl alcohol) For Magellan Aerospace, Haley

#### PLAN CERTIFICATIONS

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 23, 2014, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: Furfuryl alcohol (Part 5 VOC)

James Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 23, 2014, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 23, 2014 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Furfuryl alcohol (Part 5 VOC)

Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Magellan Aerospace Haley, a division

of Magellan Aerospace Limited

Toxic Reduction Plan (Heavy aromatic solvent naphtha) for Magellan Aerospace, Haley

# **PLAN SUMMARY**

#### **Basic Facility Information**

Name & CAS# of Substance(s)	Heavy aromatic solvent naphtha (Part 5 VOC)	64742-94-5	
	Facility Identification and Site Addres	S	
	Physical Address	Mailing Address (if different)	
Facility Address	634 Magnesium Road		
Facility Address	Haley, Ontario	Same as physical address	
	КОЈ 1ҮО		
Spatial Coordinates of Facility	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a North American Datum 82 (NAD82) datum	
Number of Employees	307	Number of full-time employee equivalents	
NPRI ID	7080	if known	
Ontario MOE ID Number	n/a	if known	
	Parent Company (PC) Information		
PC Name & Address	Magellan Aerospace	Corporation	
	3160 Derry Road East, Mississauga, ON		
Percent Ownership for	100		
each PC			
Business Number for PC	894534346		
	Primary North American Industrial Classification Syst	em Code (NAICS)	
2 Digit NAICS Code	33 — Manufacturing		
4 Digit NAICS Code	3315 — Foundries		
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)		
	Company Contact Information		
	Name: James Lemenchick	Contact address if different from Facility Address	
	Title: General Manager	contact duriess if unjerent from Facility Address	
Facility Public Contact	Email: jim.lemenchick@magellan.aero		
	Phone: (613) 432-8846 ext. 242	Same as facility address	
	Fax: (613) 432-0743		

### Toxic Reduction Plan (Heavy aromatic solvent naphtha) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Heavy aromatic solvent naphtha prepared by Magellan Aerospace Limited dated December 11, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

Heavy aromatic solvent naphtha is a component of the binder chemicals used at the facility.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of heavy aromatic solvent naphtha. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (Heavy aromatic solvent naphtha) For Magellan Aerospace, Haley

## **PLAN CERTIFICATIONS**

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 11, 2013, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: Heavy aromatic solvent naphtha (Part 5 VOC)

James Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 11, 2013, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 11, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Heavy aromatic solvent naphtha (Part 5 VOC)

Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Toxic Reduction Plan (Hydrotreated light distillate) for

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

Magellan Aerospace, Haley

# **PLAN SUMMARY**

## **Basic Facility Information**

Name & CAS# of	Hydrotreated light distillate (Part 5 VOC)	64742-47-8	
Substance(s)	Facility Identification and Site Addres	is	
	Physical Address	Mailing Address (if different)	
	634 Magnesium Road		
Facility Address	Haley, Ontario	Same as physical address	
	KOJ 1YO		
Spatial Coordinates of Facility	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a North American Datum 82 (NAD82) datum	
Number of Employees	307	Number of full-time employee equivalents	
NPRI ID	7080	if known	
Ontario MOE ID Number	n/a	if known	
	Parent Company (PC) Information		
PC Name & Address	Magellan Aerospace Corporation 3160 Derry Road East, Mississauga, ON		
Percent Ownership for			
each PC	100		
Business Number for PC	894534346		
	Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	33 — Manufacturing		
4 Digit NAICS Code	3315 — Foundries		
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)		
	Company Contact Information		
	Name: James Lemenchick	Contact address if different from Facility Address	
	Title: General Manager		
Facility Public Contact	Email: jim.lemenchick@magellan.aero		
	Phone: (613) 432-8846 ext. 242	Same as facility address	
	Fax: (613) 432-0743		

#### **Toxic Reduction Plan (Hydrotreated light distillate)**

For

Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Hydrotreated light distillate prepared by Magellan Aerospace Limited dated December 11, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

Hydrotreated light distillate is a component of Ardrox 9704 used at the facility. Ardrox 9704 is a water washable fluorescent penetrant suitable for the detection of defects open to the surface in metal components.

### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of Hydrotreated light distillate. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (Hydrotreated light distillate) For Magellan Aerospace, Haley

## **PLAN CERTIFICATIONS**

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 11, 2013, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: Hydrotreated light distillate (Part 5 VOC)

Jainés Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 11, 2013, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 11, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Hydrotreated light distillate (Part 5 VOC)

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Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Toxic Reduction Plan (Isopropyl Alcohol) for Magellan Aerospace, Haley

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

### **Basic Facility Information**

Name & CAS# of	Isopropyl Alcohol	67-63-0
Substance(s)		
	Facility Identification and Site Addres	S
	Physical Address	Mailing Address (if different)
Facility Address	634 Magnesium Road	
radincy Address	Haley, Ontario	Same as physical address
	КОЈ 1ҮО	·
Spatial Coordinates of	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a
Facility	5050750N, 505500E (2011E 181)	North American Datum 82 (NAD82) datum
Number of Employees	307	Number of full-time employee equivalents
NPRI ID	7080	if known
<b>Ontario MOE ID Number</b>	n/a	if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace	Corporation
Te Marine & Address	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100	
each PC	100	
Business Number for PC	894534346	
	Primary North American Industrial Classification Syst	em Code (NAICS)
2 Digit NAICS Code	33 — Manufacturing	
4 Digit NAICS Code	3315 — Foundries	
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)	
	Company Contact Information	
	Name: James Lemenchick	Contact address if different from Facility Address
	Title: General Manager	contact duress if different from ruenity Address
Facility Public Contact	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

## Toxic Reduction Plan (Isopropyl Alcohol) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Isopropyl Alcohol prepared by Magellan Aerospace Limited dated December 11, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

Isopropyl alcohol is a component of several cleaning chemicals used at the facility.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of Isopropyl alcohol. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (Isopropyl alcohol) For Magellan Aerospace, Haley

## **PLAN CERTIFICATIONS**

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 11, 2013, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: Isopropyl alcohol

James Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 11, 2013, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 11, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Isopropyl alcohol

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Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Toxic Reduction Plan (PM10 and PM2.5) for Magellan Aerospace, Haley

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

## **Basic Facility Information**

Name & CAS# of Substance(s)	PM10 and PM 2.5	NA — M09 and NA — M10
	Facility Identification and Site Addres	S
	Physical Address	Mailing Address (if different)
Facility Address	634 Magnesium Road	
Facility Address	Haley, Ontario	Same as physical address
	KOJ 1YO	
Spatial Coordinates of Facility	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a North American Datum 82 (NAD82) datum
Number of Employees	307	Number of full-time employee equivalents
NPRI ID	7080	if known
Ontario MOE ID Number	n/a	if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace Corporation 3160 Derry Road East, Mississauga, ON	
Percent Ownership for each PC	100	5,
<b>Business Number for PC</b>	894534346	
ĺ	Primary North American Industrial Classification System Code (NAICS)	
2 Digit NAICS Code	33 — Manufacturing	
4 Digit NAICS Code	3315 — Foundries	
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)	
	Company Contact Information	
	Name: James Lemenchick	Contact address if different from Facility Address
	Title: General Manager	contact datess if appendix from Facility Address
Facility Public Contact	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

## Toxic Reduction Plan (PM10 and PM2.5) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for PM10 and PM2.5 prepared by Magellan Aerospace Limited dated December 11, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

PM10 and PM2.5 are created as part of the manufacturing processes at the facility, and as a product of propane and natural gas combustion.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of PM10 and PM2.5. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (PM10 and PM2.5) For Magellan Aerospace, Haley

## **PLAN CERTIFICATIONS**

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 11, 2013, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: PM10 and PM2.5

James Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 11, 2013, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 11, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: PM10 and PM2.5

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Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Toxic Reduction Plan (PMDI) for Magellan Aerospace, Haley

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

# PLAN SUMMARY

### **Basic Facility Information**

Name & CAS# of Substance(s)	Polymeric diphenylmethane iisocyanate	9016-87-9
Substance(s)	Facility Identification and Site Addres	
	Physical Address	Mailing Address (if different)
Prostitus Ashdonese	634 Magnesium Road	
Facility Address	Haley, Ontario	Same as physical address
	KOJ 1YO	
Spatial Coordinates of Facility	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a North American Datum 82 (NAD82) datum
Number of Employees	307	Number of full-time employee equivalents
NPRI ID	7080	if known
Ontario MOE ID Number	n/a	if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace	-
	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100	
each PC		
Business Number for PC	894534346	
	Primary North American Industrial Classification System Code (NAICS)	
2 Digit NAICS Code	33 — Manufacturing	
4 Digit NAICS Code	3315 — Foundries	
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)	
	Company Contact Information	
Facility Public Contact	Name: James Lemenchick	Contact address if different from Facility Address
	Title: General Manager	
	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

## Toxic Reduction Plan (PMDI) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for polymeric diphenylmethane iisocyanate (PMDI) prepared by Magellan Aerospace Limited dated December 11, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

PMDI is a component of the binder chemicals used at the facility.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of PMDI. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (PMDI) For Magellan Aerospace, Haley

## PLAN CERTIFICATIONS

#### **CERTIFICATION BY HIGHEST RANKING EMPLOYEE:**

As of December 11, 2013, I, James Lemenchick, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act.

Toxic Substance: Polymeric diphenylmethane iisocyanate (PMDI)

James Lemenchick General Manager Magellan Aerospace, Haley

#### **CERTIFICATION BY LICENSED PLANNER:**

As of December 11, 2013, I, Ulla Jokinen of Trinity Consultants Ontario Inc., certify that I am familiar with the processes at the Magellan Aerospace Ltd.'s Haley facility, that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 11, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Polymeric diphenylmethane iisocyanate (PMDI)

Ulla Jokinen, B.Sc., C.E.T. of Trinity Consultants Ontario Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090



Toxic Reduction Plan (Sulphuric Acid) for Magellan Aerospace, Haley

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

### **Basic Facility Information**

Name & CAS# of	Sulphuric acid (and its compounds)	7664-93-9
Substance(s)	Zinc (and its compounds) — UNDER SEPARATE COVER	N/A — 14
	Facility Identification and Site Addres	S
	Physical Address	Mailing Address (if different)
Facility Address	634 Magnesium Road	
	Haley, Ontario	Same as physical address
	KOJ 1YO	
Spatial Coordinates of	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a
Facility	5050750N, 505500E (2011E 1817)	North American Datum 82 (NAD82) datum
Number of Employees	495	Number of full-time employee equivalents
NPRI ID	7080	if known
Ontario MOE ID Number	n/a	if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace	
	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100	
each PC		
<b>Business Number for PC</b>	894534346	
	Primary North American Industrial Classification Syst	em Code (NAICS)
2 Digit NAICS Code	33 — Manufacturing	
4 Digit NAICS Code	3315 — Foundries	
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)	
	Company Contact Information	
	Name: James Lemenchick	Contact address if different from Facility Address
	Title: General Manager	
Facility Public Contact	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

## Toxic Reduction Plan (Sulphuric Acid) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for sulphuric acid prepared by Magellan Aerospace Limited dated May 21, 2013.

### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley will be reducing the use of sulphuric acid by approximately 12% by December 2013. This reduction has been achieved.

#### **DESCRIPTION OF SUBSTANCES**

Sulphuric acid is used to etch magnesium castings in the fluorescent penetrant inspection process and used to neutralize sulfur dioxide scrubber effluent.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

Magellan Aerospace, Haley intends to implement an option that will reuse some of the 5.5% sulphuric acid from the acid etch process to neutralize effluent in the wastewater treatment process.

#### Toxic Reduction Plan (SULPHURIC ACID) For Magellan Aerospace Limited, Haley

## PLAN CONFIRMATIONS

Note: The 'Certification' statements cannot be used after the December 31, 2012 deadline.

#### CONFIRMATION BY HIGHEST RANKING EMPLOYEE:

As of May 29, 2013, I, James Lemenchick, confirm that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act, with the exception of the regulatory deadline.

The plan summary was not submitted by the December 31, 2012 deadline because resources were limited due to staffing reductions.

Toxic Substance: Sulphuric acid

James Lemenchick General Manager Magellan Aerospace Limited

#### **CONFIRMATION BY LICENSED PLANNER:**

As of May 29, 2013, I, Ulla Jokinen of Church & Trought Inc., confirm that I am familiar with the processes at the Magellan Aerospace Limited's Haley facility, that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated May 21, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act, with the exception of the regulatory deadline.

Toxic Substance: Sulphuric acid

Ulla Jokinen, Ø.Sc., C.E.T. of Church & Trought Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090

Date of Plan: May 21, 2013



Toxic Reduction Plan (Zinc) for Magellan Aerospace, Haley

Magellan Aerospace Haley, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

## **Basic Facility Information**

Name & CAS# of	Zinc (and its compounds)	N/A — 14
Substance(s)	Sulphuric acid — UNDER SEPARATE COVER	7664-93-9
	Facility Identification and Site Addres	S
x	Physical Address	Mailing Address (if different)
Facility Address	634 Magnesium Road	
	Haley, Ontario	Same as physical address
	KOJ 1YO	
Spatial Coordinates of	5050730N, 363506E (Zone 18T)	Expressed in Universal Transverse Mercator (UTM) within a
Facility	5050750N, 505500E (2010 101)	North American Datum 82 (NAD82) datum
Number of Employees	495	Number of full-time employee equivalents
NPRI ID	7080	if known
Ontario MOE ID Number	n/a	if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace Corporation	
	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100	
each PC	100	
Business Number for PC	894534346	
	Primary North American Industrial Classification System Code (NAICS)	
2 Digit NAICS Code	33 — Manufacturing	
4 Digit NAICS Code	3315 — Foundries	
6 Digit NAICS Code	331529 — Non-Ferrous Foundries (except Die-Casting)	
Company Contact Information		
Facility Public Contact	Name: James Lemenchick	Contact address if different from Facility Address
	Title: General Manager	
	Email: jim.lemenchick@magellan.aero	
	Phone: (613) 432-8846 ext. 242	Same as facility address
	Fax: (613) 432-0743	

## Toxic Reduction Plan (Zinc) For Magellan Aerospace, Haley

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for zinc prepared by Magellan Aerospace Limited dated May 29, 2013.

#### STATEMENT OF INTENT

Magellan Aerospace Limited is committed to playing a leadership role in protecting the environment. Whenever possible, the Magellan Aerospace, Haley facility will continue to work to reduce the use, creation and discharge of toxic substances in full compliance with all federal and provincial regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Haley is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduction options could be identified. Magellan Aerospace, Haley will continue to assess environmentally-friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

Zinc is a component of the magnesium alloys processed at the facility. It is also found to a much lesser degree in welding materials.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No reduction options could be identified to reduce the use, creation, or releases of zinc. A rationale as to why no option could be identified is provided for each category.

#### Toxic Reduction Plan (ZINC) For Magellan Aerospace Limited, Haley

## PLAN CONFIRMATIONS

Note: The 'Certification' statements cannot be used after the December 31, 2012 deadline.

#### CONFIRMATION BY HIGHEST RANKING EMPLOYEE:

As of May 29, 2013, I, James Lemenchick, confirm that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (general) made under that Act, with the exception of the regulatory deadline.

The plan summary was not submitted by the December 31, 2012 deadline because resources were limited due to staffing reductions. In addition, the facility was also working on confirmation that the substance was reportable for the Toxics Reduction Act.

Toxic Substance: Zinc

James Lemenchick General Manager Magellan Aerospace Limited

#### **CONFIRMATION BY LICENSED PLANNER:**

As of May 29, 2013, I, Ulla Jokinen of Church & Trought Inc., confirm that I am familiar with the processes at the Magellan Aerospace Limited's Haley facility, that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv, and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated May 29, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act, with the exception of the regulatory deadline.

Toxic Substance: Zinc

Ulla Jokinen B.Sc., C.E.T. of Church & Trought Inc. Toxic Substance Reduction Planner Planner License No: TSRP0090

Date of Plan: May 29, 2013



Toxic Reduction Plan (Chromium) for Magellan Aerospace, Mississauga

Magellan Aerospace Mississauga, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

### **Basic Facility Information**

Name & CAS# of	Chromium	NA-11 7440-47-3	
Substance(s)	Chroman		
	Facility Identification and Site Addre	SS	
	Physical Address	Mailing Address (if different)	
Facility Address	3160 Derry Road East		
racincy Address	Mississauga, Ontario	Same as physical address	
	L4T 1A9		
Spatial Coordinates of	79.63450N, 43.70680E (NAD83)	Expressed in Universal Transverse Mercator (UTM) within a	
Facility	73.034301, 43.700002 (114003)	North American Datum 82 (NAD82) datum	
Number of Employees	295	Number of full-time employee equivalents	
NPRI ID	4507		
Ontario MOE ID Number		if known	
	Parent Company (PC) Information		
PC Name & Address	Magellan Aerospace Corporation		
	3160 Derry Road East,	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100		
each PC	100		
Business Number for PC	894534346		
	Primary North American Industrial Classification Sys	tem Code (NAICS)	
2 Digit NAICS Code	33		
4 Digit NAICS Code	3364		
6 Digit NAICS Code	336410		
	Company Contact Information		
	Name: John Waring	Contact address if different from Facility Address	
	Title: Director, Manufacturing Engineering		
Facility Public Contact	Email: john.waring@magellan.aero		
	Phone: 905-673-3250 ext 3352	Same as facility address	
	Fax: 905-673-3896		

Date of Plan: Dec 20, 2012

## Toxic Reduction Plan (Chromium) For Magellan Aerospace, Mississauga

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Chromium prepared by Magellan Aeropsace, Mississauga dated December 20, 2012.

#### STATEMENT OF INTENT

Magellan Aerospace, Mississauga is an ISO 14001 certified company and as such is committed to reducing its impact on the environment. Whenever feasible, Magellan Aerospace, Mississauga will work to reduce the use and release of Chromium in compliance with Environmental Regulations. Chromium is not created at the facility and as such no reductions in the creation of Chromium will be identified.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Mississauga is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduciton options could be identified. Magellan Aerospace, Mississauga will continue to assess environmentally friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

Chromium and Nickel are introduced as constituents in the aircraft parts and non-cast raw metals. The metal specifications state that the chromium and nickel concentration in the as received parts/materials contain up to 30 and 76 percent of each material, respectively.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No options have been identified to be implemented that would result in a reduction in the use or release of Chromium.

Date of Plan: Dec 20, 2012



## **CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 20, 2012, I, Tom Logan, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Chromium

Torh Logan Plant Manager Orenda Aerospace Corporation.

### **CERTIFICATION BY LICENSED PLANNER**

As of December 20, 2012, I, David Windrim, certify that I am familiar with the processes at Orenda Aerospace Corporation that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 20, 2012 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

Chromium

David Windrim (planner license # TSRP0254) Supervisor Environmental Systems Orenda Aerospace Corporation



Toxic Reduction Plan (PM10&PM2.5) for Magellan Aerospace, Mississauga

Magellan Aerospace Mississauga, a division of Magellan Aerospace Limited

# **PLAN SUMMARY**

### **Basic Facility Information**

Name & CAS# of	PM 10 & PM 2.5	NA-M09 & NA-M10
Substance(s)		
	Facility Identification and Site Addres	55
	Physical Address	Mailing Address (if different)
Facility Address	3160 Derry Road East	
	Mississauga, Ontario	Same as physical address
5	L4T 1A9	
Spatial Coordinates of	79.63450N, 43.70680E (NAD83)	Expressed in Universal Transverse Mercator (UTM) within a
Facility		North American Datum 82 (NAD82) datum
Number of Employees	295	Number of full-time employee equivalents
NPRI ID	4507	
Ontario MOE ID Number		if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace Corporation	
	3160 Derry Road East, Mississauga, ON	
Percent Ownership for	100	
each PC	100	
Business Number for PC	894534346	
	Primary North American Industrial Classification Syst	em Code (NAICS)
2 Digit NAICS Code	33	
4 Digit NAICS Code	3364	
6 Digit NAICS Code	336410	
	Company Contact Information	
	Name: John Waring	Contact address if different from Facility Address
	Title: Director, Manufacturing Engineering	
Facility Public Contact	Email: john.waring@magellan.aero	
	Phone: 905-673-3250 ext 3352	Same as facility address
	Fax: 905-673-3896	

Date of Plan: Dec 16, 2013

## Toxic Reduction Plan (PM10&PM2.5) For Magellan Aerospace, Mississauga

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for PM 10 & PM 2.5 prepared by Magellan Aeropsace, Mississauga dated December 16, 2013.

### **STATEMENT OF INTENT**

Magellan Aerospace, Mississauga is an ISO 14001 certified company and as such is committed to reducing its impact on the environment. Whenever feasible, Magellan Aerospace, Mississauga will work to reduce the use, creation and release of particulate matter (PM10 & PM2.5) in compliance with Environmental Regulations.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Mississauga is currently unable to reduce the use of the toxic substance at the facility because no technically and economically feasible reduciton options could be identified. Magellan Aerospace, Mississauga will continue to assess environmentally friendly alternatives on an on-going basis.

#### **DESCRIPTION OF SUBSTANCES**

PM10 and PM2.5 are created as part of the manufacturing processes at the facility, and as a product of propane and natural gas combustion.

#### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

No options have been identified to be implemented that would result in a reduction in the use or release of PM 10 & PM 2.5.

Date of Plan: Dec 16, 2013



## **CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 15, 2013, I, Tom Logan, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

PM10, PM2.5 Tom Logan Plant Manager Magellan Aerospace, Mississauga.

### **CERTIFICATION BY LICENSED PLANNER**

As of December 15, 2013, I, David Windrim, certify that I am familiar with the processes at Magellan Aerospace, Mississauga that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 20, 2012 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under that Act.

PM10, PM2.5

David Windrim (planner license # TSRP0254) Supervisor Environmental Systems Magellan Aerospace, Mississauga



Magellan Aerospace Mississauga, a division of Magellan Aerospace Limited

Toxic Reduction Plan (Nickel) for Magellan Aerospace, Mississauga

# **PLAN SUMMARY**

#### **Basic Facility Information**

Name & CAS# of	Nickel	NA-04 7440-02-0
Substance(s)	NICKEI	NA-04 7440-02-0
	Facility Identification and Site Addres	S
	Physical Address	Mailing Address (if different)
Facility Address	3160 Derry Road East	
racinty Address	Mississauga, Ontario	Same as physical address
	L4T 1A9	
Spatial Coordinates of	79.63450N, 43.70680E (NAD83)	Expressed in Universal Transverse Mercator (UTM) within a
Facility	79.05450N, 45.70080E (NAD85)	North American Datum 82 (NAD82) datum
Number of Employees	295	Number of full-time employee equivalents
NPRI ID	4507	
Ontario MOE ID Number		if known
	Parent Company (PC) Information	
PC Name & Address	Magellan Aerospace Corporation	
re Name & Address	3160 Derry Road East, N	1ississauga, ON
Percent Ownership for	100	
each PC	100	
<b>Business Number for PC</b>	894534346	
	Primary North American Industrial Classification Syst	em Code (NAICS)
2 Digit NAICS Code	33	
4 Digit NAICS Code	3364	
6 Digit NAICS Code	336410	
	Company Contact Information	
	Name: John Waring	Contact address if different from Facility Address
	Title: Director, Manufacturing Engineering	
Facility Public Contact	Email: john.waring@magellan.aero	
	Phone: 905-673-3250 ext 3352	Same as facility address
	Fax: 905-673-3896	

Date of Plan: Dec 20, 2012

## Toxic Reduction Plan (Nickel) For Magellan Aerospace, Mississauga

## PLAN SUMMARY STATEMENT

This plan summary accurately reflects the content of the toxic substance reduction plan for Nickel prepared by Magellan Aeropsace, Mississauga dated December 20, 2012.

#### STATEMENT OF INTENT

Magellan Aerospace, Mississauga is an ISO 14001 certified company and as such is committed to reducing its impact on the environment. Whenever feasible, Magellan Aerospace, Mississauga will work to reduce the use and release of Nickel in compliance with Environmental Regulations. Nickel is not created at the facility and as such no reductions in the creation of Nickel will be identified.

#### **REDUCTION OBJECTIVES**

Magellan Aerospace, Mississauga has reduced the amount of Nickel disposed of by approximately 10% in the first year as outlined in the plan. This reduction was achieved by reducing the amount of rinse water and time of rinsing during the nickel plating process.

#### **DESCRIPTION OF SUBSTANCES**

Chromium and Nickel are introduced as constituents in the aircraft parts and non-cast raw metals. The metal specifications state that the chromium and nickel concentration in the as received parts/materials contain up to 30 and 76 percent of each material, respectively.

### TOXIC SUBSTANCE REDUCTION OPTION TO BE IMPLEMENTED

Magellan Aerospace, Mississauga intends to implement an option that will reduce the volume of waste generated from the nickel plating process.

Date of Plan: Dec 20, 2012