# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR MANGANESE

NOVEMBER 30, 2012

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| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company              |  |
| Facility Name:                 | ADM Woodstock                            |  |
| Street/Mailing Address:        | 842 Juliana Drive, Woodstock, ON N4S 7W8 |  |
| Number of Full-time Employees: | 34                                       |  |
| UTM Easting (NAD83)            | 521729                                   |  |
| UTM Northing (NAD83)           | 4773446                                  |  |
| NAICS 2 digit code             | 31                                       |  |
| NAICS 4 digit code             | 3111                                     |  |
| NAICS 6 digit code             | 311119                                   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company           |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526   |  |
| Ownership:                     | 100% of ADM Agri-Industries Company      |  |
| Business Number:               | 100054527                                |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash                              |  |
| Title:                         | Manager, Environmental /Canada           |  |
| Phone Number:                  | 905-873-1863 x237                        |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6   |  |
| Substance                      |  |  |
| Name of Substance:             | Manganese                                |  |
| CAS Number:                    | 7439-96-5                                |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for manganese, dated November 30, 2012.

#### **3.0 DESCRIPTION OF SUBSTANCE**

ADM Woodstock uses manganese as a trace mineral in animal feeds and pre-mixes and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of manganese at this time because it is a necessary mineral in animal feeds for bone development and reproduction functions. However, we are committed to ensuring that manganese is used in the most responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of manganese at the ADM Woodstock plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its Toxics Reduction Plan to reduce the use of manganese at their site in Woodstock. However, ADM will not reduce the manganese use at the Woodstock plant since it is a mineral added to feed and pre-mixes to promote bone development and reproduction functions in animals. A suitable replacement for manganese has not been identified to date. In addition, the environmental impact of manganese use at the plant is minimal since almost 100% of the manganese used at the site is contained in the final products leaving the site with little loss to the atmosphere or disposal. For these reasons, ADM has decided to not implement any options but will continue to monitor reduction possibilities in the future.

### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 30, 2012, I, Randy Neals, 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.

Manganese

Candy Jeals

Randy Neals Regional Business Manager ADM Agri-Industries Company

### 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 30, 2012, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 30, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Manganese

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

November 30, 2012

# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR ZINC

NOVEMBER 30, 2012

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| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 2 |

| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company              |  |
| Facility Name:                 | ADM Woodstock                            |  |
| Street/Mailing Address:        | 842 Juliana Drive, Woodstock, ON N4S 7W8 |  |
| Number of Full-time Employees: | 34                                       |  |
| UTM Easting (NAD83)            | 521729                                   |  |
| UTM Northing (NAD83)           | 4773446                                  |  |
| NAICS 2 digit code             | 31                                       |  |
| NAICS 4 digit code             | 3111                                     |  |
| NAICS 6 digit code             | 311119                                   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company           |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526   |  |
| Ownership:                     | 100% of ADM Agri-Industries Company      |  |
| Business Number:               | 100054527                                |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash                              |  |
| Title:                         | Manager, Environmental /Canada           |  |
| Phone Number:                  | 905-873-1863 x237                        |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6   |  |
| Substance                      |  |  |
| Name of Substance:             | Zinc                                     |  |
| CAS Number:                    | 7440-66-6                                |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for zinc, dated November 30, 2012.

## **3.0 DESCRIPTION OF SUBSTANCE**

ADM Woodstock uses zinc as a trace mineral in animal feeds and pre-mixes and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of zinc at this time because it is a necessary mineral in animal feeds for bone development and reproduction functions. However, we are committed to ensuring that zinc is used in the most responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of zinc at the ADM Woodstock plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its Toxic Reduction Plan to reduce the use of zinc at their site in Woodstock. However, ADM will not reduce the zinc use at the Woodstock plant since it is a mineral added to feed and pre-mixes to promote bone development and reproduction functions in animals. A suitable replacement for zinc has not been identified to date. In addition, the environmental impact of zinc use at the plant is minimal since almost 100% of the zinc used at the site is contained in the final products leaving the site with little loss to the atmosphere or disposal. For these reasons, ADM has decided to not implement any options but will continue to monitor reduction possibilities in the future.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 30, 2012, I, Randy Neals, 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.

Zinc

Kandy Jeals

Randy Neals Regional Business Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 30, 2012, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 30, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Zinc

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

November 30, 2012

# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR PHOSPHORUS

NOVEMBER 28, 2013

| 1.0 | FACILITY INFORMATION                      | . 1 |
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| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company              |  |
| Facility Name:                 | ADM Woodstock                            |  |
| Street/Mailing Address:        | 842 Juliana Drive, Woodstock, ON N4S 7W8 |  |
| Number of Full-time Employees: | 31                                       |  |
| UTM Easting (NAD83)            | 521729                                   |  |
| UTM Northing (NAD83)           | 4773446                                  |  |
| NAICS 2 digit code             | 31                                       |  |
| NAICS 4 digit code             | 3111                                     |  |
| NAICS 6 digit code             | 311119                                   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company           |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526   |  |
| Ownership:                     | 100% of ADM Agri-Industries Company      |  |
| Business Number:               | 100054527                                |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash                              |  |
| Title:                         | Manager, Environmental /Canada           |  |
| Phone Number:                  | 905-873-1863 x237                        |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6   |  |
| Substance                      |  |  |
| Name of Substance:             | Total Phosphorus                         |  |
| CAS Number:                    | No CAS.                                  |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for total phosphorus, dated November 28, 2013.

## **3.0 DESCRIPTION OF SUBSTANCE**

ADM Woodstock uses phosphorus as a trace mineral in animal feeds and pre-mixes and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of phosphorus at this time because it is a necessary mineral in animal feeds for growth, reproduction, gestation, lactation and energy transfer/utilization. However, we are committed to ensuring that phosphorus is used in the most responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of phosphorus at the ADM Woodstock plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its Toxic Reduction Plan to reduce the use of phosphorus at their site in Woodstock. However, ADM will not reduce the phosphorus use at the Woodstock plant since it is a mineral added to feed and pre-mixes to promote development and reproduction functions in animals. A suitable replacement for phosphorus has not been identified to date. In addition, the environmental impact of phosphorus use at the plant is minimal since almost 100% of the phosphorus used at the site is contained in the final products leaving the site with little loss to the atmosphere or disposal. For these reasons, ADM has decided to not implement any options but will continue to monitor reduction possibilities in the future.

### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 28, 2013, I, Mike Turnbull, 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.

Phosphorus

Al M

Mike Turnbull Location Commercial Manager ADM Agri-Industries Company

## 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 28, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 28, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Phosphorus

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Particulate Matter < 10 $\mu$ m (PM<sub>10</sub>), Particulate Matter < 2.5 $\mu$ m (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | . 1 |
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| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company  |  |
| Facility Name:                 | ADM Woodstock  |  |
| Street/Mailing Address:        | 842 Juliana Drive, Woodstock, ON N4S 7W8                               |  |
| Number of Full-time Employees: | 31   |  |
| UTM Easting (NAD83)            | 521729   |  |
| UTM Northing (NAD83)           | 4773446  |  |
| NAICS 2 digit code             | 31   |  |
| NAICS 4 digit code             | 3111   |  |
| NAICS 6 digit code             | 311119   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company   |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526                                 |  |
| Ownership:                     | 100% of ADM Agri-Industries Company                                    |  |
| Business Number:               | 100054527  |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash  |  |
| Title:                         | Manager, Environmental /Canada   |  |
| Phone Number:                  | 905-873-1863 x237  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6                                 |  |
| Substance                      |  |  |
| Name of Substance:             | Particulate Matter $< 10 \ \mu m$ , Particulate Matter $< 2.5 \ \mu m$ |  |
| CAS Number:                    | None of the substances have CAS numbers                                |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for Particulate Matter < 10  $\mu$ m (PM<sub>10</sub>) and Particulate Matter < 2.5  $\mu$ m (PM<sub>2.5</sub>), dated November 28, 2013.

# **3.0 DESCRIPTION OF SUBSTANCE**

 $PM_{10}$  and  $PM_{2.5}$  is created when natural gas is combusted in heaters at the ADM Woodstock site. In addition,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from delivery of incoming raw materials, metering, mixing, packing and cleaning operations and are exhausted to the atmosphere through baghouse dust collectors.  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

# 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of  $PM_{10}$  and  $PM_{2.5}$  at this time. However, ADM is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at the ADM Woodstock plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options in its toxic reduction plan to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce  $PM_{10}$  and  $PM_{2.5}$  emissions were identified.

ADM's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. Alteration to original equipment design parameters such as filter media must be carefully examined. Many of these filtering steps are an inherent part of ADM's process and are not typical bolt-on, end-of-pipe treatment systems. Accordingly, ADM will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an ADM site specific level.

For these reasons, ADM has decided not to implement any reduction options but will continue to pursue the opportunities discussed above.

### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 28, 2013, I, Mike Turnbull, 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.

Particulate Matter  $< 10 \ \mu m$ Particulate Matter  $< 2.5 \ \mu m$ 

Mit hall

Mike Turnbull Location Commercial Manager ADM Agri-Industries Company

### 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 28, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 28, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR COBALT (AND ITS COMPOUNDS)

DECEMBER 15, 2017

| 1.0 | FACILITY INFORMATION                      | . 1 |
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| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 2 |

| Company                              |  |  |
|--------------------------------------|--|--|
| Company Name:                        | ADM Agri-Industries Company              |  |
| Facility Name:                       | ADM Woodstock                            |  |
| Street/Mailing Address:              | 842 Juliana Drive, Woodstock, ON N4S 0A8 |  |
| Facility NPRI Identification Number: | 5931                                     |  |
| Number of Full-time Employees:       | 29                                       |  |
| UTM Easting (NAD83)                  | 521729                                   |  |
| UTM Northing (NAD83)                 | 4773446                                  |  |
| NAICS 2 digit code                   | 31                                       |  |
| NAICS 4 digit code                   | 3111                                     |  |
| NAICS 6 digit code                   | 311119                                   |  |
| Parent Company                       |  |  |
| Company Name:                        | Archer Daniels Midland Company           |  |
| Street Address:                      | 77 West Wacker Drive, Chicago, IL 60601  |  |
| Ownership:                           | 100% of ADM Agri-Industries Company      |  |
| Business Number:                     | 100054527                                |  |
| Contacts                             |  |  |
| Public Contact:                      | Robert Cash                              |  |
| Title:                               | Manager, Environmental /Canada           |  |
| Phone Number:                        | 905-703-4747                             |  |
| Mailing Address:                     | 842 Juliana Drive, Woodstock, ON N4S 0A8 |  |
| Substance                            |  |  |
| Name of Substance:                   | Cobalt (and its compounds)               |  |
| CAS Number:                          | N/A                                      |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for cobalt, dated December 15, 2017.

## 3.0 DESCRIPTION OF SUBSTANCE

ADM Woodstock uses cobalt as a trace mineral in pre-mixes and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of cobalt at this time because it is a necessary mineral in pre-mixes as an essential factor in the formation of red blood cells. However, we are committed to ensuring that cobalt is used in a responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of cobalt at the ADM Woodstock plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its Toxics Reduction Plan to reduce the use of cobalt at their site in Woodstock. However, ADM will not reduce the cobalt use at the Woodstock plant since it is a mineral added to pre-mixes as an essential factor in the formation of red blood cells in animals. A suitable replacement for cobalt has not been identified to date. In addition, the environmental impact of cobalt use at the plant is minimal since almost 100% of the cobalt used at the site is contained in the final products leaving the site with little loss to the atmosphere or disposal. For these reasons, ADM has decided to not implement any options but will continue to monitor reduction possibilities in the future.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 15, 2017, I, Mike Turnbull, 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.

Cobalt (and its compounds)

Mike Turnbull Local Commercial Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 15, 2017, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 30, 2017 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Cobalt (and its compounds)

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Operations Support ADM Agri-Industries Company

December 15, 2017

# ADM AGRI-INDUSTRIES COMPANY WOODSTOCK, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR SELENIUM (AND ITS COMPOUNDS)

DECEMBER 15, 2017

| 1.0 | FACILITY INFORMATION                      | .1 |
|-----|---|----|
| 2.0 | PLAN SUMMARY STATEMENT                    | .1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | .1 |
| 4.0 | STATEMENT OF INTENT                       | .1 |
| 5.0 | REDUCTION OBJECTIVES                      | .2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | .2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | .2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | .2 |

| Company                              |  |  |
|--------------------------------------|--|--|
| Company Name:                        | ADM Agri-Industries Company              |  |
| Facility Name:                       | ADM Woodstock                            |  |
| Street/Mailing Address:              | 842 Juliana Drive, Woodstock, ON N4S 0A8 |  |
| Facility NPRI Identification Number: | 5931                                     |  |
| Number of Full-time Employees:       | 29                                       |  |
| UTM Easting (NAD83)                  | 521729                                   |  |
| UTM Northing (NAD83)                 | 4773446                                  |  |
| NAICS 2 digit code                   | 31                                       |  |
| NAICS 4 digit code                   | 3111                                     |  |
| NAICS 6 digit code                   | 311119                                   |  |
| Parent Company                       |  |  |
| Company Name:                        | Archer Daniels Midland Company           |  |
| Street Address:                      | 77 West Wacker Drive, Chicago, IL 60601  |  |
| Ownership:                           | 100% of ADM Agri-Industries Company      |  |
| Business Number:                     | 100054527                                |  |
| Contacts                             |  |  |
| Public Contact:                      | Robert Cash                              |  |
| Title:                               | Manager, Environmental /Canada           |  |
| Phone Number:                        | 905-703-4747                             |  |
| Mailing Address:                     | 842 Juliana Drive, Woodstock, ON N4S 0A8 |  |
| Substance                            |  |  |
| Name of Substance:                   | Selenium (and its compounds)             |  |
| CAS Number:                          | N/A                                      |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for selenium, dated December 15, 2017.

## 3.0 DESCRIPTION OF SUBSTANCE

ADM Woodstock uses selenium as a trace mineral in pre-mixes and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of selenium at this time because it is a necessary mineral in animal pre-mixes because it protects animal tissues from certain poisonous substances such as arsenic, cadmium and mercury. However, we are committed to ensuring that selenium is used in a responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of selenium at the ADM Woodstock plant.

#### 6.0 **OPTIONS TO BE IMPLEMENTED**

ADM has considered all of the options identified in its Toxics Reduction Plan to reduce the use of selenium at their site in Woodstock. However, ADM will not reduce the selenium use at the Woodstock plant since it is an essential mineral added to pre-mixes because it protects animal tissues from certain poisonous substances such as arsenic, cadmium and mercury. A suitable replacement for selenium has not been identified to date. In addition, the environmental impact of selenium use at the plant is minimal since almost 100% of the selenium used at the site is contained in the final products leaving the site with little loss to the atmosphere or disposal. For these reasons, ADM has decided to not implement any options but will continue to monitor reduction possibilities in the future.

### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 15, 2017, I, Mike Turnbull, 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.

Selenium (and its compounds)

Mike Turnbull Local Commercial Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 15, 2017, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 30, 2017 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Selenium (and its compounds)

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Operations Support ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR SULPHURIC ACID

NOVEMBER 30, 2012

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 2 |

| Company                        |   |  |  |  |
|--------------------------------|---|--|--|--|
| Company Name:                  | ADM Agri-Industries Company               |  |  |  |
| Facility Name:                 | ADM Windsor                               |  |  |  |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9 |  |  |  |
| Number of Full-time Employees: | 181                                       |  |  |  |
| UTM Easting (NAD83)            | 326756                                    |  |  |  |
| UTM Northing (NAD83)           | 4681384                                   |  |  |  |
| NAICS 2 digit code             | 31  |  |  |  |
| NAICS 4 digit code             | 3112                                      |  |  |  |
| NAICS 6 digit code             | 311224                                    |  |  |  |
| Parent Company                 |   |  |  |  |
| Company Name:                  | Archer Daniels Midland Company            |  |  |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526    |  |  |  |
| Ownership:                     | 100% of ADM Agri-Industries Company       |  |  |  |
| Business Number:               | 100054527                                 |  |  |  |
| Contacts                       |   |  |  |  |
| Public Contact:                | Robert Cash                               |  |  |  |
| Title:                         | Manager, Environmental /Canada            |  |  |  |
| Phone Number:                  | 905-873-1863 x237                         |  |  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6    |  |  |  |
| Substance                      |   |  |  |  |
| Name of Substance:             | Sulphuric Acid                            |  |  |  |
| CAS Number:                    | 7664-93-9                                 |  |  |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for sulphuric acid, dated November 30, 2012.

## 3.0 DESCRIPTION OF SUBSTANCE

ADM Agri-Industries Company uses sulphuric acid in the acidulation process as part of vegetable oil refining and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of sulphuric acid at this time because its use and the products generated from its use are an integral part of the plants' revenue stream. However, we are committed to ensuring that sulphuric acid is used in the most responsible, efficient manner and we will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of sulphuric acid at the ADM Windsor plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its toxic reduction plan to reduce the use of sulphuric acid at their site in Windsor. At this time, no economically viable alternatives to reduce sulphuric acid use were identified and there are no less toxic alternatives. ADM will continue to monitor the markets for the sale of soapstock. For these reasons, ADM has decided to not implement any reduction options but will continue to monitor reduction possibilities on an on-going basis.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 30, 2012, I, Brian Brohman, 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,

Sulphuric Acid

Rollince

Brian Brohman Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 30, 2012, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 30, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Sulphuric Acid

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

November 30, 2012

# ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR N-HEXANE

DECEMBER 6, 2013

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |   |  |  |  |
|--------------------------------|---|--|--|--|
| Company Name:                  | ADM Agri-Industries Company               |  |  |  |
| Facility Name:                 | ADM Windsor                               |  |  |  |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9 |  |  |  |
| Number of Full-time Employees: | 181                                       |  |  |  |
| UTM Easting (NAD83)            | 326756                                    |  |  |  |
| UTM Northing (NAD83)           | 4681384                                   |  |  |  |
| NAICS 2 digit code             | 31  |  |  |  |
| NAICS 4 digit code             | 3112                                      |  |  |  |
| NAICS 6 digit code             | 311224                                    |  |  |  |
| Parent Company                 |   |  |  |  |
| Company Name:                  | Archer Daniels Midland Company            |  |  |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526    |  |  |  |
| Ownership:                     | 100% of ADM Agri-Industries Company       |  |  |  |
| Business Number:               | 100054527                                 |  |  |  |
| Contacts                       |   |  |  |  |
| Public Contact:                | Robert Cash                               |  |  |  |
| Title:                         | Manager, Environmental /Canada            |  |  |  |
| Phone Number:                  | 905-873-1863 x237                         |  |  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6    |  |  |  |
| Substance                      |   |  |  |  |
| Name of Substance:             | n-hexane                                  |  |  |  |
| CAS Number:                    | 110-54-3                                  |  |  |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for n-hexane, dated December 6, 2013.

## 3.0 DESCRIPTION OF SUBSTANCE

ADM Agri-Industries Company uses n-hexane to remove oil from soybeans and canola in a solvent extraction process and is the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of n-hexane at this time. However, ADM is committed to ensuring that n-hexane is used in a responsible, efficient manner and will continue to investigate opportunities for reduction.

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of n-hexane at the ADM Windsor plant.

### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its toxic reduction plan to reduce the use of n-hexane at their site in Windsor. At this time, no technical, safe or economically viable alternatives to reduce n-hexane use or to increase recovery were identified.

ADM investigated material substitution and determined that none of the alternatives were viable due to concerns related to toxicity, yield, thermodynamic, product quality, and other associated economic reasons. ADM also investigated equipment and process modifications and determined that none of the alternatives were viable due to technical and safety issues and economic viability.

For these reasons, ADM has decided to not implement any reduction options, but will continue to monitor opportunities for reduction in the future.

## 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 6, 2013, I, Brian Brohman, 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.

n-hexane

Dian Dolman

Brian Brohman Plant Manager ADM Agri-Industries Company

## 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 6, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 6, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

n-hexane

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR VOLATILE ORGANIC COMPOUNDS (VOC'S)

DECEMBER 6, 2013
| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |
|--------------------------------|--|
| Company Name:                  | ADM Agri-Industries Company                              |
| Facility Name:                 | ADM Windsor  |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9                |
| Number of Full-time Employees: | 181  |
| UTM Easting (NAD83)            | 326756   |
| UTM Northing (NAD83)           | 4681384  |
| NAICS 2 digit code             | 31   |
| NAICS 4 digit code             | 3112   |
| NAICS 6 digit code             | 311224   |
| Parent Company                 |  |
| Company Name:                  | Archer Daniels Midland Company                           |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526                   |
| Ownership:                     | 100% of ADM Agri-Industries Company                      |
| Business Number:               | 100054527  |
| Contacts                       |  |
| Public Contact:                | Robert Cash  |
| Title:                         | Manager, Environmental /Canada                           |
| Phone Number:                  | 905-873-1863 x237  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6                   |
| Substance                      |  |
| Name of Substance:             | n-hexane and hexane (all isomers excluding n-<br>hexane) |
| CAS Number:                    | 110-54-3, no CAS for hexane and its isomers              |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for volatile organic compounds (VOC's), dated December 6, 2013.

# **3.0 DESCRIPTION OF SUBSTANCE**

ADM Agri-Industries Company uses commercial grade hexane, a VOC consisting of n-hexane and hexane, to remove oil from soybeans and canola in a solvent extraction process and is the subject of this toxic substance reduction plan.

# 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of hexane at this time. However, ADM is committed to ensuring that hexane is used in a responsible, efficient manner and will continue to investigate opportunities for reduction.

#### 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of hexane at the ADM Windsor plant.

#### 6.0 **OPTIONS TO BE IMPLEMENTED**

ADM has considered all of the options identified in its toxic reduction plan to reduce the use of hexane at their site in Windsor. At this time, no technical, safe or economically viable alternatives to reduce hexane use or to increase recovery were identified.

ADM investigated material substitution and determined that none of the alternatives were viable due to concerns related to toxicity, yield, thermodynamic, product quality, and other associated economic reasons. ADM also investigated equipment and process modifications and determined that none of the alternatives were viable due to technical and safety issues and economic viability.

For these reasons, ADM has decided to not implement any reduction options, but will continue to monitor opportunities for reduction in the future.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 6, 2013, I, Brian Brohman, 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.

VOC (n-hexane and hexane (all isomers excluding n-hexane))

Diin Molum

Brian Brohman Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 6, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 6, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

VOC (n-hexane and hexane (all isomers excluding n-hexane))

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Nitrogen Oxides (NOx) and Carbon Monoxide (CO)

DECEMBER 6, 2013

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company                              |  |
| Facility Name:                 | ADM Windsor  |  |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9                |  |
| Number of Full-time Employees: | 181  |  |
| UTM Easting (NAD83)            | 326756   |  |
| UTM Northing (NAD83)           | 4681384  |  |
| NAICS 2 digit code             | 31   |  |
| NAICS 4 digit code             | 3112   |  |
| NAICS 6 digit code             | 311224   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company                           |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526                   |  |
| Ownership:                     | 100% of ADM Agri-Industries Company                      |  |
| Business Number:               | 100054527  |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash  |  |
| Title:                         | Manager, Environmental /Canada                           |  |
| Phone Number:                  | 905-873-1863 x237  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6                   |  |
| Substance                      |  |  |
| Name of Substance:             | Nitrogen Oxides (NO <sub>x</sub> ), Carbon Monoxide (CO) |  |
| CAS Number:                    | 11104-93-1, 630-08-0                                     |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO), dated December 6, 2013.

## **3.0 DESCRIPTION OF SUBSTANCE**

 $NO_x$  and CO are created when natural gas, No.2 fuel oil and diesel fuel are combusted in boilers, grain dryers, heaters and emergency and mobile equipment at the ADM Windsor site.  $NO_x$  and CO are the subject of this toxic substance reduction plan.

# 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of  $NO_x$  and CO at this time. However, ADM is committed to ensuring that  $NO_x$  and CO emissions are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

#### 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of  $NO_x$  and CO at the ADM Windsor plant.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options identified in its toxic reduction plan to reduce the creation of  $NO_x$  and CO at their site. At this time, no technical or economically viable options to reduce  $NO_x$  and CO emissions were identified.

ADM will explore the feasibility to contract third party experts to advise on efficiency opportunities. If such experts are contracted, ADM would explore the feasibility to implement recommendations made by those experts. ADM will explore the feasibility of working with their local utility to evaluate efficiency opportunities from on-site energy generation. If ADM determines that working with the local utility is feasible, ADM would explore on-site energy generation.

For these reasons, ADM has decided not to implement any reduction options at this time but will continue to investigate reduction opportunities from efficiency programs and on-site energy generation.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 6, 2013, I, Brian Brohman, 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.

Nitrogen Oxides Carbon Monoxide

Open Aboliman

Brian Brohman Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 6, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 6, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Nitrogen Oxides Carbon Monoxide

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Total Suspended Particulate (TSP), Particulate Matter < 10 μm (PM<sub>10</sub>), Particulate Matter < 2.5 μm (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | 1   |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | 2   |
| 5.0 | REDUCTION OBJECTIVES                      | 2   |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | 2   |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | 3   |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | 3   |

| Company                        |   |  |
|--------------------------------|---|--|
| Company Name:                  | ADM Agri-Industries Company   |  |
| Facility Name:                 | ADM Windsor   |  |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9   |  |
| Number of Full-time Employees: | 181   |  |
| UTM Easting (NAD83)            | 326756  |  |
| UTM Northing (NAD83)           | 4681384   |  |
| NAICS 2 digit code             | 31  |  |
| NAICS 4 digit code             | 3112  |  |
| NAICS 6 digit code             | 311224  |  |
| Parent Company                 |   |  |
| Company Name:                  | Archer Daniels Midland Company  |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526  |  |
| Ownership:                     | 100% of ADM Agri-Industries Company   |  |
| Business Number:               | 100054527   |  |
| Contacts                       |   |  |
| Public Contact:                | Robert Cash   |  |
| Title:                         | Manager, Environmental /Canada  |  |
| Phone Number:                  | 905-873-1863 x237   |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6  |  |
| Substance                      |   |  |
| Name of Substance:             | Total Suspended Particulate, Particulate Matter < 10 μm, Particulate Matter <2.5 μm |  |
| CAS Number:                    | None of the substances have CAS numbers   |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for Total Suspended Particulate (TSP), Particulate Matter < 10  $\mu$ m (PM<sub>10</sub>) and Particulate Matter < 2.5  $\mu$ m (PM<sub>2.5</sub>), dated December 6, 2013.

# 3.0 DESCRIPTION OF SUBSTANCE

TSP,  $PM_{10}$  and  $PM_{2.5}$  is created when natural gas, No.2 fuel oil and diesel fuel are combusted in boilers, grain dryers, heaters and emergency and mobile equipment at the ADM Windsor site. In addition, TSP,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from grain handling, grain drying and other plant operations and are exhausted to the atmosphere through baghouse dust collectors, cyclones, grain dryers and a cooling tower. TSP,  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at this time. However, ADM is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

## 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at the ADM Windsor plant.

## 6.0 **OPTIONS TO BE IMPLEMENTED**

ADM has considered all of the options in its toxic reduction plan to reduce the creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce TSP,  $PM_{10}$  and  $PM_{2.5}$  emissions were identified.

ADM investigated the possibility of replacing the rack dryers with column dryers. However, the uncertainty in the emission factors is an important consideration in assessing the relative improvement gained by column dryers and due to this uncertainty, it is concluded that there is no credible information showing that column dryers are better than rack dryers. Therefore, replacing the existing dryers with column dryers will not be implemented but ADM will continue to monitor emerging technologies in this area.

ADM's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. ADM's existing baghouse dust collectors and associated processes were not designed for such new filter media and it is not clear what affect this might have on ADM's processes. Accordingly, ADM will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an ADM site specific level.

For these reasons, ADM has decided not to implement any reduction options but will continue to monitor opportunities for reduction in the future.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 6, 2013, 1, Brian Brohman, 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.

Total Suspended Particulate Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Brian Brohman Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 6, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 6, 2013and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Total Suspended Particulate Particulate Matter  $< 10 \ \mu m$ Particulate Matter  $< 2.5 \ \mu m$ 

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY WINDSOR, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR TOTAL PHOSPHORUS

DECEMBER 14, 2016

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |   |
|--------------------------------|---|
| Company Name:                  | ADM Agri-Industries Company                           |
| Facility Name:                 | ADM Windsor   |
| Street/Mailing Address:        | 5550 Maplewood Drive, Windsor, ON N9C 0B9             |
| Number of Full-time Employees: | 179   |
| UTM Easting (NAD83)            | 326756  |
| UTM Northing (NAD83)           | 4681384   |
| NAICS 2 digit code             | 31  |
| NAICS 4 digit code             | 3112  |
| NAICS 6 digit code             | 311224  |
| Parent Company                 |   |
| Company Name:                  | Archer Daniels Midland Company                        |
| Street Address:                | 77 West Wacker Drive, Suite 4600<br>Chicago, IL 60601 |
| Ownership:                     | 100% of ADM Agri-Industries Company                   |
| Business Number:               | 100054527   |
| Contacts                       |   |
| Public Contact:                | Robert Cash   |
| Title:                         | Manager, Environmental /Canada                        |
| Phone Number:                  | 905-563-7101  |
| Mailing Address:               | 842 Juliana Drive, Woodstock, Ontario N4S 0A8         |
| Substance                      |   |
| Name of Substance:             | Total Phosphorus                                      |
| CAS Number:                    | N/A   |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM Agri-Industries Company's (ADM) toxic substance reduction plan prepared for total phosphorus, dated December 14, 2016.

## **3.0 DESCRIPTION OF SUBSTANCE**

Phosphorous compounds enter the ADM Windsor facility in the incoming feedstocks (soybeans and canola). Total phosphorus (as phosphoric acid) is also used at the facility in the soybean oil refining process to remove impurities and for cleaning some refining equipment.

# 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its use of total phosphorus at this time. However, ADM is committed to ensuring that total phosphorus is managed in a responsible, efficient manner and we will continue to investigate opportunities for reduction.

## 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the use of total phosphorus at the ADM Windsor plant.

#### 6.0 **OPTIONS TO BE IMPLEMENTED**

ADM has considered all of the options identified in its toxic reduction plan to reduce the use of total phosphorus at their site in Windsor. At this time, no technical or economically viable alternatives to reduce total phosphorus use were identified.

ADM investigated material substitution and determined that none of the alternatives were viable due to concerns related to yield, conversion, and other associated economic reasons.

For these reasons, ADM has decided to not implement any reduction options, but will continue to monitor opportunities for reduction in the future.

## 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 14, 2016, I, Trevor Durrant, 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.

Total Phosphorus

Trevor Durrant Plant Manager (Acting) ADM Agri-Industries Company

## 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 14, 2016, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 14, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

**Total Phosphorus** 

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Operations Support ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY MIDLAND, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Particulate Matter < 10 $\mu$ m (PM<sub>10</sub>), Particulate Matter < 2.5 $\mu$ m (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 1 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |
|--------------------------------|--|--|
| Company Name:                  | ADM Agri-Industries Company                            |  |
| Facility Name:                 | ADM Midland  |  |
| Street/Mailing Address:        | 202 First Street, Midland, Ontario, L4R 4L1            |  |
| Number of Full-time Employees: | 55   |  |
| UTM Easting (NAD83)            | 587754   |  |
| UTM Northing (NAD83)           | 4955997  |  |
| NAICS 2 digit code             | 31   |  |
| NAICS 4 digit code             | 3112   |  |
| NAICS 6 digit code             | 311211   |  |
| Parent Company                 |  |  |
| Company Name:                  | Archer Daniels Midland Company                         |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526                 |  |
| Ownership:                     | 100% of ADM Agri-Industries Company                    |  |
| Business Number:               | 100054527  |  |
| Contacts                       |  |  |
| Public Contact:                | Robert Cash  |  |
| Title:                         | Manager, Environmental /Canada                         |  |
| Phone Number:                  | 905-873-1863 x237                                      |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6                 |  |
| Substance                      |  |  |
| Name of Substance:             | Particulate Matter < 10 μm, Particulate Matter <2.5 μm |  |
| CAS Number:                    | None of the substances have CAS numbers                |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for Particulate Matter < 10  $\mu$ m (PM<sub>10</sub>) and Particulate Matter < 2.5  $\mu$ m (PM<sub>2.5</sub>), dated December 4, 2013.

# 3.0 DESCRIPTION OF SUBSTANCE

 $PM_{10}$  and  $PM_{2.5}$  is created when natural gas is combusted in a boiler at the ADM Midland site. In addition,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from wheat receiving, handling, cleaning, milling and shipping at the mill and are exhausted to the atmosphere through baghouse dust collectors.  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

# 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of  $PM_{10}$  and  $PM_{2.5}$  at this time. However, ADM is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

## 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at the ADM Midland mill.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options in its toxic reduction plan to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce  $PM_{10}$  and  $PM_{2.5}$  emissions were identified.

ADM's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. Alteration to original equipment design parameters such as filter media must be carefully examined. Many of these filtering steps are an inherent part of ADM's process and are not typical bolt-on, end-of-pipe treatment systems. Accordingly, ADM will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an ADM site specific level.

For these reasons, ADM has decided not to implement any reduction options but will continue to pursue the opportunities discussed above.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 4, 2013, I, Ken Marlor, 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.

Particulate Matter  $< 10 \ \mu m$ Particulate Matter  $< 2.5 \ \mu m$ 

R.W. Manbor

Ken Marlor Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 4, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 4, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY MISSISSAUGA, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Particulate Matter < 10 μm (PM<sub>10</sub>), Particulate Matter < 2.5 μm (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 2 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |  |
|--------------------------------|--|--|--|
| Company Name:                  | ADM Agri-Industries Company  |  |  |
| Facility Name:                 | ADM Mississauga  |  |  |
| Street/Mailing Address:        | 1770 Barbertown Road, Mississauga, Ontario,<br>L5M 2M5                 |  |  |
| Number of Full-time Employees: | 22   |  |  |
| UTM Easting (NAD83)            | 605391   |  |  |
| UTM Northing (NAD83)           | 4825366  |  |  |
| NAICS 2 digit code             | 31   |  |  |
| NAICS 4 digit code             | 3112   |  |  |
| NAICS 6 digit code             | 311211   |  |  |
| Parent Company                 |  |  |  |
| Company Name:                  | Archer Daniels Midland Company   |  |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526                                 |  |  |
| Ownership:                     | 100% of ADM Agri-Industries Company                                    |  |  |
| Business Number:               | 100054527  |  |  |
| Contacts                       | Contacts   |  |  |
| Public Contact:                | Robert Cash  |  |  |
| Title:                         | Manager, Environmental /Canada   |  |  |
| Phone Number:                  | 905-873-1863 x237  |  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6                                 |  |  |
| Substance                      |  |  |  |
| Name of Substance:             | Particulate Matter $< 10 \ \mu m$ , Particulate Matter $< 2.5 \ \mu m$ |  |  |
| CAS Number:                    | None of the substances have CAS numbers                                |  |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for Particulate Matter < 10  $\mu$ m (PM<sub>10</sub>) and Particulate Matter < 2.5  $\mu$ m (PM<sub>2.5</sub>), dated December 5, 2013.

# **3.0 DESCRIPTION OF SUBSTANCE**

 $PM_{10}$  and  $PM_{2.5}$  is created when natural gas is combusted in four boilers at the ADM Mississauga milling site. In addition,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from wheat receiving, handling, cleaning, milling and shipping at the mill and are exhausted to the atmosphere through baghouse dust collectors.  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

#### 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of  $PM_{10}$  and  $PM_{2.5}$  at this time. However, ADM is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

#### 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at the ADM Mississauga mill.

#### 6.0 OPTIONS TO BE IMPLEMENTED

ADM has considered all of the options in its toxic reduction plan to reduce the creation of  $PM_{10}$ and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce  $PM_{10}$ and  $PM_{2.5}$  emissions were identified.

ADM's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. Alteration to original equipment design parameters such as filter media must be carefully examined. Many of these filtering steps are an inherent part of ADM's process and are not typical bolt-on, end-of-pipe treatment systems. Accordingly, ADM will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an ADM site specific level.

For these reasons, ADM has decided not to implement any reduction options but will continue to pursue the opportunities discussed above.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 5, 2013, I, Barnet Garcia, 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.

Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Barnet Garcia Plant Manager ADM Agri-Industries Company

December 5, 2013

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 5, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 5, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Particulate Matter  $< 10 \ \mu m$ Particulate Matter  $< 2.5 \ \mu m$ 

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company

# ADM AGRI-INDUSTRIES COMPANY PORT COLBORNE, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Total Suspended Particulate (TSP), Particulate Matter < 10 μm (PM<sub>10</sub>), Particulate Matter < 2.5 μm (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | . 1 |
|-----|---|-----|
| 2.0 | PLAN SUMMARY STATEMENT                    | . 1 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | . 1 |
| 4.0 | STATEMENT OF INTENT                       | . 2 |
| 5.0 | REDUCTION OBJECTIVES                      | . 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | . 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | . 2 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | . 3 |

| Company                        |  |  |  |  |
|--------------------------------|--|--|--|--|
| Company Name:                  | ADM Agri-Industries Company  |  |  |  |
| Facility Name:                 | ADM Port Colborne  |  |  |  |
| Street/Mailing Address:        | 1 King Street South, Port Colborne, Ontario,<br>L3K 5W1                                |  |  |  |
| Number of Full-time Employees: | 96   |  |  |  |
| UTM Easting (NAD83)            | 642818   |  |  |  |
| UTM Northing (NAD83)           | 4748298  |  |  |  |
| NAICS 2 digit code             | 31   |  |  |  |
| NAICS 4 digit code             | 3112   |  |  |  |
| NAICS 6 digit code             | 311211   |  |  |  |
| Parent Company                 |  |  |  |  |
| Company Name:                  | Archer Daniels Midland Company   |  |  |  |
| Street Address:                | 4666 Faries Parkway, Decatur, IL 62526   |  |  |  |
| Ownership:                     | 100% of ADM Agri-Industries Company  |  |  |  |
| Business Number:               | 100054527  |  |  |  |
| Contacts                       |  |  |  |  |
| Public Contact:                | Robert Cash  |  |  |  |
| Title:                         | Manager, Environmental /Canada   |  |  |  |
| Phone Number:                  | 905-873-1863 x237  |  |  |  |
| Mailing Address:               | 24 Ontario St., Georgetown, ON L7G 3K6   |  |  |  |
| Substance                      |  |  |  |  |
| Name of Substance:             | Total Suspended Particulate, Particulate Matter <<br>10 μm, Particulate Matter <2.5 μm |  |  |  |
| CAS Number:                    | None of the substances have CAS numbers  |  |  |  |

# 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of ADM's toxic substance reduction plan prepared for Total Suspended Particulates (TSP), Particulate Matter  $< 10 \ \mu m \ (PM_{10})$  and Particulate Matter  $< 2.5 \ \mu m \ (PM_{2.5})$ , dated November 28, 2013.

## **3.0 DESCRIPTION OF SUBSTANCE**

TSP,  $PM_{10}$  and  $PM_{2.5}$  is created when natural gas is used to fire boilers and heaters at the mill and No.2 fuel oil is used to fire emergency equipment. In addition, TSP,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from wheat receiving, handling, cleaning, milling and shipping at the mill and are exhausted to the atmosphere through baghouse dust collectors and cyclones. TSP,  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

#### 4.0 STATEMENT OF INTENT

ADM does not intend to reduce its creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at this time. However, ADM is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

#### 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy ADM's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at the ADM Port Colborne mill.

#### 6.0 **OPTIONS TO BE IMPLEMENTED**

ADM has considered all of the options in its toxic reduction plan to reduce the creation of TSP,  $PM_{10}$  and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce TSP,  $PM_{10}$  and  $PM_{2.5}$  emissions were identified.

ADM's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. Alteration to original equipment design parameters such as filter media must be carefully examined. Many of these filtering steps are an inherent part of ADM's process and are not typical bolt-on, end-of-pipe treatment systems. Accordingly, ADM will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an ADM site specific level.

For these reasons, ADM has decided not to implement any reduction options but will continue to pursue the opportunities discussed above.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of November 28, 2013, I, Frank Jantz, 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.

Total Suspended Particulate Particulate Matter  $< 10 \ \mu m$ Particulate Matter  $< 2.5 \ \mu m$ 

Frank Jantz Plant Manager ADM Agri-Industries Company

#### 8.0 CERTIFICATION BY LICENSED PLANNER

As of November 28, 2013, I, Frank Cobbett, certify that I am familiar with the processes at ADM Agri-Industries Company 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 November 28, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Total Suspended Particulate Particulate Matter < 10  $\mu m$  Particulate Matter < 2.5  $\mu m$ 

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company WILD FLAVORS (CANADA) INC. MISSISSAUGA, ONTARIO TOXIC SUBSTANCE REDUCTION PUBLIC PLAN SUMMARY FOR Particulate Matter < 10 μm (PM<sub>10</sub>), Particulate Matter < 2.5 μm (PM<sub>2.5</sub>)

| 1.0 | FACILITY INFORMATION                      | 1 |
|-----|---|---|
| 2.0 | PLAN SUMMARY STATEMENT                    | 2 |
| 3.0 | DESCRIPTION OF SUBSTANCE                  | 2 |
| 4.0 | STATEMENT OF INTENT                       | 2 |
| 5.0 | REDUCTION OBJECTIVES                      | 2 |
| 6.0 | OPTIONS TO BE IMPLEMENTED                 | 2 |
| 7.0 | CERTIFICATION BY HIGHEST RANKING EMPLOYEE | 3 |
| 8.0 | CERTIFICATION BY LICENSED PLANNER         | 3 |

| Company   |   |  |  |  |
|---|---|--|--|--|
| Company Name:   | WILD Flavors (Canada) Inc.                                |  |  |  |
| Facility Name:  | Wild Mississauga  |  |  |  |
| Street/Mailing Address:   | 7315 Pacific Circle, Mississauga, ON L5T 1V1              |  |  |  |
| Facility NPRI Identification Number:  | 28463   |  |  |  |
| Number of Full-time Employees:  | 25  |  |  |  |
| UTM Easting (NAD83)   | 606498  |  |  |  |
| UTM Northing (NAD83)  | 4834465   |  |  |  |
| NAICS 2 digit code  | 31  |  |  |  |
| NAICS 4 digit code  | 3119  |  |  |  |
| NAICS 6 digit code  | 311930  |  |  |  |
| Parent Company  |   |  |  |  |
| Company Name:   | Archer Daniels Midland Company                            |  |  |  |
| Street Address:   | 4666 Faries Parkway, Decatur, IL 62526                    |  |  |  |
| Ownership:  | 100% of WILD Flavors (Canada) Inc.                        |  |  |  |
| Business Number:  | 100054527   |  |  |  |
| Contacts  |   |  |  |  |
| Public Contact:   | Robert Cash   |  |  |  |
| Title:  | Manager, Environmental /Canada                            |  |  |  |
| Phone Number:   | 519-265-1385  |  |  |  |
| Mailing Address:  | 842 Juliana Drive, Woodstock, ON N4S 0A8                  |  |  |  |
| Technical Contact:<br>Plan Coordinator:<br>Plan Preparation:<br>Plan Certification: | Frank Cobbett   |  |  |  |
| Title:  | Engineer, Environmental /Canada                           |  |  |  |
| Phone Number:   | 289-891-9147  |  |  |  |
| Mailing Address:  | 842 Juliana Drive, Woodstock, ON N4S 0A8                  |  |  |  |
| License Number:   | TSRP0058  |  |  |  |
| Highest Ranking Employee:<br>Plan Certification:                                    | Robert Duke   |  |  |  |
| Title:  | Operations and Facility Manager                           |  |  |  |
| Phone Number:   | 905-670-1108  |  |  |  |
| Mailing Address:  | 7315 Pacific Circle, Mississauga, ON L5T 1V1              |  |  |  |
| Substance   |   |  |  |  |
| Name of Substances:   | Particulate Matter < 10 μm<br>Particulate Matter < 2.5 μm |  |  |  |
| CAS Numbers:  | None of the substances have CAS numbers                   |  |  |  |

## 2.0 PLAN SUMMARY STATEMENT

This plan summary statement accurately reflects the content of Wild's toxic substance reduction plan prepared for Particulate Matter < 10  $\mu$ m (PM<sub>10</sub>) and Particulate Matter < 2.5  $\mu$ m (PM<sub>2.5</sub>), dated December 15, 2015.

## **3.0 DESCRIPTION OF SUBSTANCE**

 $PM_{10}$  and  $PM_{2.5}$  is created when natural gas is combusted in boilers, heaters and a dryer at the Wild Mississauga site. In addition,  $PM_{10}$  and  $PM_{2.5}$  emissions are created from raw material blending, drying and packing operations and are exhausted to the atmosphere through baghouse dust collectors.  $PM_{10}$  and  $PM_{2.5}$  are the subject of this toxic substance reduction plan.

## 4.0 STATEMENT OF INTENT

Wild does not intend to reduce its creation of  $PM_{10}$  and  $PM_{2.5}$  at this time. However, Wild is committed to ensuring that particulates are managed in a responsible, efficient manner and will continue to investigate opportunities for reduction.

## 5.0 **REDUCTION OBJECTIVES**

The objectives of preparing this plan were to satisfy Wild's legal requirements under Ontario Regulation 455/09 and the Toxics Reduction Act 2009, and to identify opportunities to reduce the creation of PM<sub>10</sub> and PM<sub>2.5</sub> at the Wild Mississauga plant.

## 6.0 **OPTIONS TO BE IMPLEMENTED**

Wild has considered all of the options in its toxic reduction plan to reduce the creation of  $PM_{10}$  and  $PM_{2.5}$  at their site. At this time, no technical or economically viable options to reduce  $PM_{10}$  and  $PM_{2.5}$  emissions were identified.

Wild's initial discussions with baghouse dust collector filtration suppliers indicate that replacing conventional bags with emerging, re-engineered filter media may decrease particulate emissions significantly. Alteration to original equipment design parameters such as filter media must be carefully examined. Many of these filtering steps are an inherent part of Wild's process and are not typical bolt-on, end-of-pipe treatment systems. Accordingly, Wild will continue to work with suppliers and consider designing a pilot program to test the new filter media since none of the manufacturers' claims have been proven at an Wild site specific level.

For these reasons, Wild has decided not to implement any reduction options but will continue to pursue the opportunities discussed above.

#### 7.0 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 15, 2015, I, Robert Duke, 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.

Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Robert Duke Operations and Facility Manager Wild Flavors (Canada) Inc.

## 8.0 CERTIFICATION BY LICENSED PLANNER

As of December 15, 2015, I, Frank Cobbett, certify that I am familiar with the processes at Wild Flavors (Canada) Inc. 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 15, 2015 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Particulate Matter < 10 μm Particulate Matter < 2.5 μm

Frank Cobbett [Planner License #TSRP0058] Engineer, Environmental /Canada Technology Centre ADM Agri-Industries Company