



RULE 13 ANNUAL REPORT

State Form 51278 (R / 6-03)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

For questions regarding this form, contact:

IDEM – Rule 13 Coordinator
100 North Senate Avenue, Rm 1255
P.O. Box 6015
Indianapolis, IN 46206-6015
Phone: (317) 234-1601 or
(800) 451-6027, ext. 41601 (within Indiana)

Web Access:

<http://www.in.gov/idem/water/npdes/permits/wetwthr/storm/rule13.html>

NOTE:

- In order to comply with 327 IAC 15-13-18, annual reports must be submitted to the Indiana Department of Environmental Management. **Failure to submit this form will be considered noncompliance with your permit.**
- For the **first five** (5)-year permit term, this completed form must be submitted by 1 year from the SWQMP – Part C submittal date and, thereafter, 1 year from the previous report (i.e., in years two (2) through five (5) of permit coverage).
- In the **second and subsequent** five (5)-year permit terms, this completed form must be submitted in years two (2) and four (4) of permit coverage, by 1 and 3 years from the SWQMP – Part C resubmittal date.
- **Please type or print in ink.**
- Please answer all questions thoroughly and return the form by the due date.
- Return this form and any required addenda to the IDEM Rule 13 Coordinator at the address listed in the box on the upper-right.

REPORTING YEAR (Check one)

- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013

PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Report Completed By: Matthew Kras
(MS4 Operator — i.e., name of permit holder)

2. Permit Number: IN 0073
R

3. Mailing Address
Street Address: 166 Lincolnway

City Of: Valparaiso Zip: 46383 County: Porter
 Town

PART B: GENERAL INFORMATION – CONTACT PERSON

4. Contact Person Name (please print): Matthew Kras

5. Contact Person Title: City of Valparaiso Stormwater Engineer/ MS4 Operator

6. Phone Number: (219) 462-3763

7. Facsimile Number (if applicable): (219) 462-3763

8. E-mail Address (if applicable): kras@netnitco.net

PART C: CONTROL MEASURE ACTIVITIES

9. For the following items, please provide a summary of control measure activities related to Rule 13 performed during the previous year.

List any updated measurable goals from the SWQMP, compliance activities, BMPs installed or initiated, updated programmatic indicator data, and updated or developed regulatory mechanisms with effective dates.

Public Education and Outreach:

The Northwest Indiana Storm Water Public Education and Outreach and Public Involvement and Participation Program, derived from the requirements of the Phase II MS4 permit, focuses on improving urban storm water quality through the implementation of Best Management Practices as required under Indiana's Municipal Separate Storm Sewer System (MS4) Rule 13 Guidance, 327 IAC 15-13.

The NIRPC program is conducted and implemented on a regional scale to provide a coordinate and consistent message for the region and to identify measurable goals that quantify the progress of program implementation and performance. These BMPs and measurable goals will help establish a baseline against which future progress at reducing pollutants to the MEP can be measured.

NIRPC is working with the MS4 Partners to identify specific community needs and to target every population sector in the future. The MS4 Advisory Workgroup will continue to meet on a bi-monthly bases.

MCM-1: Storm Water Quality Management Plan Public Education and Outreach [327 IAC 15-13-12]

327 IAC 15-13-12 (a) (b) (c) Storm water quality management plan public education and outreach MCM

Activity – BMP Completed	Measurable Goal	Schedule – Date Completed
Radio Campaign to promote improvement of storm water quality	NIRPC will produce and air on local radio a 60 second public service announcement on storm water and what actions individuals can do to prevent storm water impacts	May 1, 2005 through October 29, 2005 – Total 18 weeks of 60 second public service and public information spots. Conducted in coordination with the Saturday HHW Community Collections. The radio spots and promotions increased participation by 15% in 2005
Classroom Education on Storm Water	NIRPC will provide curriculum and other educational materials to schools	Project WET Curriculum was used Programs were conducted by: Porter County Parks (22 schools – 31 classrooms) Porter County Solid Waste District – Over 60 classrooms Lake County Solid Waste District – over 200 classrooms Nat. Lk Shore Environmental Learning Center – 18 schools
Teacher Education and Training on Storm Water	Train local educators on storm water and water resource conservation issues	Four (4) teacher training workshops were held: July 2005 at the Douglas Center (10 attended); October 2005 at Porter county Parks (30 attended) National Lake Shore Environmental Learning Center June, 2005 (40 attended) and August 2005 (30 Attended)

MCM-1 Continued...

a. Public Involvement and Participation:

MCM-2: Storm Water Quality Management Plan Public Participation and Involvement [327 IAC 15-13-13]

327 IAC 15-13-13 Storm water quality management plan public participation and involvement MCM

Activity – BMP Completed	Measurable Goal	Schedule – Date Completed
Establish NPDES Public Advisory Work Group	Involve Stakeholders early in the process.	The NIRPC MS4 Advisory Workgroup was established in April 2004 and meets bimonthly. The group has input on activities, training, and program development,
Hold Public Input on proposed NIRPC MS4 program	The number of opportunities for citizens to discuss their view point and have input into the outreach and education Process	The monthly meetings of the NIRPC Environmental Management Policy Committee provided opportunities for public input and comment about the MS4 program September 2004 – October 2005
Develop Community Volunteer Leaders	Increase the number of community volunteer groups	Four (4) MS4 entities organized volunteer groups: City of Gary, City of Hobart, City of Valparaiso, Valparaiso University
Coordinate Meetings	Work with MS4 Communities to coordinate meeting with IDEM, EPA, NIRPC and stakeholders	Two (2) meetings were held in 2004 and two (2) meetings in 2005
Restoration Workshops	Develop or partner with program	Save the Dunes developed ICRAAT a volunteer organization to do restoration projects in the Lake Michigan Basin. Three projects have been completed./

In addition to Valparaiso's contract with NIRPC, the City has created a link for information on the City's Rule 13 program. The information on this site informs the public of what the City is doing to improve water quality.

b. Illicit Discharge Detection and Elimination:

Activity – BMP

The City of Valparaiso's proposed *Illicit Discharge and Connection Stormwater Ordinance* is currently being reviewed and modified by of City Storm Water Engineer/MS4 Operator, Engineering Director, Storm water Management Board, and City Attorney.

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Valparaiso, Indiana through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by storm water discharges by any user
- (2) To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system
- (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance

Measurable Goal

The number of illicit connections disconnected from the City's Storm Sewer System

Schedule for Completion

The *Illicit Discharge and Connection Stormwater Ordinance* will be presented to the City of Valparaiso Common Council for adoption in the first quarter of 2006.

c. Construction Site Storm Water Run-off Control:

Activity – BMP

The City of Valparaiso currently has in place an ordinance for *Erosion Control On Sites With Land Disturbing Activities*. This ordinance provides for the administration, enforcement, and amendment of this ordinance for controlling soil erosion within the City of Valparaiso, Indiana.

The objective of this ordinance is the control of wind borne and/or water borne soil erosion and the resulting sedimentation that is accelerated by land disturbing activities in the City of Valparaiso. Measures taken to control erosion and sedimentation should assure that sediment is not transported to improper locations by wind or water. The intent of this ordinance is to require practices that will control soil erosion and thereby minimize the amount of soil and sediment leaving sites where the vegetative cover has been disturbed. The ordinance applies to land disturbing activities including those associated with agricultural, commercial, industrial, institutional, residential and highway development.

All erosion control measures, including, but not limited to those required to comply with this ordinance, shall meet the design criteria, standards and specifications as adopted by the Board and those listed in the "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS".

An erosion control plan, (the plan) shall be submitted with each application for an Erosion Control Permit. The Board shall have the authority to waive any of the requirements for the plan.

Control of erosion and sediment through the entire duration of the land disturbing activity is the responsibility of the applicant. The following measures shall be utilized where required to provide the necessary control.

1. Runoff from off-site and flowing through the land in question shall be diverted around the land disturbing activity by means of swales, channels, ditches, culverts or storm sewers. The diversion may be a temporary installation, utilized only until the land disturbing activity is complete, or it may be a permanent part of the proposed improvement on the land. Such diversion shall not be such that it causes drainage or erosion problems down stream.
2. Any detention basin proposed for the site should be utilized during construction as a sediment basin to trap as much soil as possible. Such basins shall be designed for this purpose, utilizing over excavation for temporary sediment storage, temporary perforated standpipes and or stone filters as required by proper engineering design.
3. Temporary sediment traps may be required in areas where runoff exits the site and is likely to carry sediment from eroded soils on the site. The temporary traps shall be sized proportionate with the expected flow rate from the site.
4. Ingress and egress to the site shall be by way of coarse stone drive(s) of sufficient length to cause soil picked up by the tires of vehicles to be dropped before the vehicle enters the roadway. Drives shall be designed and situated so that they provide maximum protection against tracking of soil or mud onto the street. For single family and duplex home sites the stone drive should coincide with the final location of the drive to the residence.
5. Drain inlets and entrances to culverts shall be protected with an installation of silt fence.
6. All disturbed ground left inactive for a period of twenty-one (21) days shall be seeded, sodded or stabilized with mulch or equivalent. Between the dates of October 1 and the release of the frost law in the following year, the disturbed ground shall be stabilized with the use of silt fence or approved equivalent.
7. Storage piles of soil left for longer than 3 days shall be completely encircled with silt fence. If left inactive or unused for longer than twenty-one (21) days the pile shall be seeded, sodded, or covered with a mulching fabric or tarpaulins.
8. Stone check dams shall be used in open drainage courses to slow velocities of the runoff and allow sediment to drop out of the runoff.
9. Silt fence shall be installed along the down slope edges of all disturbed areas on the site. In general, silt fence shall be installed at the edges of pavements, adjoining properties and open watercourses whenever the adjacent ground slopes towards that street, adjoining property or watercourse.

All erosion control measures shall be maintained throughout the course of the construction or until the growth of vegetation has made them unnecessary. If silt fence is temporarily removed to allow access to a portion of the site it shall be re-installed at the end of the workday. The applicant is responsible for the maintenance of all erosion control measures.

Measurable Goal

The number of warnings and/or fines levied to applicants of the erosion control permit for construction sites within Valparaiso.

Schedule for Completion

The City of Valparaiso is currently understaffed for doing regular site inspections in accordance with Rule 5. The City is looking at the possibility of hiring a part-time inspector in the spring/summer of 2006. This should allow for regular inspections and enforcement of this ordinance and Rule 5.

d. Postconstruction Storm Water Management in New Development and Redevelopment:

Activity – BMP

The City of Valparaiso is currently looking at updating its *REQUIREMENTS FOR STORM DRAINAGE AND FLOODPLAINS* to include new water quality BMPs including, but not limited to, catch basin/inlets with traps on the outlet pipes and sumps in the bottom, dry bottom detention basins, sediment basins, underground storage, vegetated swales, infiltration trenches, raingardens, filter strips, porous pavement, modular pavement, rooftop storage, rain barrels, green roofs, oil/grit separators, and slope stabilization.

Measurable Goal

The number of new water quality BMPs installed annually.

Schedule for Completion

We would like to have the ordinance in place by the end of 2006.

e. Pollution Prevention and Good Housekeeping for Municipal Operations:

General maintenance activities are done by the City's Public Works and Collections Departments. The Collections Department cleans catchbasins and sewer lines at least once a year. A list is made, by the Collections Department, of priority areas, which are first addressed, with catchbasins and sewer lines of lesser priority following. The Collections Department also works on remediation of outfall scouring.

Activity – BMP

The City of Valparaiso's Public Works Department purchased and constructed a salt storage facility.

Measurable Goal

Completion of the facility

Schedule for Completion

Completed (2005)

Activity – BMP

Physical improvements to Public Works Department regarding water quality

Measurable Goal

Completion of Improvements

Schedule for Completion

Public Works site has begun improvements and is still looking to have renovations completed by 2007

Activity – BMP

The City is currently in the process of removing its municipal refueling station located next to the receiving water, Salt Creek, due to environmental concerns over possible spills and receiving water contamination.

Measurable Goal

Completion of Improvements

Schedule for Completion

2006

Activity – BMP

In addition to Valparaiso's contract with NIRPC, the City has created a link to provide information on the Rule 13 program. The information on this site informs the public of what the City is doing to improve water quality.

Measurable Goal

Number of improvements to the site

Schedule for Completion

Ongoing

10. Provide any data regarding the following programmatic indicators, since the previous annual report (Attach separate sheets as necessary, and indicate, as appropriate, the rationale behind not using a listed indicator):

- i. Number or percentage of citizens that have an awareness of storm water quality issues

Refer to updated measurable goals in MCM 1 and 2 contracted with NIRPC

- ii. Number and description of meetings, training sessions, and events conducted to involve citizens

Refer to updated measurable goals in MCM 1 and 2 contracted with NIRPC

- iii. Number and location of storm drains marked or cast

Storm drain stenciling had taken place on the north end of the City with the Valparaiso Lakes Conservancy District. The City of Valparaiso, at this time, has not continued to do stenciling. The City is rethinking stenciling as a BMP due to insufficient awareness/reduction in goals. Personnel and time constraints are 2 obstacles.

- iv. Estimated linear feet or percentage of MS4 conveyances mapped

The City of Valparaiso has mapped approximately 35% of its MS4 conveyance system

- v. Number and location of MS4 area outfalls mapped

The City of Valparaiso has finished mapping approximately 30% of all outfalls with a 2-foot or greater diameter.

- vi. Number and location of illicit discharges detected

An illicit discharge was reported at Windridge Apts on August 22, 2005. Their parking lots were being sealcoated when a downpour occurred and the sealant leaked off the parking lot in the apartment complexes detention pond and into a neighboring pond.

- vii. Number and location of illicit discharges eliminated

The Windridge Apts illicit discharge was eliminated. Booms were set in place to prevent farther movement of the spill. Severn Trent Laboratories provided analysis of the pond water. Dave Greinke, the Emergency Responder for IDEM, was onsite and noted that nothing more could be done at the time and gave his contact information to me and the Apartment Complex for future quick reference. The spill had occurred on a weekend and coordination and contact info for cleanup was delayed.

All other illicit discharges found by our collections department have been disconnected on an "as found" basis.

A database for illicit discharges is under construction for a future measurable goal.

- viii. Number of, and amount of material collected from, HHW collections

The Valparaiso HHW collection at the Porter County Fairgrounds collected 37,289 total pounds of wastes. The HHW collection is sponsored by the Porter County Solid Waste Department.

- ix. Number and location of citizen drop-off centers for automotive fluids

AutoZone, Jiffy Lube, and WalMart will accept some common car wastes. All of these businesses are located within Valparaiso City limits.

- x. Number of construction sites permitted for storm water quality

All new construction on commercial or industrial sites and all construction sites of 1 acre or more.

- xi. Number of construction sites inspected

Construction sites are currently inspected on an "as needed" basis.

- xii. Number and type of enforcement actions taken against construction site operators

Fines (up to \$50/day) and warnings are issued on construction sites on an "as needed" basis. The City of Valparaiso plans to take over Rule 5 inspections/penalties by December of 2006.

xiii. Number, type, and location of structural BMPs inspected

Candlewood Pond, Fairgrounds Park Basin, Hotter Lagoon, Knode Creek Basin #1, Knode Creek Basin #2, Wall Street Basin, Catch Basins, Roadside Swales.

xiv. Number, type, and location of structural BMPs maintained, or improved

Candlewood Pond, Fairgrounds Park Basin, Hotter Lagoon, Knode Creek Basin #1, Knode Creek Basin #2, Wall Street Basin, Catch Basins, Roadside Swales.

xv. Type and location of nonstructural BMPs utilized

Street sweeping, contracted NIRPC public education/outreach and public participation/involvement, and Valparaiso's erosion control ordinance

These BMPs are utilized throughout the City, and in the case of NIRPC's contract, throughout the tricounty area.

xvi. Estimated acreage or square footage of open space preserved and mapped

Valparaiso has approximately 2.97mi² (24% of total area) as open space.

xvii. Estimated acreage or square footage of mapped pervious and impervious surfaces

The City of Valparaiso currently has approximately 1850 acres of impervious surface and 8189 acres of pervious surface. Approximately 480 impervious acres come from streets and sidewalks and approximately 1,370 acres from roofs/driveways/parking areas. These approximations are based off of the City's aerial photographs and annual road GASB reporting.

xviii. Number and location of retail gasoline outlets or municipal, state, federal, or institutional refueling areas with installed BMPs

The City is currently in the process of removing its municipal refueling station located next to the receiving water, Salt Creek, due to environmental concerns over possible spills and receiving water contamination.

xix. Estimated acreage or square footage and location where pesticides, herbicides and fertilizers are applied by the entity

The City currently applies pesticides, herbicides, and/or fertilizers to some areas within its 17 parks(applied mostly on athletic field areas), Forest Park Golf Course. Approximately 40 acres has pesticides, herbicides, and/or fertilizers applied within our parks, 38 acres on our golf course, and approximately 3 acres of miscellaneous City property. These estimates are based on information provided from our Parks Department.

xx. Estimated linear feet or percentage and location of MS4s cleaned or repaired

The City cleans its stormwater conveyances on an as needed basis. In 2005, the City of Valparaiso cleaned 13,602 linear feet of storm sewer mains, and spent 367.5 hours performing this service. The City spent 229.0 hours maintaining the City's roadside ditches and swales.

xxi. Number and location of storm water outfall areas remediated from scouring conditions

The City of Valparaiso has completed 2 projects this year that have remediated severe scouring conditions in Beauty Creek. These projects were the CLOVER LANE PROJECT and FERNHILL PROJECT.

xxii. Number and location of de-icing salt and sand storage areas covered or otherwise improved to minimize storm water exposure

The City of Valparaiso's Public Works Department purchased and constructed a salt storage facility in 2005. This storage allows the salt and sand mixture the City uses for deicing to be completely covered. Previously salt and sand were stored outside open to the elements.

xxiii. Estimated amount, in tons, of salt and sand used for snow and ice control

The amount of salt and sand purchased for the 2005 year was 5,000 tons of salt and 393.1 tons of sand for snow and ice control.

xxiv. Estimated amount of material collected from catch basin, trash rack, or other structural BMP cleaning

In 2005 the City of Valparaiso's Collections Dept. cleaned approximately 262.5 yd³ of debris from intakes, beehives, and catch basins.

xxv. Estimated amount of material collected from street sweeping

The amount of debris collected from street sweeping in 2005 is approximately 2293.16 tons. This is based on our Public Works Department's monthly documentation.

PART D: MISCELLANEOUS INFORMATION

11. On-Going Water Quality Characterization Activities

a) Monitoring Data (submit summary of appropriate results):

Pollution Tolerance

Index numbers for our biomonitoring in 2005 were as follows:

Site 1 (Sager's) 32

Site 2 (Parker by rte 2 bridge) 39

Site 3 41

Site 4 (at old iron bridge site by Vineyard) 42

Site 5 (downstream of wastewater plant) 21

12. Discuss any problems encountered during this period (include any BMP changes in response to problems encountered).

Insufficient personnel and budgetary constraints are our main obstacles.

13. Identify any non-routine (i.e. do not include routine maintenance or cleaning) budgetary transactions related to your permit. List all storm water improvement projects started during this reporting period.

The City of Valparaiso has purchased/constructed an enclosed salt storage area for deicing salt and sand in response to Rule 13 stormwater quality controls.

The City is currently in the process of removing its municipal refueling station located next to the receiving water, Salt, Creek, due to environmental concerns over possible spills and receiving water contamination.

14. Provide a summary of complaints received and the follow-up actions taken in reference to storm water quality issues.

In early 2005(1st quarter) I received complaints from citizens regarding a sewer project along the City's Westside and sediment from the construction site entering, one of our receiving waters, salt creek. After meeting with representatives from the construction company, and DNR, the proper erosion and sediment control measures were installed and maintained during the project construction timeline.

15. Implementation status:

a. Are the six minimum control measures being implemented within the compliance schedule and SWQMP timetables?

Yes No*

The 6 MCMs are being implemented. However, the City is currently in the process of adopting an Illicit Discharge and Elimination Ordinance, and working towards taking over the Rule 5 erosion control review/inspections. These should be completed by the end of 2006. The City has some BMPs in place for all 6 MCMs, but is not fully complete with all MCMs. The City of Valparaiso has and is continuing to implement programmatic indicators, BMPs, and measurable goals to the 6 MCMs

- b. Do you foresee any problems which may affect full implementation of all the measures?
 Yes No*

However, insufficient personnel and budgetary constraints will probably continue to be our main obstacles

- c. Are the six minimum control measures meeting percent reduction goals specified in the SWQMP?
 Yes No*
* If no, explain:

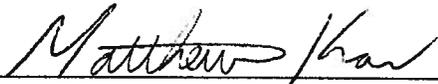
The City's 6 MCMs are new and it is too difficult to determine accurate percent reductions at this time. The City's SWQMP is certainly farther along than it was a year or two ago, but I think it will be many years before we can accurately say that we are noticing significant measurable reductions in stormwater pollution.

PART E: CERTIFICATION AND SIGNATURE

- The individual completing this report, listed in "PART A: GENERAL INFORMATION – MS4 OPERATOR" must sign the following certification statement:

"By signing this Rule 13 annual report, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Type or Print Name: Matthew Kras

Signature: 

Date: 1/31/06
(mm/dd/year)