2011 TOXIC SUBSTANCE REDUCTION PLANS SUMMARY

Based on 2011 Toxic Substance Reporting
Espanola Mill,
Prepared under the Toxics Reduction Act & O. Reg. 4556/09

COPY OF CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of May 30, 2014, I, Scott Mosher, 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. The regulatory deadline of December 31, 2012 was not met for these substances due to the availability of resources to prepare the plan.

- Acetaldehyde, cas#75-07-0
- Acenaphtylene, cas#208-96-8
- Arsenic (and compounds)
- Benzo(a)phenanthrene, cas#218-01-9
- Cadmium (and compounds)
- Chlorine, cas#7782-50-5
- Dioxins and Furans
- Fluoranthene, cas#206-44-0
- Hexachlorobenzene, cas#118-74-1
- Hexavalent Chromium compounds
- Hydrochloric Acid cas#7647-01-0
- Lead (and compounds)
- Manganese (and compounds)
- Methanol cas#67-56-1
- Mercury (and its compound)
- Phenanthrene cas#85-01-8
- Pyrene cas#129-00-0
- Selenium (and its compounds)
- Sulphuric acid cas#7664-93-9

Original signed copy on file at the facility
Scott Mosher, General Manager
Domtar Espanola (Domtar)

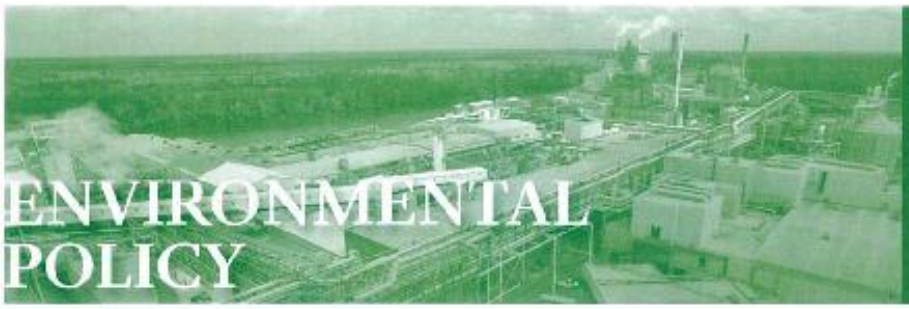
COPY OF CERTIFICATION BY TOXIC SUBSTANCE REDUCTION PLANNER

As of May 26, 2014, I, Scott Manser certify that I am familiar with the processes at Domtar 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 plans and that the plan complies with that Act and that the plans, with the exception of the regulatory deadline, complies with that Act and Ontario Regulation 455/09 (General) made under that Act:

- Acetaldehyde, cas#75-07-0
- Acenaphtylene, cas#208-96-8
- Arsenic (and compounds)
- Benzo(a)phenanthrene, cas#218-01-9
- Cadmium (and compounds)
- Chlorine, cas#7782-50-5
- Dioxins and Furans
- Fluoranthene, cas#206-44-0
- Hexachlorobenzene, cas#118-74-1
- Hexavalent Chromium compounds
- Hydrochloric Acid cas#7647-01-0
- Lead (and compounds)
- Manganese (and compounds)
- Methanol cas#67-56-1
- Mercury (and its compound)
- Phenanthrene cas#85-01-8
- Pyrene cas#129-00-0
- Selenium (and its compounds)
- Sulphuric acid cas#7664-93-9

Original signed copy on file at the facility
Scott Manser, Senior Project Manager
Toxic Substance Reduction Planner
License No. TSRP0071

DOMTAR ENVIRONMENTAL POLICY



ENVIRONMENTAL POLICY

Domtar

It all begins with paper.®

WE WILL CONDUCT BUSINESS IN A MANNER THAT CONSERVES RESOURCES AND CONSTANTLY REDUCES OUR ENVIRONMENTAL FOOTPRINT. WE SEEK CONTINUAL IMPROVEMENT IN OUR ENVIRONMENTAL PERFORMANCE BY SETTING, REVIEWING AND UPDATING ENVIRONMENTAL GOALS.

We are committed to:

- Managing operations to comply with all applicable laws and regulations and other requirements to which we subscribe, with emphasis on pollution prevention, and minimizing adverse environmental impacts;
- Identifying and evaluating potential environmental risks and implementing appropriate measures to eliminate or control those risks;
- Developing and implementing measures to ensure sustainable use of materials, resources and energy;
- Promoting and developing awareness, leadership and accountability with respect to environmental protection among all our employees and persons working for us or on our behalf;
- Communicating with our employees, customers, suppliers, the communities in which we operate and public officials to build greater mutual understanding of environmental issues;
- Participating in the development of governmental environment policies based on sound science and sustainable growth principles;
- Supporting research aimed at improving process efficiency and environmental protection measures and applying such knowledge to our product stewardship;
- Conducting independent third party environmental audits to confirm that our management practices meet policy objectives, legislation and the principles of sound management; and reporting to the Board of Directors on the environmental status of our operations.

Our employees share in this responsibility and are accountable for the successful implementation of this policy. Local management is empowered to curtail operations, as necessary, to prevent serious environmental impacts.

John D. Williams
President and CEO

July 2009

BASIC FACILITY INFORMATION

Legal and trade names of the owner and operator of the facility, the street and mailing address	Domtar Inc. 1 Station Road Espanola, Ontario P5E 1R6
Facility NPRI identification number	3185
O. Reg 127 identification number	5114
No. of full time employees	
UTM coordinates x	
y	
UTM zone	14
Datum	NAD 83
Legal name of Canadian Parent company, the street and mailing address	Domtar Inc. 395 Maisonneuve Blvd. Ouest Montréal, QC H3A 1L6
Percent ownership	100%
NAICS codes	31-33 3221 322121
Facility Public Contact	Lynne Gibson Safety and Communications Coordinator (705)869-2020

ACETALDEHYDE

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Acetaldehyde as it is an undesirable trace contaminant created within the manufacturing process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Acetaldehyde as it is an undesirable trace contaminant created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of Acetaldehyde created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Acetaldehyde is an undesirable trace contaminant created throughout the manufacturing process for which there is no viable alternative.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the creation of Acetaldehyde.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

POLYAROMATIC HYDROCARBONS (PAHs)

- Acenaphtylene, cas#208-96-8
- Benzo(a)phenanthrene, cas#218-01-9
- Fluoranthene, cas#206-44-0
- Phenanthrene, cas#85-01-8
- Pyrene, cas#129-00-0

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Polyaromatic Hydrocarbons (PAHs) because they are undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. PAHs are not used at the facility thus this plan does not address their use.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

PAHs are undesirable trace contaminants created during the combustion of wood chips, natural gas and other process by-products for which there is no viable alternative. PAHs are not used by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the creation of PAHs.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

ARSENIC (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of arsenic (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Arsenic is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of arsenic (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of arsenic (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Arsenic (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Arsenic (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use arsenic (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

CADMIUM (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of cadmium (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Cadmium is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of cadmium (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of cadmium (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Cadmium (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Cadmium (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use cadmium (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

LEAD (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of lead (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Lead is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of lead (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of lead (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Lead (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Lead (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use of lead (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

MANGANESE (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of manganese (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Manganese is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of manganese (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of manganese (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Manganese (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Manganese (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use manganese (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

MERCURY (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of mercury (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Mercury is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of mercury (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of mercury (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Mercury (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Mercury (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use mercury (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

SELENIUM (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use of selenium (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Selenium is not created at the facility thus this plan does not address its creation.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use of selenium (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of selenium (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Selenium (and its compounds) is an undesirable trace contaminant present in wood chips, natural gas and other chemical additives for which there is no viable alternative. Selenium (and its compounds) is not created by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use selenium (and its compounds).

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

HEXAVALENT CHROMIUM (and its compounds)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Hexavalent because it is an undesirable trace contaminant created as a by-product of combustion for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Hexavalent Chromium is not used at the facility thus this plan does not address its use.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Hexavalent Chromium because it is an undesirable trace contaminant created as a by-product of combustion for which there is no viable alternative. Based on the information gathered in this report, the amount of Hexavalent Chromium created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Hexavalent Chromium is an undesirable trace contaminant created during combustion through the conversion of Chromium present in the material feedstock. Hexavalent chromium is not used by the Kraft pulp manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the creation of Hexavalent Chromium.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

METHANOL

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Methanol at the facility as no viable alternative could be identified. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation Methanol as no viable alternative could be identified. Based on the information gathered in this report, the amount of Methanol used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Methanol is used at the facility in the production of Chlorine Dioxide and created as a by-product within the remaining processes at the facility.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use Methanol.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

CHLORINE

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Chlorine at the facility as no viable alternative could be identified. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation Chlorine as no viable alternative could be identified. Based on the information gathered in this report, the amount of Chlorine used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Chlorine is used at the facility as part of the water treatment system and created as a by-product of the Chlorine Dioxide making process. Chlorine Dioxide is used in the pulp bleaching process.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use or creation of Chlorine.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

DIOXIN AND FURANS (D/Fs)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. D/Fs are not used at the facility thus this plan does not address their use.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of D/Fs because they are an undesirable trace contaminant created within combustion process for which there is no viable process alternative. Based on the information gathered in this report, the amount of D/Fs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

D/Fs are undesirable trace contaminants created during combustion processes for which there is no viable alternative. D/Fs are not used by the manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the creation of D/Fs.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

HEXACHLOROBENZENE (HCB)

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Hexachlorobenzene (HCB) because it is an undesirable trace contaminant created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. HCB is not used at the facility thus this plan does not address its use.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its creation of HCB because it is an undesirable trace contaminant created within combustion process for which there is no viable process alternative. Based on the information gathered in this report, the amount of HCB created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

HCB is an undesirable trace contaminant created during combustion processes for which there is no viable alternative. HCB is not used by the manufacturing operation.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the creation of HCB.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

HYDROCHLORIC ACID

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Hydrochloric Acid at the facility as no viable alternative could be identified. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Hydrochloric Acid as no viable alternative could be identified. Based on the information gathered in this report, the amount of Hydrochloric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Hydrochloric Acid is used at the facility to clean equipment in the Softwood Pulping process and created as a by-product within the Bleaching Process, Recaust Furnace, Lime Kiln and Wood Residue Combustion process.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use Chlorine.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.

SULPHURIC ACID

Statement of Intent:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Sulphuric Acid at the facility as no viable alternative could be identified. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Objective:

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation Sulphuric Acid as no viable alternative could be identified. Based on the information gathered in this report, the amount of Sulphuric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

Description of Why Toxic Substance is Used or Created

Sulphuric Acid is used at the facility in the production of Chlorine Dioxide, Tall Oil, Boiler Feedwater Treatment and created as a by-product within the Lime Kiln and Recovery Furnace.

Options to be Implemented

No options were identified to be technically or economically feasible. Therefore, no option will be implemented for the reduction of the use Chlorine.

Estimated Reductions for Options to be Implemented

Not applicable.

Timelines for Achieving Estimated Reductions

Not applicable.