FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

February 2, 2015

Mr. Bill Brecks
City of Lexington
406 E. 7th St.
Lexington, NE 68850-0070

RE: City of Lexington 2014 MS4 Evaluation Support

Dear Mr. Brecks,

Please see the attached MS4 Evaluation report for your review and comment. The report summarizes findings in each of the six minimum control measures, as well as some general information. A summary of MS4 program recommendations is provided following the assessment.

Feel free to provide any clarification or further missing information for inclusion in the report.

If you have any questions, please do not hesitate to contact me.

Sincerely,

FELSBURG HOLT & ULLEVIG

J.B. Dixon, CPESC, CISEC

Project Manager

Evaluation of Municipal Separate Storm Sewer System (MS4)

At

City of Lexington

406 E. 7th St.

Lexington, NE 68850-0070

NDEQ MS4 General Permit #300000

Prepared by:

Felsburg, Holt & Ullevig

315 S. 9th Street, Suite 201

Lincoln, NE 68508

January 30, 2015

INTRODUCTION

At the request of the City of Lexington, NE, Felsburg, Holt & Ullevig conducted an evaluation of the Municipal Separate Storm Sewer System (MS4) for the City of Lexington. This narrative report and the attachments present the results of the evaluation. Findings and recommendations given in this narrative report do not constitute violations of the NPDES MS4 Permit, as violations can only come from a regulatory agency.

PARTICIPANTS

Jesse Naputi, Building Inspector, City of Lexington
Bill Brecks, Chief Building Inspector, City of Lexington
J.B. Dixon, Felsburg, Holt & Ullevig

BACKGROUND

The Stormwater Management Plan (SWMP) for the City of Lexington was developed to reduce pollutants discharged through the Municipal Separate Storm Sewer System (MS4) to downstream receiving waters. The plan consists of best management practices (BMPs) to address the six minimum control measures as outlined in NPDES Permit NER300000, including:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Currently, according to Nebraska Department of Environmental Quality, NPDES Permit NER300000 is under an Administrative Extension. It was scheduled to expire January 1, 2013. On behalf of Nebraska H20 communities, a new NPDES Permit for Phase II MS4's has been drafted and submitted to NDEQ for adoption, and a draft Stormwater Management Plan has also been written, in anticipation of new permit issuance. Until a new General Permit for Small MS4 communities is issued, it is FHU's recommendation to continue to operate on the established Stormwater Management Plan, dated 2006. The MS4 Evaluation conducted by FHU is based on the 2006 Stormwater Management Plan.

EVALUATION FINDINGS

Lexington MS4 2006 Stormwater Management Plan Language:

1. **Public Education & Outreach**
   - **1.1. Develop brochures regarding stormwater issues and methods to prevent contamination. Make available at various locations throughout the community. Include brochure in utility bill mailing once to each household. Include specific information regarding impairments to the**

Platte River receiving waters, and possible contributing sources and information for residents to help reduce the potential sources.

Lexington has worked with Nebraska H20 in the past to produce brochures on pollution prevention and erosion & sediment control that have been handed out at local events and at the building & development counter. These brochures highlighted impacts of non-point source pollution to adjacent receiving waters. Current brochures made in-house include a Keep Lexington Beautiful campaign, educating residents about the city's weed ordinance. This brochure is also printed in Spanish. Brochures are made available at Dawson County Extension office and City Hall.

1.2. Update the City's existing website to include information regarding stormwater issues. Include a "Frequently Asked Questions" portion, as well as a way for citizens to submit questions electronically. Include specific information regarding impairments to the Platte River receiving waters, and possible contributing sources and information for residents to help reduce potential sources.

1.3.

The city uses a Facebook page as their primary Education & Outreach tool online. It was suggested that areas of the City of Lexington website be enhanced for more stormwater-specific content, especially highlighting education & outreach efforts in the community. However, the Stormwater Awareness page of the City website is difficult to locate. It is suggested that The Stormwater Awareness page page be moved under the Development Services section of the City website for ease of location. The Stormwater Awareness page would also have a direct link to the City's Facebook site. All contact information for inquiries from the community is provided on the City website within the Development Services Department. Contact information should also be provided on the Stormwater Awareness page.

1.4. Cooperate with local community organizations, such as the Chamber of Commerce, local civic organizations, and other groups to provide education regarding stormwater issues.

The city has helped sponsor a local 5K run in the Fall, with an educational table for stormwater management, including free giveaways like water bottles. City staff frequently utilizes the "Wally The Walleye" mascot, created by Nebraska H20, for these types of events. The city also hosted a clean-up day, partnering with the Lexington High School football team, cleaning up the city pond and park adjacent to Lexington High School. City staff routinely provides educational presentations in the Lexington School system for various grade levels.

Staff member Jesse Naputi also makes regular visits to various Lexington K-12 classrooms for presentations and awareness activities related to stormwater. These are provided at various times of the year per request. It is suggested that these presentation dates and audiences are documented for future annual reporting.

1.5. Develop press releases and/or public service announcements with stormwater related educational material to be issued twice annually through local media sources.

The City of Lexington currently does not have a routine schedule for providing content to its residents through local media sources. It was suggested that City staff provide quarterly or semi-annual content for the local newspaper and/or circular publications in the Lexington area, highlighting aspects of the MS4 program they feel is of particular interest at that time for the community (i.e. litter clean-up, illicit discharge detection & elimination, etc.)

2. Public Participation & Involvement

2.1. Develop and implement a system to address and respond to stormwater related concerns and complaints from telephone, mail, or email.

The Lexington city website does provide contact information, but there is nothing specific on the Stormwater Awareness page that provides instructions to residents regarding what types of things to call into the city. For stormwater concerns, residents should be encouraged to contact the building department. Given the size of the community and available staff, complaints and concerns are addressed directly between one or two staff, at most. A simple system for managing follow-up actions by staff is currently the responsibility of the chief building inspector, and there is no need for a more systematic protocol at this time.

2.2. Update the existing City website to include information on stormwater, with links to other useful sites. Include a section for visitors to submit complaints, comments or questions. Include specific information regarding impairments to the Platte River receiving waters, and possible contributing sources and information for residents to help reduce potential sources.

It was suggested that areas of the Lexington website be enhanced for more stormwater-specific content, especially highlighting education & outreach efforts in the community. While the stormwater page does have links to other content on it, it seems the site lacks program-specific content that describes what Lexington is required to do for MS4 Compliance. It's an opportunity to provide the community with a simple, direct message for how the city values clean water, and why it's important to Lexington.

As suggested previously, for ease of navigation by the general public, the Stormwater Awareness Page should be moved to become a sub-page of the Development Services section of the site.

Organize and hold public meetings and attend meetings with affected groups (i.e. homebuilder's association, etc.) to discuss stormwater program and solicit feedback.

The City of Lexington has held public meetings and open houses in the past with local builders & developers with any new ordinance that is brought forward. They anticipate a similar process for post-construction stormwater program updates when the time comes.

2.3. Sponsor a community-wide clean-up day and encourage individual and group participation. Emphasize contaminant contributing to impairment of the Platte River.

The city hosted a clean-up day, partnering with the Lexington High School football team, cleaning up the city pond and park adjacent to Lexington High School. With staff support from Jesse Naputi, one of Lexington's major program strengths will continue to be their outreach in the community through annual events like this. It is suggested that all dates of these days, as well as all groups and participants be documented for future annual reporting.

3. Illicit Discharge Detection & Elimination

3.1. Develop ordinances to prohibit illicit non-stormwater discharges, including appropriate penalties and enforcement procedures, Outline non-prohibited discharges, as well (i.e. private car washing, lawn watering, etc.)

Ordinances are adopted to address Illicit Discharge Detection & Elimination: Division 3 – Standards & Requirements

- Section 12-84 – Illicit Discharge
- Section 12-85 – Allowed Discharge
- Section 12-86 – Illicit Connection
- Section 12-87 – Suspension of Storm Drain Access
- Section 12-91 – Monitoring of Discharges
- Section 12-92 – Best Management Practices
- Section 12-93 – Watercourse Protection
- Section 12-94 – Notification of Discharges and Spills

3.2. Evaluate the accuracy and completeness of the existing storm sewer system map. Identify all outfalls and the names of the receiving streams.

The city is currently up to date with an inventory of its existing storm sewer system, including GIS mapping of all known outfalls. City staff updates the system map with each new development that is completed within the MS4.

3.3. Conduct dry weather inspections of all known major outfalls (30" diameter and larger) in conjunction with map evaluation noted above. For any observed flow, estimate flow rate and complete a physical examination of the flow. Inspect outfalls (including smaller outfalls) in response to complaints.

The City of Lexington has not done many dry weather outfall screenings in the past. It is suggested that the City establish a frequency schedule for screening, typically three to five

years per outfall, and begin a regular outfall screening regimen. Screening procedures and protocols should also be established, if conducted by city staff.

3.4. Stencil storm sewer inlets with "No Dumping" or fish symbols to reduce illegal dumping. Solicit volunteer help from local groups.

The City of Lexington has currently marked all existing storm drain curb inlets with "No Dumping" stickers. The City is working with a stenciling/sticker company that includes a bar code for smart phones on the storm drain sticker itself, with a direct link to the city's program information. The plan is to include these on each new storm drain inlet, and begin the process of installing these around the city. The City will actively seek groups or participants to assist with marking new inlets in the future. As a suggestion, the city should consider a corresponding map to the Storm Drain System map to show which inlets have been stenciled/stickered.

3.5. Use educational materials described in "Public Education & Outreach" to educate the public about illegal dumping and illicit discharges.

It is suggested that the City of Lexington re-evaluate Public Education & Outreach materials coordinated through Nebraska H20 to include illegal dumping and illicit discharges for distribution to the general public.

4. Construction Site Runoff Control

4.1. Develop stormwater management and erosion control ordinances for construction sites. Include criteria for design and review, as well for enforcement and penalties for non-compliance. Design standards shall be consistent with the requirements of the NDEQ NPDES general permit for construction site runoff.

Ordinances have been adopted: Division 3 – Standards and Requirements
Section 12-88 – Construction
Section 12-90 – Technical Standards, Specifications, and Guidance
Section 12-91 – Monitoring of Discharges
Section 12-92 – Best Management Practices

4.2. Develop or adopt design standards, minimum controls, and other construction site requirements to minimize the potential for pollutants to runoff into the MS4 system.

Currently, there are no local standards & specifications in place for erosion & sediment controls for construction. Lexington Ordinance states the following:

<u>Division 3, Sec. 12-90 – Technical Standards, Specifications, and Guidance</u>

All BMPs designed to meet the requirements of this article shall reference the appropriate technical standards, specifications, and guidance as follows:

1. City standards and specifications for construction
2. State department of roads drainage design and erosion control standards, specifications and guidance.
3. Any other alternative methodology approved by the city, which is demonstrated to be effective.

The City of Lexington is currently working with Miller and Associates, a local engineering company which is currently considered the City Engineer, to create City standards and specifications for construction stormwater. It is recommended that those standards and specifications be published via the City website, available for the building community and the general public as soon as the standards are completed.

4.3. Develop a plan review and site inspection program including procedures for reporting and correcting deficiencies, procedures for referral to NDEQ for non-complying sites that do not respond to local enforcement actions. Identify priority sites for plan review and inspection based upon the size of the construction project, location, terrain, and receiving water. Consider the past history of the contractor/developer in compliance when targeting site inspections.

City of Lexington ordinance outlines procedures for enforcement within City Ordinance Chapter 12 - Division 2: Administration and Enforcement. After a verbal warning to the builder or developer, the most effective enforcement mechanism city inspectors use for erosion & sediment control violations is a “Red Tag” for construction site shutdown and a hold on building inspections.

A recommended Enforcement Response Plan has been provided to the City for adoption and use regarding Stormwater Pollution Prevention Plan Review and Construction Site Inspection, created on behalf of Nebraska H20 communities by Felsburg, Holt & Ullevig. It is suggested that City staff review these procedures, discuss areas of refinement to better reflect current construction site protocols as they relate to building inspection, and make any recommendations for amendment, if necessary.

Regardless of what procedures are currently used, or adopted in the future, any enforcement protocols need to be documented. If changes are made to policies or procedures, it is imperative that the intent of the conditions of the Stormwater Management Plan, as well as the requirements of the City’s MS4 Permit is still met for compliance.

The city typically has a limited number of active construction sites at any given time. Therefore, developments and construction sites are tracked with their assigned building permit number.

4.4. Educate developers and contractors as to the requirements of the City's program by distribution of standards or criteria information sheets.

While education and outreach training specifically for Construction Stormwater Pollution Prevention was done in the past, coinciding with the new ordinance adoption in 2011, there has been little in the way of stormwater training recently. It is the City's intent to conduct stormwater training again in the near future, but no specific dates or timelines for that training have been established as of now. It is suggested that City staff establish a timeline for construction stormwater training, and discuss the intended target audience, and training content.

5. Post-Construction Runoff Control

5.1. Develop and implement ordinances addressing post-construction runoff control. These ordinances will be developed as part of the construction site runoff control ordinances. Include requirements for Best Management Practices and inspection and maintenance for post-construction runoff control.

5.2. Develop and implement procedures for post-construction site inspections (follow-up inspections within one year of completion of construction). Identify priority sites based on construction site size, topography, nature of construction, and receiving waters.

5.3. Educate contractors and developers of the requirements of post-construction runoff control.

Existing Post Construction Stormwater ordinance is Chapter 12, Division 3 – Standards and Requirements

- Section 12-89 – Post-Construction of Permanent BMPs

The ordinance outlines requirements for land development that must address stormwater runoff quality through the use of permanent BMP's, but provides little explanation to design standards and specifications. The ordinances stipulate that all BMPs must be in compliance with the approved final drainage plan, and that the owner must execute an inspection & maintenance agreement, and undergo ongoing inspections to document maintenance & repair needs to ensure compliance and structural BMP integrity.

Currently, The City is coordinating with other Nebraska H20 communities to develop post-construction stormwater standards and procedures that are more in line with the intent of the NPDES regulations. The project will produce:

- Minimum stormwater treatment standards and the conditions to which they apply.
- Stormwater treatment calculations under varying conditions.
- References to adopted BMP design manuals as accepted practices, including exceptions if warranted.
- General Procedures related to the platting and site planning process.
- General procedures related to inspections and maintenance.

- Stormwater treatment plan submittal checklist.

The timeline for bringing proposed Post-Construction stormwater standards forward for approval is no later than 4th quarter of 2015.

It is anticipated that with the discussion prior to adoption, and after adoption of new Post-Construction Stormwater Standards, there will be extensive opportunities to provide education & outreach to contractors and developers. Timing of this targeted education will be dictated by refinement and adoption of the ordinance.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

6.1. Evaluate all municipal operations to determine ways to minimize impacts to stormwater runoff. When feasible, operations shall comply with "No Exposure" status. Where not feasible, develop best management practices to limit potential pollutant runoff.

In May of 2012, Felsburg, Holt & Ullevig updated a Facility Runoff Control for the Main Public Works Maintenance Facility. The primary goals of the plan are to:

1. Identify potential pollutant sources that affect stormwater discharge from the site;
2. Describe the practices that will be implemented to prevent or control the release of pollutants in stormwater discharges, and;
3. Create an implementation schedule to ensure that the practices described in this plan are in fact implemented and to evaluate the plan's effectiveness in reducing the pollutant levels in stormwater discharges.

Many ongoing and potential pollutant sources were identified in the facility screening process which prompted the FRCP to be developed. It is recommended that City staff utilize this FRCP as a planning and pollution prevention tool in meeting the conditions of this particular section of the Stormwater Management Plan. Also, consider any facilities that have not been evaluated using a Hot Spot evaluation similar to the main maintenance yard.

6.2. Provide adequate training provided to City employees identified as jobs with potential impacts to receiving waters. Training to include ways they can prevent pollutant runoff from municipal operations. Include training for activities, inspections, controls on discharge of pollutants from streets, poor maintenance of salt/sand storage areas, waste cleanup, etc. Identify responsible departments and personnel for employee training.

It is anticipated that 2015 will see municipal good housekeeping training revisited. Previous proprietary stormwater and good housekeeping training videos were purchased around 2006, but it is unclear when they were last utilized, and they may be out of date. Training is recommended to be based on the FRCP for the main public works maintenance facility. Consideration will be made to educate a diverse group of City staff members.

6.3. Conduct inspections and maintenance of the storm drainage system to remove sediment and debris (in conjunction with illicit discharge detection).

Currently, there is no set schedule specifically for inspection of the storm drain system for potential blockages or issues with sediment and debris. These are currently conducted on an as-needed basis. Given the overall size of the MS4, and the language of the current permit, this is adequate approach. Consideration should be made for scheduling inspections of locations that are known to have recurring drainage problems.

6.4. Conduct street cleaning to remove potential pollutants before they enter the storm sewer system.

The City of Lexington conducts street sweeping throughout the year, given good weather conditions. Primarily, the city has conducted their street sweeping with a 2004 Pelican Street Sweeper, which has a 3.5 cubic yard hopper capacity. During a daily operation, the sweeper operator fills and empties the hopper twice, for a daily cleanup of 7 cubic yards, or approximately 21,000 lbs of waste. The city has purchased a new Global M3 Street Sweeper, with a 5.6 cubic yard hopper capacity, and has been in operation since the summer of 2014. It is recommended that the City track the total number of operating days or hours annually, and keep track of the number of street miles swept.

Proposed Wet Weather Monitoring Plan

According to the 2006 Stormwater Management Plan, the City of Lexington intended to perform wet weather monitoring as required in the NPDES General Permit in years 2 and 4 of the permit cycle. This would include monitoring three locations three times in each of the two years. Sites were to include monitoring locations from a residential, commercial and industrial area. The City selected the representative sites, and was subject to verification and approval of NDEQ.

After consultation with other Phase II communities, given issues with limited availability for proper testing laboratories and the proposed expense, The City believes that NDEQ provided verbal confirmation that the monitoring portion of the General Permit would not be enforced for the permit period. No sampling results have been submitted with Annual Reports which NDEQ has accepted without comment.

The City has not received any written confirmation of this waiver from NDEQ.

It is highly recommended that the City of Lexington continue communications with NDEQ, and obtain written confirmation of this waiver to forego wet weather monitoring.

This foregoing of scheduled wet weather monitoring does not exclude the City from conducting elements of its Illicit Discharge Detection and Elimination program, including dry weather outfall screening and assessments.

Annual Reporting

The City of Lexington submits annual reports to NDEQ annually as required by NPDES Permit NER300000. For annual reporting submissions, it is encouraged that the City attaches any and all supporting documentation related to the MS4 activities conducted for the reporting year.

Conclusions

Overall, given the resources typical of a Phase II MS4 with no dedicated funding mechanism, the City of Lexington is doing a good job implementing many aspects of its MS4 program, especially in the areas of Education & Outreach, and Construction Site Runoff Control.

Consistent communication between the program administrator and NDEQ has been ongoing since the program's inception. Lexington has been a steady contributor and participant with Nebraska H20 communities, sharing efforts wherever possible.

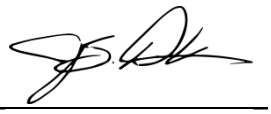
The City has consistently submitted annual reports, as well as utilized allotted funds dedicated to their stormwater program through NDEQ's Stormwater Grant program.

Summary of Recommendations

Public Education & Outreach	• Enhancements to the Stormwater Awareness page on the City of Lexington website, with more stormwater-specific content, especially highlighting education & outreach efforts in the community. • The Stormwater Awareness page moved under the Development Services section of the City website for ease of location. • The Stormwater Awareness page would also have a direct link to the City's Facebook site. • All contact information for inquiries from the community should be provided on the Stormwater Awareness page.
Public Education & Outreach	• Documentation of presentation dates and attendance numbers for Lexington K-12 classroom presentations and awareness activities related to stormwater for future annual reporting.
Public Education & Outreach	• Provide quarterly or semi-annual content for the local newspaper and/or circular publications in the Lexington area, highlighting aspects of the MS4 program they feel is of particular interest at that time for the community (i.e. litter clean-up, illicit discharge detection & elimination, etc.)
Public Participation & Involvement	• Add program-specific content to the Stormwater Services page of the City website that describes what Lexington is required to do for MS4 Compliance. It's an opportunity to provide the community with a simple, direct message for how the city values clean water, and why it's important to Lexington.
Public Participation & Involvement	• Document dates of community clean-up efforts, specific targeted locations (if any), as well as all groups and participants for future

	annual reporting.
Illicit Discharge Detection & Elimination	• Establish frequency schedule for outfall screening/dry weather monitoring, typically three to five years per outfall, and begin a regular outfall screening regimen. • Establish screening procedures and protocols, if conducted by city staff.
Illicit Discharge Detection & Elimination	• Consider a corresponding map to the Storm Drain System map to show which inlets have been stenciled/stickered.
Illicit Discharge Detection & Elimination	• Evaluate Public Education & Outreach materials coordinated through Nebraska H20 to include illegal dumping and illicit discharges for distribution to the general public.
Construction Site Runoff Control	• Finish creation of City standards and specifications for Construction Site Runoff Control, coordinated with Miller and Associates. • Publish new Construction Site Runoff standards & specifications via the City website, available for the building community and the general public.
Construction Site Runoff Control	• Review enforcement procedures, discuss areas of refinement to better reflect current construction site protocols as they relate to building inspection, and make any recommendations for amendment, if necessary. • Document current enforcement procedures.
Construction Site Runoff Control	• Deliver construction stormwater training within the next two calendar years, and discuss the intended target audience, and training content.
Post-Construction Runoff Control	• Continue collaboration with Nebraska H20 communities to create minimum standards for post-construction stormwater treatment for new and redevelopment. • Adopt standards and criteria locally.
Pollution Prevention/Good Housekeeping	• Ensure the Facility Runoff Control Plan for the main Public Works Maintenance Facility is being utilized, including monthly in-house inspections.
Pollution Prevention/Good Housekeeping	• Provide periodic education to wide group of city staff
Pollution Prevention/Good Housekeeping	• Track the total number of street sweeping operating days or hours annually, and keep track of the number of street miles swept.
Monitoring	• Obtain written confirmation that grab sampling monitoring has been waived for the current permit period.

Preparer:



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