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WOOD CITY OF NORTHWOOD

2GQ00002 2011/07/08 TEBBE, PATRICIA

NORTHWOOD



Environmental  
Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

Re: Wood County  
City of Northwood  
Stormwater - MS4

July 8, 2011

Mr. Dennis Recker, City Administrator  
City of Northwood  
6000 Wales Road  
Northwood, Ohio 43619

Dear Mr. Recker:

On June 16, 2011, I conducted an audit of the City of Northwood Municipal Separate Storm Sewer System (MS4) program which is authorized under the National Pollutant Discharge Elimination System (NPDES) permitting program for storm water discharges under US EPA's Phase II storm water regulation.

The audit consisted of an evaluation of the Storm Water Annual Report and an interview with you. The audit followed a modified worksheet issued by USEPA. Answers to questions in the worksheet are in bold italics. The City of Northwood has a population of approximately 5471.

The MS4 permit requires that a storm water management plan (SWMP) be developed, implemented and enforced in order to reduce the discharge of pollutants from the community in order to satisfy the appropriate water quality requirements of Ohio Revised Code (ORC) 6111, and the Clean Water Act. The SWMP includes best management practices (BMPs) along with measurable goals for each of the BMPs. Few of the goals given in the latest annual report provide a measurement of the effectiveness of the program.

The following is a summary of findings of each of the six minimum controls of the program:

1. Public Education and Outreach on Storm Water Impacts – education was given to public through the Give Water a Hand program through TMACOG. Other than some catch basin stenciling by City personnel there is currently little in the way of public education and outreach being done in the City.
2. Public Involvement/Participation – Public participation is minimal in implementing the program. Public does participate in community clean ups, and students in the watershed watch program through the schools.

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3. Illicit Discharge Detection and Elimination – Four Home Sewage Treatment Systems have been identified by the City of Northwood and the Wood County Health Department as being illicit discharges.
4. Construction Site Storm Water Runoff Control – The City has few active construction sites at this time but there are over a dozen sites with active permits. Please be aware that the City is required to develop procedures to inspect active construction sites on a monthly basis.
5. Post-Construction Storm Water Management in New Development and Redevelopment – The City is to develop and implement ordinances for post-construction storm water management in new developments.
6. Pollution Prevention/Good Housekeeping for Municipal Operations – The City has built a new salt storage barn, sweeps streets quarterly and street sweepings are taken to a landfill. The City minimizes use of fertilizers, herbicides, pesticides and road salt as appropriate.

Activity on the SWMP has been minimal in the past year. Part III.D. of the MS4 permit requires that the City do an annual review of your SWMP. The SWMP should be updated to provide more feasible and effective best management practices (BMPs) along with measurable goals that demonstrate effectiveness of the BMPs.

A major way that the City can improve their MS4 program is to have all inspection, review, and training procedures in writing and follow up any inspections with written reports.

If you have any questions, you may contact me at 419-373-3016 or by e-mail at [patricia.tebbe@epa.state.oh.us](mailto:patricia.tebbe@epa.state.oh.us).

Sincerely,



Patricia A. Tebbe, P.E.  
Division of Surface Water

/llr

Enclosure

cc: DSW-NWDO

ec: Jason Fyffe, DSW-Co w/encl

**City of Northwood MS4 Inspection**

June 15, 2011

**City of Northwood:**

Dennis Recker

**OEPA:**

Patricia A. Tebbe

**1. Program Management Component**

**Comprehensive Stormwater Management Planning SWMP Planning**

*Interview Questions:*

- SWMP Plan developed? *Yes*
- Were stakeholders included in the planning process? *Yes*

**Comprehensive Stormwater Management Planning Intergovernmental, Agency, Departmental Coordination**

*Interview Questions:*

- How are in-house departments coordinated? *Small city, staff meetings*
- Is there a stormwater task force or committee in place? *Environmental committee on council – 7 meetings a year*
- Are outside groups used to implement the SWMP? *Yes*
  - Name of group(s) *TMACOG, school groups, Health Department, Wood County Solid Waste Department, SWCD – no formal MOUs*

**Comprehensive Stormwater Management Planning Staff Inventory & Organization**

*Interview Questions:*

- Has an organizational chart been developed? *No – needs to be developed and submitted with annual report*

**Comprehensive Stormwater Management Planning Performance Standards or Goals**

*Interview Questions:*

# PROGRAM EVALUATION WORKSHEETS

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- Have measurable goals or standards been developed for each SWMP program component? *Yes however the goals are not necessarily measurable*
- Do the goals address water quality impact or effectiveness? *Recommend that the City review all of the goals with the idea of updating them to reflect the ability of the city and the measurability of the goals to show how they are effective and positively affect water quality.*

## Comprehensive Stormwater Management Planning Prioritization of Resources

### *Interview Questions:*

- Have pollutants of concern (POC) been established? If yes, based on what?
  - Land uses of concern? ✓
  - Existing watershed planning efforts? ✓
- Have POC-specific strategies been developed in the SWMP? *Yes*
- How does the permittee decide program implementation priorities for resource allocation? *How well it fits in with existing work schedule and program*

## Assessment and Evaluation

### *Interview Questions:*

- Is the SWMP regularly measured against goals or standards? *No*
- Have load reduction goals been established or assessed? *No*
- Have other types of improvements been assessed? *No*
  - Riparian habitat?
  - Stream corridor?
  - Aquatic habitat?
  - Groundwater?

## Data Collection and Reporting

### *Interview Questions:*

- Have internal reporting deadlines been established? *No*

## 2. Public Education/Involvement Component

### Goals and Objectives

#### *Interview Questions:*

# PROGRAM EVALUATION WORKSHEETS

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- Outreach strategy document developed? *No*

## Message Development

### *Interview Questions:*

- Specific stormwater messages been developed? Describe. *Participated in TMACOG Give Water a Hand Campaign; SWCD in schools; website used for education – There was no message on the website at the time of this write up. It is a good mechanism though and should be utilized with messages placed prominently that are attractive and cannot be missed.*
- Based on what?
  - Pollutants of concern ✓
  - Target audience ✓
  - Behavior of concern ✓
  - Other
- Illicit discharges being addressed? *Investigated by the Health Department*
- Pesticides, herbicide, and fertilizer education being conducted? *Addressed in Give Water a Hand Campaign*

## Target Audience

### *Interview Questions:*

- Target audiences established? *Done by Give Water a Hand*
- Based on what:
  - Behavior?
  - Location/neighborhood?
  - Business?
  - Age?
  - Other?
- Target audiences regularly reevaluated?
- Homeowners a target for pesticide, herbicide, and fertilizer education? *Part of Give Water a Hand*

## Distribution Mechanisms

### *Interview Questions:*

- Methods and location of materials distribution: *Handouts, website*
- Distribution tracked? *No*

## Public Involvement Activities

### *Interview Questions:*

# PROGRAM EVALUATION WORKSHEETS

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- Public participation obtained during stormwater management program changes? *No changes made*
- Stormwater related volunteer activities sponsored or endorsed? *School involvement in Student watch program sampling; recycling and annual litter cleanup day in the City.*

## Evaluation Methods

### *Interview Questions:*

- Public Education and Involvement assessment methods:
- Public awareness survey been performed? *Done with Give Water a Hand program with regard to that program.*

## 3. MS4 Maintenance Component

### MS4 Mapping

#### *Interview Questions:*

- Outfalls and receiving waters mapped? *Basic mapping done with revisions as more information obtained*
- Catch basins?
- Pipes, ditches, other conduits? *Not all ditches are shown*
- Public stormwater facilities (BMPs)?
- Private stormwater facilities (BMPs)?
- How are maps used (i.e. tracking illicit discharges)?

### Catch Basin Cleaning

#### *Interview Questions:*

- Schedule established for inspections and cleaning? *Yes*
- Is cleaning and maintenance of catch basin tracked: *Yes*
- How are spoils materials disposed of? *To landfill – Waste Management*
- Are storm drain pipes inspected?
  - Proactive or only in response to blockage event?

### Stormwater Management Facilities Operation and Maintenance

#### *Interview Questions:*

- Public facilities inspected? *Yes*

## PROGRAM EVALUATION WORKSHEETS

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- Frequency: *Twice per year plus complaint based*
- Private facilities inspected? *No*
- Checklist used for inspections? *Need to have written report documentation*
- Maintenance standards and procedures established? *Yes*
- Data evaluated to target maintenance resources? *No*

### Road Maintenance

#### *Interview Questions:*

- Streets regularly swept? *Yes*
  - Frequency: *Streets cleaned four times per year*
- Frequency based on water quality factors (e.g. proximity to streams)? *No*
- How are spoils disposed of? *Landfill*
- BMPs used during road maintenance activities? Describe.
- BMP guidance available to field staff? – *raining on how to monitor salt distribution*
- Deicers used by MS4? *Road Salt – kept inside salt barn*
- Type and amount of deicer tracked? *Yes, 1200 pounds in past year*
- Sand/salt swept up after application? *yes*
  - How soon?

### Flood Management

#### *Interview Questions:*

- Inventory of flood management structures completed? *Curtice Road, Brentwood Park, Greenway Estates is planned for the future*
- Structures been assessed for stormwater retrofit? *Two detention ponds reconstructed and retrofitted*

### Facilities Operation & Maintenance

#### *Interview Questions:*

- Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?
  - Types of facilities included: *City maintenance facility, salt storage, garage*
- Facilities inspected?
  - Frequency:
- Checklist used? *No*
- Staff which perform the inspections (department or agency): *Craig Meier, Public Service Director*
- Parking lots owned/operated by the permittee swept? *Quarterly*

# PROGRAM EVALUATION WORKSHEETS

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- Sanitary sewer systems evaluated to determine storm sewer cross-connections or overflow locations? *Sanitary sewers owned by Northwestern Water and Sewer District who does inspections*
- Sewer spill and cleanup procedures in place?

## Pesticides, Herbicides & Fertilizers

### *Interview Questions:*

- Certified applicators used? *Yes*
- Integrated Pest Management (IPM) practices used?
- Storage location of pesticides, herbicides, and fertilizers: *maintenance garage*
- BMPs used during application. *Fertilizer applied by hand using auger spreader*
- Fertilizer/pesticide application plan utilized? *No – manufacturer guidance and directions*

## Standards, BMPs, & Outreach

### *Interview Questions:*

- BMP technical guidance document available to maintenance staff? *Training by Craig Meier, documentation by certifications*
- BMP guidance materials provided to contracted staff?
- Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?

## Staff Education and Training

### *Interview Questions:*

- Staff trained on pollution prevention? *Yes*
  - Frequency.
- Materials used to train staff. *Workshops*

## 4. Construction Component

### Ordinance/Legal Authority

#### *Interview Questions:*

- Ordinance used to require stormwater BMPs at construction sites?
  - Name and/or code section(s). *Developed March 2008 Found in Zoning and storm water management ordinance*
- Threshold for coverage: *1 acre*
- Exclusions from coverage allowed. *No*

## PROGRAM EVALUATION WORKSHEETS

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- Other pollutants regulated on construction sites (e.g., construction wastes, trash, chemicals, etc.):
- Permitting mechanism used to require appropriate BMPs (i.e. grading permit, building permit):
- Is a plan required (erosion control plan or SWPPP)? *Yes by the planning commission*
- Are minimum construction site BMPs specified?
- Types of enforcement mechanisms available.
  - Notices of Violations
  - Administrative fines
  - Stop-work orders
  - Civil penalties
  - Criminal penalties
  - Other:
- Official enforcement escalation plan or procedures in place?

### Construction Project Inventory

#### *Interview Questions:*

- Construction projects tracked? *no*
  - Projects <1 acre?
- Updated at what frequency?
- Information tracked:
  - Project status
  - Inspection Findings
  - Enforcement Actions
  - Complaints
  - NOI submittal
  - Other:
- Projects prioritized to determine inspection frequency?
  - Criteria used:
    - Proximity to waterbody
    - Waterbody impairment
    - Size of project
    - Slope of project site
    - Other:
- Number of active projects: *List of still active sites in Ohio EPA data base given to City Administrator*

### Construction Requirements and BMPs

#### *Interview Questions:*

- Technical guidance provided or required? *Not given*

# PROGRAM EVALUATION WORKSHEETS

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- Does guidance include selection criteria?
- Does guidance include operation and maintenance requirements?
- Does guidance have different requirements or standards for different times of the year (i.e. rainy vs. dry seasons)?

## Plan Review Procedures

### *Interview Questions:*

- Who performs erosion and sediment control plan review (i.e. planning department, building department)? *Feller Finch (Dave Kuhn)*
- Size threshold for plan review: *1 acre*
- NOI submittal verified during review?
  - How (i.e. canceled permit fee check)?
- Pre-project meetings conducted with developer?
- Standard conditions of approval include erosion and sediment control and/or general stormwater requirements?
- Plan review criteria or checklist used?

## Construction Project Inspections

### *Interview Questions:*

- Who performs construction stormwater inspections (i.e. building inspector, dedicated stormwater inspector)? List all if different phases or areas of project are inspected by different staff. (i.e. public right-of-way, building footprint, grading phase, construction phase). *Zoning Inspector*
- How often are sites inspected? *Renewal permit requires monthly inspections*
- Inspections triggered by rain events?
  - What size rain event?
  - How soon after the event?
- Standard inspection checklist used?
- Findings tracked in a database?

## Enforcement/Referrals

### *Interview Questions:*

- Can construction inspectors administer enforcement actions? *Police, maintenance supervisor and zoning inspector can all report.*
  - If no, who can?
  - If yes, what types of enforcement actions?
- Enforcement action is most commonly used:
- Enforcement actions tracked?
  - How?

## PROGRAM EVALUATION WORKSHEETS

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- Average number of enforcement actions (by type) issued in the previous year:
  - Notices of Violations (NOV)
  - Administrative fines
  - Stop-work orders
  - Civil penalties
  - Criminal penalties
  - Other:
- Most common compliance issue on construction projects (i.e. tracking on streets, litter, inadequate concrete washout BMPs)?
- Adequate legal authority and tools available to inspectors to enforce stormwater requirements on construction projects?
  - If no, how could the program be improved?
- Who does follow up on enforcement actions?

### 5. Post-Construction Component

#### Ordinance/Legal Authority

##### *Interview Questions:*

- Ordinance used to require post-construction stormwater BMPs on new development or redevelopment projects? ***Need to develop ordinance on post construction ordinance and procedures for compliance and inspections***
  - Name and/or code section(s).
- Threshold for coverage (e.g., 1 acre, 100 cubic yards, etc.)
- Exclusions from coverage allowed: ***No***
- Permitting mechanism used to require appropriate BMPs (i.e. building permit):
- Is a plan required (erosion control plan or SWPPP)? ***Yes***
- Are minimum post-construction site BMPs specified?
- What types?

#### Comprehensive or Master Planning

##### *Interview Questions:*

- Is there an overall comprehensive or watershed plan with detailed information on current and planned development and redevelopment? ***Online – subdivision regulations for 40% development***
- If the permittee is a municipality, does the comprehensive plan include stormwater elements? If so, what types?
  - Imperviousness
  - Public infrastructure/drainage
  - Open space

# PROGRAM EVALUATION WORKSHEETS

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- Water body protection
- Are there programs and design guidelines to assist in current and future development and redevelopment (including funding programs)?
- Audit or review of existing codes completed?

## Construction Requirements and BMPs

### *Interview Questions:*

- Technical guidance provided or required?
- Does guidance include selection criteria (i.e. based on land use, location)?
- Does guidance include operation and maintenance requirements?

## Plan Review Procedures

### *Interview Questions:*

- Who performs post-construction BMP plan review (i.e. planning department, building department)? *Feller Finch*
- Size threshold for plan review (i.e. 1 acre, 10,000 square feet)?
- Pre-project meetings conducted with developer?
- Standard conditions of approval include post-construction stormwater requirements?
- Plan review criteria or checklist used?
- Maintenance agreement required?

## Post-Construction BMP Inventory

### *Interview Questions:*

- Post-construction structural BMPs tracked?
- Information tracked:
  - Location
  - Maintenance Requirements
  - Inspection findings
  - Other:
- Nonstructural BMPs tracked?
- Database used?
- Number of private post-construction structural BMPs:

## Post-Construction BMP Inspection and Maintenance

### *Interview Questions:*

- Who performs post-construction BMP inspections? *Only of City structures*

## PROGRAM EVALUATION WORKSHEETS

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- Training received and frequency:
- Are "as built" inspections performed?
- How often are BMPs inspected?
  - What determines frequency?
- Standard inspection checklist used?
- Findings tracked in a database?

### Enforcement/Referrals

#### *Interview Questions:*

- Can inspectors administer enforcement actions if private post-construction BMPs are not maintained?
  - If no, who can?
  - If yes, what types of enforcement actions?
- Enforcement action is most commonly used:
- Enforcement actions tracked?
  - How?
- Average number of enforcement actions (by type) issued in the previous year:
  - Notices of Violations (NOV)
  - Administrative fines
  - Stop-work orders
  - Civil penalties
  - Criminal penalties
  - Other:
- Adequate legal authority and tools available to inspectors to enforce post-construction stormwater requirements?
  - If no, how could the program be improved?
- Who does follow up on enforcement actions?

### Outreach and Education

#### *Interview Questions:*

- Type of training provided to designers and engineers:
- Attendance required?
- Training frequency?
- Number trained:
- Training topics:
- Presentations given by MS4 staff to professional groups?
- Brochures or outreach materials targeted at designers and engineers:
- How/when is the information distributed?
- Website used to educate designers and engineer?
  - Web address:

# PROGRAM EVALUATION WORKSHEETS

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## MS4-Owned Construction Projects

### *Interview Questions:*

- Projects designed in-house or contracted? *Contracted*
- If contracted planners and engineers are used for the design of MS4-owned projects, does the contract language specify that post-construction stormwater BMPs be incorporated into the design? *Yes*
- In-house inspection staff inspect post-construction BMPs? If so, which department? *Streets*
- Post-construction inspectors trained?
  - Frequency:

## Ordinance/Legal Authority

### *Interview Questions:*

- Ordinance which requires industrial/commercial facilities to install BMPs or minimize pollutant discharge?
  - Name and/or code section(s).
- Types of facilities covered:
- Facilities exempted:

## Facility Inventory

### *Interview Questions:*

- Industrial/Commercial facilities inventoried?
- Types of facilities included in the inventory:
- Facilities prioritized according to risk?
  - Criteria used:
    - Proximity to waterbody
    - Waterbody impairment
    - Type of facility
    - Materials produced on-site
    - Materials stored on-site
- Facilities mapped? *No*
  - GIS?

## Standards, BMPs & Outreach

### *Interview Questions:*

- Standards adopted which require industrial/commercial facilities to install BMPs (e.g., all car dealerships must install a wash rack plumbed to the sanitary sewer)? Describe.

## PROGRAM EVALUATION WORKSHEETS

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- Standards for new development only or do they apply to improvements as well?
- Additional criteria which determine whether BMPs are required (e.g. facilities determined to be "high priority", facilities within 100 feet of stream):
- Specific guidance document or manual utilized:
- Materials developed to educate operators about required or recommended BMPs:
- Training for operators:
  - Frequency of training:

### Inspections

#### *Interview Questions:*

- Industrial/Commercial facilities inspected? *No*
  - Frequency:
- Staff (department or agency) responsible for inspections: *City Engineer/Zoning Inspector*
- If multiple departments perform inspections (i.e. health department inspects restaurants, pretreatment staff inspects heavy industrial), are the stormwater findings compiled?
- Checklist used during inspection?
- Types of data collected:
  - Proximity to waterbody
  - Type of facility
  - Materials produced on-site
  - Materials stored on-site
  - Hazardous waste on-site
  - NOI submittal
  - Other
- Are non-filers reported to permitting authority?
- Method of tracking inspection findings?
- Educational materials provided to operators during inspections?

### Enforcement

#### *Interview Questions:*

- Enforcement escalation plan or procedures adopted?
- Can industrial/commercial inspectors administer enforcement actions?
  - If no, who can?
  - If yes, what types of enforcement actions?
- Enforcement action is most commonly used:
- Enforcement actions tracked?
  - How?
- Average number of enforcement actions (by type) issued in the previous year:

## PROGRAM EVALUATION WORKSHEETS

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- Notices of Violations (NOV)
- Administrative fines
- Civil penalties
- Criminal penalties
- Damage abatement
- Other:
- Adequate legal authority and tools available to inspectors to enforce stormwater requirements at industrial/commercial facilities?
  - If no, how could the program be improved?
- Who does follow up on enforcement actions?

### *Applicable Documents:*

- Enforcement escalation plan or procedures

### **Staff Education and Training**

#### *Interview Questions:*

- Staff trained to inspect industrial/commercial facilities?
  - Frequency:
- Materials used to train staff:

## **6. Illicit Discharge Component**

### **Ordinance/Legal Authority**

#### *Interview Questions:*

- Ordinance which prohibits illicit discharges? *Yes*
  - Name and/or code section(s).
- Exclusions (non-stormwater discharges) allowed:
- Types of enforcement mechanisms available:
  - Notices of Violations (NOV)
  - Administrative fines
  - Stop-work orders
  - Civil penalties
  - Criminal penalties
  - Other:
- Official enforcement escalation plan or procedures in place?

### Dry-Weather Screening

*Interview Questions:*

- Map of MS4 system complete? *Yes*
- Who can access the map and for what purpose? *Access through City*
- Dry-weather field screening used to detect illicit discharges? *Not complete*
- Frequency and extent of field screening (i.e. 30 percent of major outfalls annually):
- Areas for screening prioritized?
  - Criteria used:
    - Land use(s) in watershed
    - Waterbody impairment
    - Spills/Dumping incidents
    - Other:
- Checklist or reporting form utilized?
- Dry-weather flows sampled and analyzed?
  - Parameters:
- Dry-weather screening findings tracked?
  - Database used?
  - Data tracked:

### Investigation of Illicit Discharges

*Interview Questions:*

- Investigation procedure adopted? *Work with Health Department*
- Summary of process used:
- Staff (departments/agencies) utilized: *Health Department*
- Enforcement mechanisms available:
  - Notices of Violations (NOV)
  - Administrative fines
  - Civil penalties
  - Criminal penalties
  - Abatement charges for damage
  - Other: *4 HSTS found. Would like to refer to Ohio EPA*

### Public Awareness & Reporting

*Interview Questions:*

- Spill reporting hotline?
- Complaint tracking database or system? Describe.
- Outreach materials used to educate public about illicit discharges:

## PROGRAM EVALUATION WORKSHEETS

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- Subwatersheds or neighborhoods prioritized for outreach based on complaints or land use?

### Spill Prevention & Response

#### *Interview Questions:*

- Spill response plan or procedures adopted?
  - Who responds? *Fire Department*
- Adequate equipment and training for staff?
- Tracking of spills and response?
  - Database used?

### Used Oil & Toxics Management

#### *Interview Questions:*

- Types of waste managed: *Dry waste through Evergreen landfill recycling center*
  - Household Hazardous Waste
  - Used oil/filters
  - Batteries
  - Thermometers
  - White goods (e.g. refrigerators)
  - E-waste (e.g. computers)
  - Paint
  - Other
- Describe public outreach materials used:

### Sanitary Sewer Discharges

#### *Interview Questions:*

- Sanitary sewer systems evaluated to determine storm sewer cross-connections or overflow locations? *Sanitary sewers owned and operated by Northwestern Water and Sewer District. Inspections done by NWWSD*
- Extent of infiltration and inflow into storm sewer system:
- Sewer spill and cleanup procedures in place?

### Staff Education and Training

#### *Interview Questions:*

- Staff trained to identify illicit discharges?
  - Frequency:
- Materials used to train staff: