State of Wisconsin Department of Natural Resources dnr.wi.gov

### Annual Report under MS4 General Permit No. WI-S050075-1

Form 3400-195 (R 12/13)

Page 1 of 7

Due by March 31, 2014

**Notice:** Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (DNR) by March 31 of each year to report on activities for the previous calendar year. This form is being provided by the DNR for the user's convenience. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

This form is for reporting on activities undertaken in calendar year 2013.

**Instructions:** Complete each section of the form that follows. If additional space is needed to respond to a question, attach additional pages. Provide descriptions that explain the program actions taken to comply with the general permit. Complete and submit the annual report by March 31, 2014, to the appropriate address indicated on the last page of this form.

SECTION I. MUNICIPAL Information					
Name of Municipality		Facility ID No.	(FIN)		
City of Beloit			31	039	
Mailing Address	City			State	ZIP Code
100 State Street	Beloit			WI	53511
County(s) in which Municipality is located	Municipality Type:	(select one)			<u>8</u>
Rock	O County		e () T	own (	Other (specify)
SECTION II. Municipal Contact Information					
Name of Municipal Contact Person		Title			3
William A. Frisbee		Storm Water	Engine	eer	
Mailing Address	City		5	State	ZIP Code
2400 Springbrook Ct	Beloit			WI	53511
2400 Springbrook Ct Email	Beloit Phone Number (inclu	ide area code)	Fax Nur		53511 nclude area code)
		,		mber (i	

I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-1 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

Authorized Representative Printed Name	Authorized Representative Title	
Gregory Boysen	Public Works Director	
Signature of Authorized Representative	Date 1251	
Hugon Doysen	3/25/14	
Email	Phone Number (include area code)	Fax Number (include area code)
boyseng@beloitwi.gov	(608) 364-6693	(608) 364-2879
SECTION IV. Conoral Information		

SECTION IV. General Information

a. Describe what efforts the municipality has undertaken to invite the municipal governing body, interest groups, and the general public to review and comment on the annual report.

A copy of the annual report is given to the City Council and a copy of the report is available on the City's website.

b. Describe how elected and municipal officials and appropriate staff have been kept apprised of the municipal storm water discharge permit and its requirements.

Storm water permit issues are discussed at various Public Works meetings. Engineering staff works closely with other departments/divisions (Planning, Economic Development, City Manager, DPW) in the City to assure everyone is on the same page.

c. Has the municipality prepared its own municipal-wide storm water management plan? () Yes () No

If yes, title and date of storm water management plan:

Page 2 of 7

SECTION IV. General Information (continued)
<ul> <li>d. Has the municipality entered into a written agreement with another municipality or a contract with another entity to perform one or more of the conditions of the general permit as provided under Section 2.10 of the general permit?</li> </ul>
If yes, describe these cooperative efforts:
The City of Beloit is a member of the Rock River Stormwater Group (RRSG). The group collectively implements an annual work plan to meet the requirements of the permit for public education and outreach as well as public involvement and participation. See the attached RRSG summary.
e. Does the municipality have an internet website? <ul> <li>Yes</li> <li>No</li> </ul>
If yes, provide web address: www.beloitwi.gov
If the municipality has an internet website, is there current information about or links provided to the MS4 general permit and/or the municipality's storm water management program?
If yes, provide web address: http://www.ci.beloit.wi.us/index.asp?Type=B_BASIC&SEC={C073A737-9D28-40C3-B891-7DB34EC263E5} &DE={12DB778C-BB19-4211-A0D2-9FF4503CEC10}
SECTION V. Permit Conditions

- a. <u>Minimum Control Measures</u>: For each of the permit conditions listed below, provide a description of the status of implementation of program elements, the status of meeting measurable goals, and compliance with permit schedule in section 3 of the MS4 general permit. Provide an evaluation of program compliance with the general permit, the appropriateness of identified best management practices, and progress towards achieving identified measurable goals. Be specific in describing the actions that have been taken during the reporting year to implement each permit condition and whether measurable goals have been met, including any data collected to document a measurable goal. Also, explain the reasons for any variations from the compliance schedule in the MS4 general permit.
  - Public Education and Outreach

See the attached RRSG summary.

Gave a presentation to the Significant Industrial Users Group on illicit discharges and pollution prevention. (April 17, 2013)

Had a booth at the Beloit Farmer's Market on May 4, 2013. Distributed native plant seeds with education materials on the benefits of infiltrating rainwater. Also used our Enviroscape model to demonstrate sources of storm water pollution.

Public Involvement and Participation

See the attached RRSG summary.

• Illicit Discharge Detection and Elimination All major outfalls were inspected during dry weather periods for flow.

Responded to several notifications of illicit discharges. Clean-up was done where possible and one citation was issued.

Construction Site Pollutant Control

The City has a construction site erosion and sediment control ordinance and permit. All required site plans are reviewed to assure compliance.

Construction sites are inspected for compliance weekly or after each rainfall event of 1/2" or greater.

Post-Construction Storm Water Management

The City has a post construction storm water ordinance.

Site plans are reviewed for compliance.

A procedure needs to be established for recording maintenance agreements. Currently an ordinance requires BMPs to be maintained.

Page 3 of 7

### SECTION V. Permit Conditions (continued)

Pollution Prevention

2.6.1 - All storm water management ponds and basins are inspected at least once per year. Any maintenance required to maintain operating efficiency will be performed in a timely matter. If the required maintenance is a major expense, the correction may wait to allow proper funding to be budgeted.

2.6.2 - All streets are swept routinely.

2.6.3 - Street sweeping and catch basin waste is screened. The trash is taken to the landfill and the organic matter is

stored in piles. The City has obtained a Low Hazard Exemption from DNR to reuse the "clean" screened granular material for several approved uses. A copy of the LHE is attached.

2.6.4 - Road salt is kept to a minimum. The City of Beloit uses salt brine which is more efficient at removing ice and preventing it from forming. This allows for less salt to be applied. The City of Beloit also uses GeoMelt to prevent icing from forming or sticking to the pavement.

2.6.5 - Leaves and grass clippings are mulched and left on site for City properties. The City has a leaf-vac program where we vacuum leaves from the gutters in the fall. The City also offers curbside collection of bagged yard waste. When leaves and grass clippings are collected, they are stored in piles until they can be properly disposed of.

2.6.6 - Each facility has a Spill Control Plan. Pollution Prevention Plans will be developed in 2014 to comply with the requirements of the new MS4 permit.

2.6.7 - Will verify plans are in place in 2014.

2.6.8 - Site specific Storm Water Pollution Prevention Plans will be developed in 2014. Staff at each facility will be trained to implement the plans.

Storm Water Quality Managemen assess compliance with the 20%						۹ ک	∕es ⊖ No
If yes, provide the following:	Model used	SLAMM	Version	9.2.4	Reduction (%	6)	31

If no, include a description of any actions the municipality has undertaken during 2013 to help achieve the 20% standard.

Has the municipality completed an evaluation of all municipal owned or operated structural flood control facilities to determine the feasibility of retrofitting to increase TSS removal?

If yes, describe:

Existing dry ponds were evaluated. The cost was cheaper to build new ponds at the golf course. The golf course ponds are not included in the 31% reduction form the model. Actual reduction is close to 40%. No more BMPs are needed for compliance after the 40% requirement was removed. Retrofitting may be a possibility for TMDL compliance.

c. Best Management Practices Maintenance: Does the municipality have a maintenance program for installed storm water best management practices?

○ Yes ● No

Yes () No

If yes, describe the maintenance program and any maintenance activities that have occurred for best management practices in 2013. If available, attach any additional information on the maintenance program.

d. Storm Sewer System Map: Describe any changes or updates to the storm sewer system map made in the reporting year. Provide an updated map if any changes occurred during the reporting year.

The map was updated for changes to the storm sewer. No drainage basins or outfalls were changed.

### SECTION VI. Fiscal Analysis

a.	Provide a fiscal analysis that includes the annual expenditures for 2013, and the budget for 2013 and 2014. A table to document
	fiscal information is provided on page 6.

Page 4 of 7

#### SECTION VI. Fiscal Analysis (continued)

c. Are adequate revenues being generated to implement your storm water management program to meet the permit requirements?

 No () Yes

Please provide a brief summary of your financing/fiscal strategy and any additional information that will assist the Department in understanding how storm water management funds are being generated to implement and administer your storm water management program.

The City of Beloit has a storm water utility that is the main funding source for storm water funds. In addition to the utility wastewater funds are used to correct storm water issues that are affecting the wastewater collection system. Some funds are used from the general fund to make up the difference in funds generated by the storm water utility. These additional funds cover expenses for inlet maintenance, erosion control inspections, curb repairs and other various activities.

### SECTION VII. Inspections and Enforcement Actions

Note: If an ordinance listed below has previously been submitted and has not been amended since that time, a copy does not need to be submitted again. If the ordinance was previously submitted, indicate such in the space provided.

a. As of the date of this annual report, has the municipality adopted a construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit? • Yes If yes, attach copy or provide web link to ordinance: () No

Previously submitted. Can be found under Municipal Code of Ordinances at www.beloitwi.gov

b. As of the date of this annual report, has the municipality adopted a post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit? • Yes O No If yes, attach copy or provide web link to ordinance:

Previously submitted. Can be found under Municipal Code of Ordinances at www.beloitwi.gov

c. As of the date of this annual report, has the municipality adopted an illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit? • Yes O No If yes, attach copy or provide web link to ordinance:

Previously submitted. Can be found under Municipal Code of Ordinances at www.beloitwi.gov

d. As of the date of this annual report, has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.)? If yes, attach copy or provide web link to ordinance: • Yes  $\bigcirc$  No

Previously submitted. Can be found under Municipal Code of Ordinances at www.beloitwi.gov

e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above. One citation was issued for an illicit discharge. A carnival vendor dumped wash water from funnel cake making in a storm manhole.

590 erosion control inspections were performed on permitted commercial properties.

#### SECTION VIII. Water Quality Concerns

	list of ORW	/s and ÈRW	W) or exceptional resource water (ERW) listed s may be found on the Department's Internet site at:
http://dnr.wi.gov/topic/SurfaceWater/orwerw.html)	Yes	🔿 No	If yes, list:
Turtle Creek - ERW			
b. Does any part of the MS4 discharge to an impaired $A_{24}$	,		ordance with section 303(d)(1) of the federal Clean Water

Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaire	ed waterbo	dies may b	be found on the Department's
Internet site at: http://dnr.wi.gov/water/impairedsearch.aspx?status=303d)	Yes	🔿 No	If yes, complete the following:

Impaired waterbody to which the MS4 discharges:

Rock River - Total Suspended Solids and Total Phosphorous

Page 5 of 7

### SECTION VIII. Water Quality Concerns (continued)

 Description of actions municipality has taken to comply with section 1.5.2 of the MS4 general permit for discharges of pollutant(s) of concern to an impaired waterbody:

The City has two street sweepers that run whenever weather permits. One sweeper is a vacuum sweeper. No sand is applied to the streets in winter.

A fall leaf collection program is in place to to remove leaves in a timely manner.

Constructed 4 storm water ponds in 2010-2011 to remove TSS and Phosphorous

c. Identify any known water guality improvements in the receiving water to which the MS4 discharges during the reporting period.

No known improvements

d. Identify any known water quality degradation in the receiving water to which the MS4 discharges during the reporting period and what actions are being taken to improve the water quality in the receiving water. No known degradation

#### SECTION IX. Proposed Program Changes

Describe any proposed changes to the storm water management program being contemplated by the municipality for 2014 and the schedule for implementing those changes. Proposed program changes must be consistent with the requirements of the general permit.

Develop site specific SWPPP consistent with proposed MS4 permit requirements for all municipal facilities. Summer 2014.

Create a City Storm Water Management Plan. By end of 2014.

Develop an inspection and maintenance schedule/program for all City owned structural storm water management facilities.

Fiscal Analysis Table. Complete the fiscal analysis table provided below.

Program Element	Annual Expenditure	Buc	Budget		Source
	2013	2013	2014		
Public Education and Outreach	See Attached City of Beloit	Storm Water Budget			
Public Involvement and Participation					
Illicit Discharge Detection and Elimination					
Construction Site Pollutant Control					
Post-Construction Storm Water Management					
Pollution Prevention					
Storm Water Quality Management (including pollutant-loading analysis)					
Storm Sewer System Map					
Other:					

## Annual Report under MS4 General Permit No. WI-S050075-1

Form 3400-195 (R 12/13)

Page 7 of 7

				1 6111 6466 166	(
NORTHERN F	REGION COUNTI	ES	WEST CENT	RAL REGION COU	UNTIES
Ashland Barron Bayfield Burnett Douglas Florence Forest Iron	Langlade Lincoln Oneida Polk Price Rusk Sawyer Taylor Vilas Washburn	DNR Service Center Attn: Storm Water Program 5301 Rib Mountain Rd. Wausau, WI 54401 Phone: (715) 359-4522	Adams Buffalo Chippewa Clark Crawford Dunn Eau Claire Jackson Juneau La Crosse	Marathon Monroe Pepin Pierce Portage St. Croix Trempealeau Vernon Wood	DNR Service Center Attn: Storm Water Program 5301 Rib Mountain Rd. Wausau, WI 54401 Phone: (715) 359-4522
NORTHEAST	REGION COUN	TIES	SOUTH CEN	TRAL REGION CO	DUNTIES
Brown Calumet Door Fond du Lac Green Lake Kewaunee Manitowoc Marinette	Marquette Menominee Oconto Outagamie Shawano Waupaca Waushara Winnebago	DNR Northeast Region Attn: Storm Water Program 2984 Shawano Ave. Green Bay, WI 54313 Phone: (920) 662-5100	Columbia Dane Dodge Grant Green Iowa	Jefferson LaFayette Richland Rock Sauk	DNR South Central Region Attn: Storm Water Program 3911 Fish Hatchery Rd. Fitchburg, WI 53711 Phone: (608) 275-3266
SOUTHEAST	REGION COUNT	TIES			
Kenosha Milwaukee Ozaukee Racine	Sheboygan Walworth Washington Waukesha	DNR Service Center Attn: Storm Water Program 141 NW Barstow Street, Room 180 Waukesha, WI 53188 (262) 574-2100			



Making Stormwater Cleaner and Waterways Healthier Across South Central Wisconsin

Rock River Stormwater Group 2013 Activities Report March 21, 2014

## **RRSG Meetings in 2013**

Special training or informational presentations are noted.

- January 15 (Beaver Dam)
- March 7 (Fort Atkinson)
- April 11 (Janesville)
- May 9 (Beaver Dam) Public Works Yards/SWPPS presentation and Walk-Through, Pete Woods, DNR
- July 11 (Beloit)
- September 12 (Whitewater)
- November 12 (Janesville)
- December 10 (Beaver Dam) EPA MS4 Inspections, James Rabe, City of Oshkosh

## Coordination Efforts with Madison Area Municipal Stormwater Partnership (MAMSWaP)

- General coordination meeting and discussion (June 5)
- Creation of a common Renew The Rock logo, to be used by both organizations
- A jointly-implemented survey of residents throughout each group's service area
- Sharing and mutual refinement of outreach materials and press releases

### Public Education and Outreach

Rock River Reflections Articles

- July (Grass clippings)
- October (Rain gardens and groundwater recharge)

Newspaper article releases

- July (Grass clippings)
- October (Rain gardens and groundwater recharge)

Grass Clipping Campaign

• Beaver Dam requested and distributed a supply of mower stickers

Fall Leaf Management Campaign

• 37,000 newspaper insert flyers on fall leaf management in the Stateline News (part of a multiyear strategy to distribute the same message in all RRSG communities)

Website and Social Media

- Website recreated and rebranded as Renew The Rock
- New home page features map of region with links to pages for each community, plus Rock River flow data
- Social media accounts created Facebook, Twitter, LinkedIn
- Periodic (approx. biweekly) social media posts on fertilizing, mowing, leaf management, salting, rain gardens, pet waste and other assorted topics.

## Developer, Business and Industry Education and Outreach

- Evaluated feasibility of a "Champion Dirtkeepers" program to recognize superior performance in construction site erosion control; rejected due to cost-benefit concerns
- Began development of a program to require signs on permitted sites that invite citizen monitoring of soil erosion.

## **Community Survey**

- Contract with UW-River Falls Survey Research Center
- Created survey in collaboration with MAMSWaP, implemented independently in each organization's communities
- 17% response with statistically valid results that will inform future outreach topics and activities
- Key takeaways from this first survey in RRSG communities
  - Most respondents aren't familiar with local government efforts to improve water quality, but about 75% know those efforts are taking place

- Regarding investment in water quality improvements, 61% support current spending levels and another 34% support increased spending; only 5% want spending to decrease or stop
- 27% of respondents aren't sure who to contact if they become aware of a stormwater pollution problem
- Agricultural and lawn fertilizers are perceived to be the greatest contributors to water quality problems in the community
- 29% of respondents believe grass clippings and leaves do not contribute to water quality problems; 28% believe pet waste does not contribute
- About 25% of respondents aren't sure whether stormwater runoff contributes to sediment delivery or weed and algae growth in waterways
- On the topic of individual habits and practices, many report using best practices already, such as directing rain downspouts to the lawn (78%), using a mulching lawnmower (63%) and keeping grass and leaves out of the street (50%)
- Issues about which respondents most often asked for more info included saltfree ice melting, chemical-free lawn maintenance, soil testing, and rain gardens
- o Almost none of the respondents had visited our website

The complete survey results are available on the Resources page of our website, RenewTheRock.com

## **DEPARTMENT OF PUBLIC WORKS**

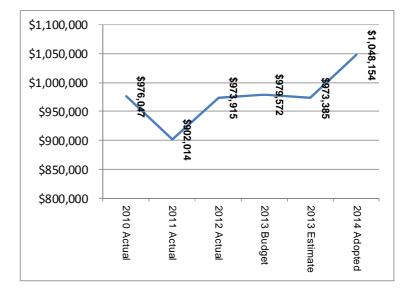
### 2014 CITY OF BELOIT OPERATING BUDGET

## Enterprise Fund – Storm Water Division Description:

The Storm Water Utility was created in 2007 to establish funding to meet the requirements of the DNR's new pollution discharge elimination permit and accounts for the operation of the physical storm water discharge system and collection of storm water fees. Activities include a street sweeping program, yard waste collection, and the cleaning and maintenance of approximately 172 miles of storm water mains, thousands of catch basins, and various public storm water ponds. Efforts also include inspection of construction related erosion control systems, public education on reducing storm water runoff pollution, etc.

Revenue sources include residential and commercial user fees based upon the amount of impervious area on the user's property. Units of impervious area are based upon the average single-family residential unit (SFU) amount of 3347 square feet. The current user charge is \$3.00 per SFU there is no increase in this fee for next year.





# City of Beloit 2014 BUDGET SUMMARIES

	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 BUDGET	2012 ESTIMATE	2014 ADOPTED	CHANGE	PERCENT CHANGE
STORM WATER UTILITY				202021			01111101	0111102
27707508								
REVENUES								
INTERGOVT AIDS/GRANT CASH & PROPERTY INC. DEPARTMENTAL EARNINGS OTHER FINANCING SOURCES <b>Total</b>	\$0 (\$60,517) (\$942,022) (\$55,598) (\$1,058,137)	\$0 (\$61,068) (\$945,989) (\$164,244) (\$1,171,301)	(\$32,203) (\$17,259) (\$941,597) \$0 (\$991,059)	\$0 (\$34,572) (\$945,000) \$0 (\$979,572)	\$0 (\$8,600) (\$945,000) \$0 (\$953,600)	(\$21,951) (\$11,500) (\$945,000) (\$69,703) (\$1,048,154)	(\$21,951) \$23,072 \$0 (\$69,703) (\$68,582)	100.00% -66.74% 0.00% 100.00% 7.00%
EXPENDITURES								
PERSONNEL SERVICES CONTRACTUAL SERVICE MATERIALS & SUPPLIES FIXED EXPENSES DEBT SERVICE DEPRECIATION CAPITAL OUTLAY Total	\$482,488 \$145,142 \$21,027 \$19,000 \$113,058 \$195,332 \$0 \$976,047	\$367,943 \$113,858 \$17,021 \$21,000 \$127,438 \$254,754 \$0 \$902,014	\$398,137 \$137,769 \$17,836 \$21,000 \$119,066 \$267,306 \$12,801 \$973,915	\$411,750 \$151,718 \$20,200 \$22,000 \$245,208 \$115,000 \$13,696 \$979,572	\$407,696 \$150,289 \$19,500 \$22,000 \$245,208 \$114,996 \$13,696 \$973,385	\$440,448 \$207,096 \$20,200 \$22,000 \$243,410 \$115,000 \$0 \$1,048,154	\$28,698 \$55,378 \$0 \$0 (\$1,798) \$0 (\$13,696) \$68,582	6.97% 36.50% 0.00% -0.73% 0.00% -100.00% 7.00%

**Budget Modifications:** Applied fund balance to account for CIP storm water improvement costs moving to operating budget. \$50,000 budgeted for storm water improvements. There are no user fee changes for 2014.

PERCENTAGE OF POSITION ALLOCATED TO FUNDS								
	2014 FTE			Percentage				
Department/Division	Equivalent	Position Status	Budgeted Fund	Allocated				
ENGINEER - SPECIALTY	1.00	FT	Enterprise Fund - Storm Water Utility	100%				
STORM WATER SEASONAL	0.38	Casual	Enterprise Fund - Storm Water Utility	100%				
STORM WATER UTILITY	1.38							

## PERFORMANCE MEASURES THAT ILLUSTRATE PROGRESS & 2013 STRATEGIC GOAL ACCOMPLISHMENTS

## PROGRAM STRIVES TO OBTAIN COUNCIL STRATEGIC OBJECTIVE:

3. Proactively partner with individuals and businesses to promote a safe and healthy community, minimize personal injury, prevent loss of life and protect property and natural resources.

	PROGRAM	PERFORMANCE	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
	<u>OBJECTIVES:</u>	<u>INDICATORS:</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Target</u>	<u>Target</u>
oad:	1. Clean and removedebris from stormwaterconveyance system.2. Televise stormwater	Feet of stormwater conveyance system cleaned annually. Feet of televising	1,166	3,343	10,604	15,000	15,000
<u>Workload:</u>	conveyance system and inlets prior to street construction and overlay program to assure system integrity.	performed on stormwater conveyance system.	968	9,802	6,988	15,000	15,000
fectiveness:	3. Enter stormwater system information into Geographical Information System (GIS) Database.	Percent of stormwater system information into GIS by the end of the year.	99%	99%	99%	99%	99%
Efficiency & Effectiveness:	4. Improve stormwater conveyance system through effective preventative maintenance.	Meet 40% total suspended solids reduction in stormwater conveyance system by 11-13-13.	21.2%	29.2%	39.5%	39.5%	39.5%
		Dry weather outfall inspections.	16	16	7	31	31
<u>2013 Strategic</u> Goal(s) Report:	Reduce stormwater pollution to protect our surface water bodies and groundwater supply and comply with all State & Federal storm water regulations.	Continue to implement public education and outreach program through the Rock River Stormwater Group.	100%	100%	100%	100%	100%

# **CITY OF BELOIT**

2014 STRATEGIC PLAN

# Department of Public Works

## City of Beloit Strategic Goal: 1

Program: Storm Water Utility Operations.

## **Objective:**

- Continue to manage the economic and environmental performance of the Storm Water Utility
- Reduce storm water pollution to protect surface water bodies and groundwater supply
- Comply with all State & Federal storm water regulations
- Comply with Wisconsin Pollution Discharge Elimination System (WPDES) MS4 permit requirements

## **Action Steps:**

- 1. Partner with neighboring communities through the Rock River Stormwater Group to educate the citizens of the Rock River Watershed as to storm water pollution concerns.
- 2. Partner with citizens and community organizations to clean existing and reduce future pollution to the storm water conveyance system.
- 3. Detect and eliminate illicit discharges.
- 4. Administer the storm water pollution prevention program used at all municipal facilities.
- 5. Improve storm water conveyance system through effective preventative maintenance.
- 6. Televise storm water conveyance system prior to street construction projects to assure system integrity.
- 7. Track construction site erosion control inspections and enforcement actions.
- 8. Monitor all City owned non-structural storm water facilities.
- 9. Monitor all major storm sewer outfalls.
- 10. Develop plan for beneficial reuse of street sweepings per Department of Natural Resources (DNR) guidance.

Mission Statement: The Department of Public Works exists to serve the public need through cost effective operations and quality service, while providing for enhanced public safety and quality of life for today and tomorrow.

### State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 101 S. Webster Street Box 7921

Madison WI 53707-7921

FEB 1 8 2014

February 14, 2014

Scott Walker, Governor Cathy Stepp, Secretary Telephone 608-266-2621 FAX 608-267-3579 TTY Access via relay - 711



FID: 154011220 Rock County SW/CORR

Mr. William A. Frisbee, P.E. City of Beloit Department of Public Works 2400 Springbrook Court Beloit, WI 53511

Subject: Low hazard waste grant of exemption approval for the beneficial reuse of screened street sweepings; City of Beloit

Dear Mr. Frisbee:

The Department has completed our review of your low hazard waste grant of exemption application request form, dated October 2, 2013, and received by the Department on October 10, 2013, for the above referenced project. The information submitted for this low hazard waste grant of exemption provided sufficient justification for granting of this exemption under ss. 289.43 (8), Stats., and NR 500.08(5), Wis. Adm. Code.

The beneficial reuse of street sweepings as confined geotechnical fill is a relatively new solid waste management technique in Wisconsin. This approval is for a 5-year period. A condition of this approval requires a written request from the city to extend the approval. We reserve the right to modify this grant of exemption should conditions warrant.

The City proposes to process street sweepings that are mostly aggregate and will not include sweepings when sweepings will be nearly or entirely organic debris such as leaves, needles, and branches. The organic debris will be directed to a temporary storage yard on City property. Storm sewer debris will be processed similarly to street sweepings. Processing will be conducted on City facilities and will include trommel screening with a ½ inch screen to remove physical contaminants such as paper, plastic, glass, and metal. The unacceptable material will be landfilled. Screened material is expected to be almost entirely inorganic aggregate which will be stockpiled at City facilities.

Potential uses of the screened material are proposed to be subgrade fill for roads, parking lots, or building construction that will be covered by asphalt or concrete paving or slabs, utility trench backfill, utility pipe bedding, general fill for old quarries, and general fill for public works projects. The City proposed certain limits on some the uses. Three feet of separation is required between drinking water pipes and screened material used as fill. Use as general fill will be limited to City-owned properties such as curb and tree stump backfill, berms, tee boxes on golf courses, and filling low areas, and in all instances with a 4 inch topsoil cover. Any other uses will require Department approval prior to implementation.

Monitoring and reporting follow Department recommendations and are approved, as proposed: The City will stockpile screened street sweepings and storm sewer debris separately.

Initial sampling of each material in will be performed by making a composite sample of 10 individual samples.



Lab analyses for PAH compounds listed in Table 1B of NR 538, pH, conductivity, alkalinity, hardness, chloride, sulfate, BOD, COD, iron, manganese, TKN, phosphorus, and the elements K, Al, St, Ar, Ba, Be, B, Cd, Cr (total), Hg, Mo, Ni, Se, Ag, Th, and Zn.

Annually, the City will make a composite sample from the street sweepings stockpile and analyze it for the same constituents as the initial sample.

The City will report annually on tonnage of street sweepings and storm sewer debris collected, processed material generated, waste send to landfill, material used, and sample results.

This exemption does not relieve you of the obligation to comply with all other Department of Natural Resources requirements or other applicable state, county, and local regulations.

The attached grant of exemption constitutes your Department issued approval to the beneficial reuse of street sweepings as confined geotechnical fill. It is our opinion that the proposed management activity can be performed in an environmentally acceptable manner if the items in your exemption request and the conditions of this grant of exemption are followed. If you have any questions regarding this approval, please contact Robert Grefe at 608/266-2178.

Sincerely,

Dennis Mack, P.E.' Waste and Materials Management Program South Central Region

cc: Bob Grefe – WA/5 – GEF2 Madison Jack Connelly - WA/5 – GEF2 Madison

### BEFORE THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

### CONDITIONAL LOW HAZARD WASTE GRANT OF EXEMPTION APPROVAL FOR THE BENEFICIAL REUSE OF SCREENED STREET SWEEPINGS

### FINDINGS OF FACT

- 1. Municipalities in Wisconsin generate many tons of street sweepings each year from the removal of accumulated winter road abrasive materials. These sweepings are a solid waste under s. 289.01(33), Stats., and are typically disposed of at licensed solid waste landfills.
- 2. The City of Beloit Department of Public Works (DPW) collects street sweepings and storm sewer debris using its own equipment. The City has proposed to process street sweepings and storm sewer debris to separate yard waste and other undesirable materials to produce a processed aggregate that can be used in City construction projects. Use of the processed aggregate will displace consumption of natural aggregate, confine the processed aggregate where any associated contamination will not cause deleterious effects, and avoid costs associated with hauling and tipping fees as licensed solid waste landfills.
- 3. On October 2, 2013 the City of Beloit DPW submitted a low hazard waste exemption application request to process and use street sweepings and storm sewer debris.
- 4. Additional documents and information considered in review of the exemption request include:
  - a. Pilot projects approved December 12, 2007 for the City of Menomonee, WI and May 13, 2008 for Marathon and Portage Counties, WI
  - b. Waste and Materials Management Team Issue Brief: Low Hazard Waste Exemptions for the Reuse of Street Sweepings, for the February 5-6, 2013 meeting.
  - c. NR 720, Wis. Adm. Code, standards for residual contaminant level concentrations for direct contact.
  - d. NR 538, Wis. Adm. Code, beneficial us of industrial byproducts tables.
- 5. Additional facts relevant to the review of the exemption request include:
  - a. Street sweepings are a solid waste under s. 289.01(33), Stats., but are not a municipal solid waste, an industrial waste, or a construction and demolition waste as defined in NR 500.03, Wis. Adm. Code.
  - b. The DPW collects street sweeping and storm sewer debris using its own equipment and staff. The DPW estimates that its collection activities generate about 2,500 tons of street sweepings each year.
  - c. The DPW proposes to screen street sweepings to eliminate trash by trommel screening and to stockpile screened material for public works projects. Processing and storage will take place on DPW property that is already disturbed and subject to stormwater controls.
  - d. The street sweepings eligible for processing will not include street sweepings during periods when it is mostly yard waste.
  - e. Accumulated sediment from storm water ponds is not included in the proposed processing of street sweepings and storm sewer debris.
  - f. The DPW provided analyses of samples of street sweepings that indicate that are about 99% sand-sized aggregate with PAHs below the detection limit or between the levels of detection and quantification, low levels of metals, detectable levels of indicator and nutrient parameters, and no exceedances of TCLP limits.
  - g. The contamination potential for the proposed disposal of screened street sweepings is low, when compare to standards in Table 2 of NR 538 for high volume industrial waste categories, and NR 720 for soil cleanup residual concentration values. The proposed disposal of street sweepings poses no greater threat than the current disposal of soils to groundwater, runoff, or air quality or potential to cause obnoxious problems with odors and dust

- 6. The Department has conducted a continuing review of the potential hazard to public health and the environment of solid waste facilities in general as well as this specific proposal. Based upon this review, the Department finds that regulation under s. 289, Stats., is not warranted in light of the low potential hazard to public health and the environment.
- 7. The conditions set forth in this grant of exemption are necessary to assure protection of the environment and to prevent contamination of surface water. If the conditions are complied with, the proposed exemption will not inhibit compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Stats.

### CONCLUSIONS OF LAW

- 1. Based on the foregoing, the Department has the authority under ss. 289.43(8), Stats., and NR 500.08(5), Wis. Adm. Code, to issue a grant of exemption if the exemption would not inhibit compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299 and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Stats.
- 2. The Department has authority to approve a grant of exemption with conditions if the conditions are needed to ensure compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Stats.
- 3. The conditions set forth below are needed to ensure compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Stats.
- 4. In accordance with the foregoing, the Department has the authority under ss. 289.43(8), Stats. and NR 500.08(5) Wis. Adm. Code to issue the following conditional grant of exemption.

### CONDITIONAL GRANT OF EXEMPTION

In accordance with the authority granted to the Department under section 289.43(8)(b)3, Stats., the Department hereby grants the City of Beloit Department of Public Works a low hazard waste exemption for the use of screened street sweepings for use as fill, subject to the proposed plan in the exemption request and the following conditions:

- 1. This exemption shall be effective for five years from the date of this approval. This approval may be extended beyond that date and conditions may be modified if justified by experience and feedback from operation of the processing facility prior to that date.
- 2. To reiterate the exemption request, the following are acceptable confined fill reuses:
  - a. subgrade fill for roads, parking lots, or building construction that will be covered by asphalt or concrete paving or slabs,
  - b. utility trench backfill,
  - c. utility pipe bedding, with three feet of separation is required between drinking water pipes and screened material used as fill,
  - d. general fill for old quarries, and
  - e. general fill for public works projects, limited to City-owned properties such as curb and tree stump backfill, berms, tee boxes on golf courses, and filling low areas, and in all instances with a 4 inch topsoil cover. Any other uses will require Department approval prior to implementation.

- 3. The DPW may conduct other uses of screened street sweepings on a one-time basis with Department concurrence, to generate information to support a longer-term use under a modification to this grant of exemption.
- 4. Sampling and analyses of samples of street sweepings and storm sewer debris shall be conducted as proposed in the request for grant of exemption. The annual reporting proposed in the request for exemption shall be provided to the Department by June 1 of each year for the disposal of spring street sweepings.
- 5. The annual report shall include a brief description of DPW experience of the advantages and disadvantages of processing and use of street sweepings and storm sewer debris and changes and adaptations of equipment or methods used in processing and utilization.

This approval is based on the information available to the Department as of the date of approval. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity. Likewise, the Department accepts proposals to modify approvals, as provided for in state statutes and administrative codes.

### NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes and administrative codes establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, ss. 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. You have 30 days after the decision is mailed or otherwise served by the Department to file your petition with the appropriate circuit court and serve the petition on the Department. The petition shall name the Department of Natural Resources as the respondent.

Dated: FEB 13 2014

DEPARTMENT OF NATURAL RESOURCES

Dennis Mack, P.E. Waste and Materials Management Program South Central Region

Robert P. Grefe, P.E. Bureau of Waste and Materials Management