MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-3

*BMP Title: De-icing and Anti-Icing Equipment and Materials

*BMP Description:

A portion of the City drains to Shingle Creek, an Impaired Water on the State of Minnesota's 303(d) list due to excess chloride concentrations in Shingle Creek. The EPA-approved Shingle Creek Chloride TMDL estimated that chloride load in the Shingle Creek watershed must be reduced by 81 percent annually if Shingle Creek is to meet state water quality standards for chloride. The TMDL estimated that the source of 84 percent of the chloride load to the Creek is from the use of road salt – NaCl – for de-icing and anti-icing. One of the strategies identified in the Implementation Plan to reduce chloride load with minimal impact to public safety is to use new technologies in equipment and material to obtain the same de-icing and anti-icing benefit while applying less road salt. The specific activities the City will undertake to evaluate and implement new technologies are:

- 1. Use weather information to improve application decisions such as the amount and timing of application
- 2. Evaluate new technologies such as prewetting and anti-icing as equipment needs to be replaced. These technologies will be adopted where feasible and practical.
- 3. Investigate and adopt new products (such as Clear Lane, a commercially available pretreated salt) where feasible and cost effective.

Location(s) in SWPPP of detailed information relating to this BMP:

This summary sheet.

*Measurable Goals:

- Acquisition and installation of necessary prewetting support equipment at the City maintenance facility and prewetting spreaders on new dump trucks.
- Investigation and adoption of new products where feasible and cost effective.

*Timeline/Implementation Schedule:

- December 31st, 2010 Installation of prewetting support equipment at the City maintenance facility completed were feasible.
- Yearly from 2010 Installation of prewetting equipment on new dump truck purchases.
- December 31st, 2010 Feasibility report on alternate snow and ice control products completed.

Specific Components and Notes:

*Responsible Party for this BMP:

Name: Richard McCoy

Department: Engineering

Phone: 763-531-1260

E-mail: rmccoy@ci.robbinsdale.mn.us

^{*}Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.

MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-4(2)

*BMP Title: Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas

*BMP Description:

A portion of the City drains to Shingle Creek, an Impaired Water on the State of Minnesota's 303(d) list due to excess chloride concentrations in Shingle Creek. The EPA-approved Shingle Creek Chloride TMDL estimated that the source of 84 percent of the chloride load to the Creek is from the use of road salt – NaCl – for de-icing and anti-icing. One of the strategies identified in the Implementation Plan to reduce chloride load is to minimize the potential for wash-off of salt from salt storage and transfer facilities by requiring stockpiles to be covered and to be located on impervious surfaces.

The City maintains a stockpile of road salt that is stored in an enclosed salt storage building with a paved building pad. Road salt loading and unloading generally takes place within the salt storage building. Any road salt tracked onto pavement following loading or delivery is swept up as conditions allow and disposed of with street sweepings. The building pad and pavement outside the building drain to a pond prior to discharge into the storm sewer system.

Location(s) in SWPPP of detailed information relating to this BMP:

This summary sheet.

*Measurable Goals:

- Staff person assigned to monitor need to sweep up spilled or tracked road salt.
- Sweeping performed as necessary

*Timeline/Implementation Schedule:

- From December 2008 Staff person assigned to monitor need to sweep up spilled or tracked road salt.
- Sweeping performed as necessary

Specific Components and Notes:

*Responsible Party for this BMP:

Name: Richard McCoy

Department: Engineering

Phone: 763-531-1260

E-mail: rmccoy@ci.robbinsdale.mn.us

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MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-1(2)

*BMP Title: Operator Training to Reduce Road Salt Use		
*BMP Description:		
The City will train truck operators responsible for de-icing and anti-icing operations in the proper use of equipment and application of salt to use the least amount of product necessary to maintain public safety on roads and sidewalks. Topics covered in the training will include but not be limited to proper calibration of spreaders; understanding of and adherence to application policies; and optimum application rates for different temperature and road conditions.		
Location(s) in SWPPP of detailed information relating to this BMP:		
This summary sheet.		
*Measurable Goals:		
 All operators trained in the proper use of equipment and application of salt on roads and sidewalks. 		
*Timeline/Implementation Schedule:		
 All operators trained annually as availability of courses allow. 		
Specific Components and Notes:		
*Responsible Party for this BMP:		
Name: Richard McCoy		
Department: Engineering		
Phone: 763-531-1260		
E-mail: rmccoy@ci.robbinsdale.mn.us		
•		

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MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-1(3)

*BMP Title:	Snow Stockpiling Practices	
*BMP Description:		
The City will r	or stockpiled directly streamside can leak high concentrations of chloride directly into the stream. eview and revise where necessary its snow plowing and stockpiling practices to minimize snow at to Shingle Creek or its tributaries.	
Location(s) in	SWPPP of detailed information relating to this BMP:	
This summary	sheet.	
*Measurable	Goals:	
Snow plowing	ng and stockpiling practices minimize stockpiles of snow adjacent to Shingle Creek or its tributaries	
*Timeline/Implementation Schedule:		
 December 31st, 2008 – Review snow plowing and stockpiling practices adjacent to Shingle Creek and its 		
tributaries. December 1 st , 2009 – Implement revisions to those practices as necessary.		
December 1	, 2009 Implement revisions to those practices as necessary.	
Specific Components and Notes:		
*Responsible Party for this BMP:		
Name:	Richard McCoy	
Department:	Engineering	
Phone:	763-531-1260	
E-mail:	rmccoy@ci.robbinsdale.mn.us	

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MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-2(2)

*BMP Title: Street Sweeping

*BMP Description:

A portion of the City drains to Shingle Creek, an Impaired Water on the State of Minnesota's 303(d) list due to excess chloride concentrations in Shingle Creek. The EPA-approved Shingle Creek Chloride TMDL estimated that

the source of 84 percent of the chloride load to the Creek is from the use of road salt – NaCl – for de-icing and anti-

icing. One of the strategies identified in the Implementation Plan to reduce chloride load is to sweep streets as early as possible in late winter to remove residual product prior to spring rains.

Location(s) in SWPPP of detailed information relating to this BMP:

This summary sheet. Also refer to BMP 6a-2.

*Measurable Goals:

Street sweeping is performed as early as possible in the late winter or early spring

*Timeline/Implementation Schedule:

- September 30th, 2008 Review street sweeping practices to prioritize the street sweeping schedule.
- January 1st, 2009 Implement revisions to the street sweeping schedule.

Specific Components and Notes:

*Responsible Party for this BMP:

Name: Richard McCoy

Department: Engineering

Phone: 763-531-1260

E-mail: rmccoy@ci.robbinsdale.mn.us

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MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-1(4)

*BMP Title: Research into Salt Alternatives		
*BMP Description:		
The City will research and keep informed in new technologies, practices, and products that protect public safety while reducing the use of sodium chloride. This research may ultimately result in the implementation of new or revised practices, technologies, or products as described in BMP 6a-3.		
Location(s) in SWPPP of detailed information relating to this BMP:		
This summary sheet.		
*Measurable Goals:		
 Staff attendance at conferences, seminars, and workshops addressing advances in de-icing and anti-icing practices and technologies 		
practices and technologies		
*Timeline/Implementation Schedule:		
 Annually from January 1st, 2009 dependent upon appropriateness of course and as budgets allow. 		
Specific Components and Notes:		
*Responsible Party for this BMP:		
Name: Richard McCoy		
Department: Engineering		
Phone: 763-531-1260		
E-mail: rmccoy@ci.robbinsdale.mn.us		
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MS4 Name: Robbinsdale

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-1(5)

*BMP Title: Data Reporting

*BMP Description:

A portion of the City drains to Shingle Creek, an Impaired Water on the State of Minnesota's 303(d) list due to excess chloride concentrations in Shingle Creek. The EPA-approved Shingle Creek Chloride TMDL estimated that chloride load in the Shingle Creek watershed must be reduced by 81 percent annually if Shingle Creek is to meet state water quality standards for chloride. The TMDL estimated that the source of 84 percent of the chloride load to the Creek is from the use of road salt – NaCl – for de-icing and anti-icing. The Shingle Creek Watershed Management Commission agreed in the TMDL Implementation Plan to be responsible for ongoing monitoring of chloride concentrations in Shingle Creek. To assist in the ongoing monitoring and evaluation of the effectiveness of implementation activities in meeting the TMDL requirement, the City will continue to report monthly to the Commission on the amount of road salt applied to roads under its jurisdiction.

Location(s) in SWPPP of detailed information relating to this BMP:

This summary sheet.

*Measurable Goals:

Monthly road salt application reports submitted to the Commission

*Timeline/Implementation Schedule:

■ Annually from December 1st, 2008.

Specific Components and Notes:

*Responsible Party for this BMP:

Name: Richard McCoy

Department: Engineering
Phone: 763-531-1260

E-mail: rmccoy@ci.robbinsdale.mn.us

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