

**City of Madison, Indiana
Storm Water Quality Management Plan
Permit Year 2 Annual Report**



Permit # INR040061

May 5, 2006



RULE 13 ANNUAL REPORT

State Form 51278 (R2 / 11-03)
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: Honorable Al Huntington, Mayor
(MS4 Operator — i.e., name of permit holder)

2. Permit Number: **INR** 0 4 0 061

3. Mailing Address
Street Address: 101 W. Main St.
Madison, IN 47250
(812) 265-8312

City **Of:** Madison Zip: 47250 County: Jefferson
 Town

PART B: GENERAL INFORMATION – CONTACT PERSON

4. Contact Person Name (please print): Mr. Jim Turner, PE

5. Contact Person Title: Public Works and Utilities Director

6. Phone Number: (812) 265-8326

7. Facsimile Number (if applicable): (812) 273-0575

8. E-mail Address (if applicable): utilitymanager@madison-in.gov

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.

a. Public Education and Outreach:

See Chapter 1. Public Education and Outreach

b. Public Involvement and Participation:

See Chapter 2. Public Involvement and Participation

c. Illicit Discharge Detection and Elimination:

See Chapter 3. Illicit Discharge Detection and Elimination

d. Construction Site Storm Water Run-off Control:

See Chapter 4. Construction Site Run-off Control

e. Post Construction Storm Water Management in New Development and Redevelopment:

See Chapter 5. Post Construction Stormwater Management

f. Pollution Prevention and Good Housekeeping for Municipal Operations:

See Chapter 6. Pollution Prevention and Good Housekeeping

g. Other controls:

None.

10. List all receiving water(s) and corresponding outfall(s) not submitted in the original NOI letter (form):

None.

11. 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 stormwater quality issues:
Madison Consolidated High School Environmental Club – Twenty-five (25) students actively participated in water quality education activities. One hundred and twenty-five (125) students from Jefferson County public schools were reached through five (5) classroom presentations in Spring 2006.
ii. Number and description of meetings, training sessions, and events conducted to involve citizens:
The Jefferson County Soil and Water Conservation District lead and facilitated Project WET training sessions. Madison Consolidated High School Environmental Club was lead by a teacher who has completed Project WET training. Activities included: <ul style="list-style-type: none"> - Water quality monitoring and habitat assessment at Johnson Lake - Participation in Lake Sweep at Hardy Lake - Training Boys Scouts on water quality monitoring - Travel to Yellowstone to learn about water quality in the area as a result of wolf reintroduction - Participation in Envirothon competition
iii. Number or percentage of citizens that participate in stormwater quality improvement projects:
<ul style="list-style-type: none"> - Two local members of the non-profit organization Girls Incorporated were trained on the Project WET curriculum - Approximately 125 students from Jefferson County public schools were reached through five (5) classroom presentations in Spring 2006 - Ninety-two (92) volunteers participated in the Ohio River Sweep event in 2005. Volunteers met at the Regatta Judge's Stand and cleaned 2 to 3 miles up and down the river bank sponsored by ORSANCO - Six (6) summer interns at the Indiana-Kentucky Electric Corporation participated in a river sweep by the plant and cleaned approximately 2 miles of the river bank
iv. Number and location of storm drains marked:
Fifty (50) storm drains in the downtown area of the City have been labeled.
v. Estimated or actual linear feet or percentage of MS4 conveyances mapped:
To date, 126.9 miles of MS4 conveyances have been mapped.
vi. Number and location of MS4 area outfalls mapped:
To date, six (6) MS4 outfalls have been mapped.
vii. Number and location of MS4 area outfalls screened for illicit discharges:
None to date. The screening program will be implemented in PY 03 in conjunction with outfall mapping.
viii. Number and location of illicit discharges detected:
Three (3) illicit discharge connections have been detected.
ix. Number and location of illicit discharges eliminated:
None to date. Property owners have been notified and work is underway to eliminate the illicit discharges.
x. Number of, and estimated amount of material collected from, HHW collections:
One (1) household hazardous waste (HHW) collection site at the Jefferson Proving Grounds in Jefferson County serves 6 surrounding counties (Franklin, Ripley, Scott, Switzerland, Ohio, Jefferson, Jennings).
xi. Number and location of citizen drop-off centers for automotive fluids:
Automotive fluids are accepted at Jefferson Proving Ground – Southeastern Indiana Solid Waste Management District (SISWMD) Recycling Center located at 6556 N. Shun Pike Rd in Madison and Jefferson County Highway Garage located at 1315 Clifty Dr in Madison, IN. Several private retailers also accept automotive fluids.
xii. Number or percentage of citizens that participate in HHW collections:
According to the SISWMD, approximately 300 citizens participated in HHW collections. Since the SISWMD serves 6 counties, it is not clear how many were from the City of Madison.
xiii. Number of construction sites permitted for stormwater quality:
None to date. The City of Madison's Construction Site Runoff Control program is on schedule to be established via Ordinance by September 30, 2006, per compliance with IDEM.
xiv. Number of construction sites inspected:
None to date. The City of Madison's Construction Site Runoff Control program is on schedule to be established via Ordinance by September 30, 2006, per compliance with IDEM.
xv. Number and type of enforcement actions taken against construction site operators:
None to date. The City of Madison's Construction Site Runoff Control program is on schedule to be established via Ordinance by September 30, 2006, per compliance with IDEM.
xvi. Number of public informational requests received related to construction sites:
None through the City; the Jefferson County Soil and Water Conservation District started logging calls in January 2006 for Rule 5 and has received about 40 calls through April 17, 2006. Calls related to City construction projects were not tracked.
xvii. Number, type, and location of structural BMPs installed:
The City owns two (2) retention ponds, (a pond at the City's golf course (2) and a lake in Johnson Lake Park) which were installed prior to the PY 02 reporting period.

xviii. Number, type, and location of structural BMPs inspected:
The two City-owned retention ponds (at the City's golf course and a lake in Johnson Lake Park) were inspected in 2006.
xix. Number, type, and location of structural BMPs maintained, or improved, to function properly:
The ponds at the City's golf course and the small lake at a City park were functioning properly during PY 02 and no maintenance was required or performed.
xx. Type and location of non-structural stormwater quality BMPs utilized:
The City of Madison's Post-Construction Stormwater Management Program is anticipated to be established via Ordinance within 3 months of publication of the Indiana Stormwater Quality Manual, or by December 31, 2006, whichever ever occurs first.
xxi. Estimated acreage or square footage of open space preserved and mapped:
Approximately 150 acres of open space and parks were available within the City of Madison.
xxii. Estimated acreage or square footage of mapped pervious and impervious surfaces:
Data were not available.
xxiii. Number and location of retail gasoline outlets or municipal, state, federal, or institutional refueling areas with installed BMPs:
At the City Garage, all bulk storage materials (oil and antifreeze) are located in a containment facility. Gas & Diesel underground storage tanks (USTs) are registered through IDEM and feature modern leak detection equipment.
xxiv. Number and location of entity facilities that have containment for accidental releases:
All bulk storage materials (oil and antifreeze) at City garage were located in a containment facility; gas and diesel UST's were registered through IDEM and feature modern leak monitoring equipment.
xxv. Estimated acreage or square footage and location where pesticides and fertilizers are applied by the regulated MS4 entity:
Approximately 125 acres throughout the City were treated as needed with fertilizer and pesticides (golf course; Rucker sports complex; Lamplighter Park; Broadway Street medians, pesticides in downtown streets / curb areas).
xxvi. Estimated linear feet or percentage and location of unvegetated swales and ditches that have an appropriately-sized vegetated filter strip:
The golf course featured buffer zones between 10-ft and 80-ft wide along all creeks and ditches.
xxvii. Estimated linear feet or percentage and location of MS4 conveyances cleaned or repaired:
Approximately 500 feet of MS4 conveyances were cleaned in PY02.
xxviii. Estimated linear feet or percentage and location of roadside shoulders and ditches stabilized:
Between 500 and 2,000 ft of ditch/swale work was performed in PY02.
xxix. Number and location of stormwater outfall areas remediated from scouring conditions:
None in PY 02.
xxx. Number and location of de-icing salt and sand storage areas covered or otherwise improved to minimize stormwater exposure:
All salt was stored in a 225 ton capacity covered building at the City Garage located at 1215 Walnut St, Madison, IN 47250.
xxxi. Estimated amount, in tons, of salt and sand used for snow and ice control:
In 2005, an estimated 635 tons of salt was purchased for snow and ice control. In 2006, (through April) an estimated 250 tons of salt was purchased for snow and ice control.
xxxii. Estimated amount of material by weight collected from catch basin, trash rack, or other structural BMP cleaning:
Between 50 and 75 cubic yards of material were removed from the City MS4; work took 10-15 days; on average, 20 inlets were cleaned per day.
xxxiii. Estimated amount of material by weight collected from street sweeping:
Street sweeping was conducted during April-November. Each street was swept approximately once weekly. An estimated 100 cubic yards of material was collected in PY 02.
xxxiv. Number or percentage and location of canine parks sited at least 150 feet away from a surface water body:
There are no canine parks located in the City

PART D: MISCELLANEOUS INFORMATION

12. On-Going Water Quality Characterization Activities

The City of Madison conducted a bioassessment study to obtain water quality data for the watersheds involved in the stormwater program. The initial testing of the MS4's waterways was completed to develop a baseline characterization which was reported in the City's Part B submission. The goal of the monitoring program was to develop an assessment of structural and non-structural BMPs along with maintaining BMPs currently used, to reduce pollution in these waterways. The next bioassessment study will be conducted during the third quarter of 2008.

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

None.

14. Identify any new funding source(s) for implementing this permit.

None.

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

None.

16. Provide a summary of complaints received and the follow-up actions taken in reference to stormwater quality issues.

None.

17. Implementation status:

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

Yes No*

* If no, explain:

b. Do you foresee any problems which may affect full implementation of all the measures?

Yes No*

* If yes, explain:

c. Are the six minimum control measures meeting percent reduction goals specified in the SWQMP?

Yes No*

* If no, explain:

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 are 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: Honorable Al Huntington, Mayor

Signature: _____

Date: _____
(mm/dd/year)

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ACKNOWLEDGEMENTS

The following individuals and organizations have participated in the development of the City of Madison's Storm Water Quality Management Plan and Annual Report:

Mayor

Al Huntington

City Council

Bob Schoenstein

Bob May

Mary K. Dwyer

Jim Lee

Don Joslin

David Adams

David Carlow

Board of Public Works and Safety

Al Huntington

Robert Barlow

Jim Lee

Public Works and Utilities Director

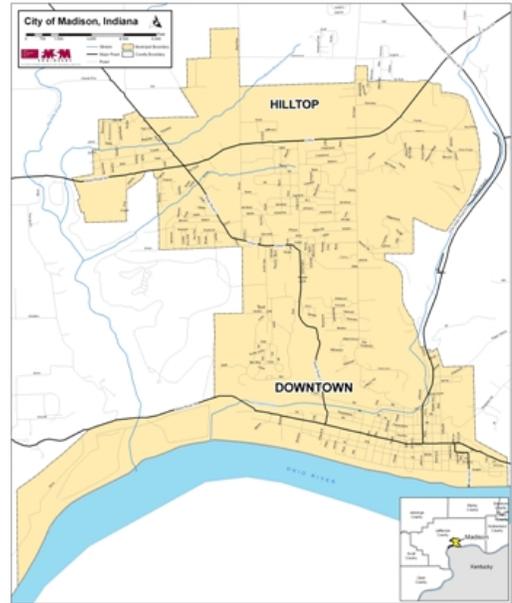
Jim Turner, PE

INTRODUCTION

This report summarizes the City of Madison, Indiana's efforts to implement its Storm Water Quality Management Plan (SWQMP) from May 1, 2005 through April 30, 2006 (Permit Year 02). During the Permit Year (PY), the City of Madison implemented the required components of the SWQMP as described herein.

The City of Madison is located in Jefferson County in southeastern Indiana along the north shore of the Ohio River, approximately 50 miles east Louisville and 75 miles west of Cincinnati. The area along the City's riverfront consists of approximately 1,500 historic residential, commercial and industrial structures. In this area, the Ohio River continues to serve as a major commerce route. The City of Madison and Jefferson County offer many opportunities for economic development, culture, and recreation. The population of Madison is 12,004 (2000 census) and has remained stable since 1990. According to the US Census Bureau, there are 5,597 households and 1,402 persons per square mile in the City of Madison.

For the purposes of this report, the City of Madison's MS4 area refers to the entirety of the City's corporate boundary as illustrated in **Figure 1. Madison, Indiana MS4 Area Map**. IDEM requested a boundary map of the City of Madison was made in the Notice of Sufficiency (NOS) letter dated August 1, 2005. See **Introduction Appendix 1. Notice of Sufficiency Letter**.



The detailed corporate boundary map of the City of Madison is provided in **Introduction Appendix 2. Figure 1. Madison, Indiana MS4 Area Map Corporate Boundary Map of the City of Madison**.

Partnership with Hanover College

The City of Madison has partnered with the Rivers Institute at Hanover College to share resources for the implementation of the Storm Water Quality Management Program (SWQMP). The Rivers Institute will assist the City of Madison with key tasks including the development and analysis of the Residential Public Survey, the development of the Stormwater Quality Webpage, assistance with MS4 system mapping, and dry-weather outfall screening.

CSO Program Consistency

The City of Madison operates a combined sewer collection system. A revised LTCP was submitted to IDEM in March 2006 and regulatory review of this document is ongoing. In accordance with the Phase II requirements, the City has reviewed the current draft LTCP and Phase II commitments. Based upon this review, the CSO and Phase II programs are consistent and are not resulting in duplication efforts. A final comparison will be made once the LTCP is finalized.

Chapter 1: Public Education and Outreach

The success of the Stormwater Quality Management Program depends on securing the support of elected officials, municipal employees, regulated entities and citizens, i.e., stakeholders. To secure this support, the City is implementing a public education and outreach program on stormwater quality issues.

This chapter outlines the steps taken by the City of Madison during PY 02 to implement MCM 1. The City has initiated practical efforts to educate stakeholders within our MS4 and to provide opportunities and mechanisms for them to participate in the program.

- 1.1 **Residential Public Survey:** A survey will be developed and issued to assess the understanding and perception of stormwater quality issues among the City's residents. An initial survey will be completed by the first quarter of 2006. A follow-up survey will be conducted in the fourth quarter of 2007. Results will be used to tailor and improve the effectiveness of the outreach efforts

Measurable Goals: Initial survey completed by first quarter of 2006. Number and percentage of completed surveys, number and percentage of respondents with knowledge of stormwater programs.

Permit Year 02 Progress Report

The City of Madison recently initiated a partnership with the Rivers Institute of Hanover College to develop and analyze the results of the survey. The survey will be performed by a student intern hired through the Rivers Institute. The intern will work under the guidance of a professor with expertise in developing unbiased surveys and statistical analysis of survey data. Through this project, the survey would be mailed no later than August 31 and the results would be analyzed by the end of 2006. A follow up survey will be conducted in this permit term to assess changes in knowledge and attitude.

During this reporting period, Madison did not meet its schedule for developing the survey by March 31, 2006 as described in the Part C Submittal. However, the City of Madison fully plans to move forward with the survey and will report on its results in next year's annual report.

- 1.2 **Stormwater Quality Web Page:** The City of Madison will develop a web page accessible from the City's homepage to communicate the goals and objectives of the stormwater program. The web page will provide information on stormwater activities and dates and solicit feedback on the program.

Measurable Goals: The webpage will be developed by the first quarter of 2006. The City will track and report upon the number of stormwater quality forms posted, the number of emails received, the number of times the web page is updated and number of web hits.

Permit Year 02 Progress Report

The City of Madison recently initiated a partnership with the Rivers Institute of Hanover College that will involve the development of content for a storm water web page. As with the survey, this work will be performed by an intern to be hired through the Rivers

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Institute. Under this project, the content would be prepared by August 31, 2006 with the web page being activated by September 30, 2006. The storm water web page will be a featured link at the existing City of Madison web page (www.madison-in.gov).

If the intern project does not proceed as hoped, Madison will develop the content and activate this web page by September 30, 2006. The City has retained the services of Fuller, Mossbarger, Scott, and May Engineers, Inc. (FMSM) to assist with this task.

During this reporting period, Madison did not meet its schedule of developing the web page by March 31, 2006 as described in the Part C Submittal. However, the City fully plans to move forward with the web page development and will report on that task in the PY 03 annual report.

- 1.3 **Printed Flyers or Pamphlets:** The City of Madison will use printed flyers and pamphlets to communicate the goals and objectives of the program and generate interest for public participation. Printed materials will be distributed to public libraries, at the utility office and at local businesses.

Measurable Goals: Distribute printed materials through public libraries, the utility office and local businesses by December 2005. The City will track and report upon the number of printed materials, distribution locations, number of printed materials distributed. The per capita distribution will be calculated.

Permit Year 02 Progress Report

The City of Madison has retained the services of Fuller, Mossbarger, Scott, and May Engineers, Inc. (FMSM) to assist with the development and printing of a storm water flyer. These flyers will be available for distribution by September 30, 2006. They will be displayed at different City locations (City Hall, Public Library, etc.) and will be distributed through the annual school presentations (see **Section 2.2**).

During this reporting period, Madison did not meet its schedule of developing printed materials by December 31, 2005 as described in the Part C Submittal. However, the City fully plans to move forward with the storm water flyer and will report on this task in the PY 03 annual report. Draft materials are provided in Appendix 1.1.

- 1.4 **Newsletter / Newspaper Article:** The City initially committed to developing a newsletter that would be mailed to each utility customer twice each year in the Part C Submittal. The City requested that the newsletter BMP be eliminated and replaced with a BMP to publish three (3) newspaper articles during this permit term.

Measurable Goals: The City will report on the date and circulation of the newspaper in which the stormwater articles are published.

Permit Year 02 Progress Report

Per the City's November 29, 2005 letter to Cynthia Wagner, Madison requested to eliminate the newsletter mailing BMP. It has been replaced with a newspaper article BMP. See **Appendix 1.2 Letter to IDEM Requesting Part C Changes**. Per that letter,

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the City's will work with the local newspaper, The Madison Courier, to publish three (3) articles during the first 5-year permit cycle.

Since a written response to the 11/29/2005 letter has not been received from IDEM, the City has proceeded on the assumption that the proposed changes are acceptable. Therefore, Madison is currently on schedule with the newspaper article BMP.

- 1.5 **Educational Displays:** The City of Madison will develop an educational display to communicate the goals and objectives of the program to targeted audiences and to generate interest for public participation.

Measurable Goals: The City of Madison will develop the educational display during the first quarter of 2006 and will document and report upon the date and location of the event and estimate the number of MS4 constituencies reached during the event.

Permit Year 02 Progress Report

The City of Madison has retained the services of Fuller, Mossbarger, Scott, and May Engineers, Inc. (FMSM) to assist with the development of an educational display. The display is being developed to reach a wide range of audiences, from school children and lay people to knowledgeable professionals. This display will be completed and available for presentation by September 30, 2006.

During this reporting period, Madison did not meet its schedule of developing the display. However, the City fully plans to move forward with the development of a display and will report on this task in the PY 03 annual report.

- 1.6 **CSO Program Consistency:** A revised LTCP was submitted to IDEM in March 2006 and regulatory review of this document is ongoing. In accordance with the Phase II requirements, the City has reviewed the current draft LTCP and Phase II commitments. Based upon this review, the CSO and Phase II programs are consistent and are not resulting in duplication efforts.

Chapter 2: Public Participation and Involvement

This chapter outlines the approach by the City of Madison to facilitate and encourage participation by elected officials, municipal employees, regulated entities and citizens within the City in the development and implementation of the SWQMP. The PY 02 efforts of the City to promote public participation and involvement are discussed below.

- 2.1 **Public Presentations:** The City of Madison will use public presentations about stormwater quality programs to communicate the goals and objectives of the program to elected officials, municipal employees, regulated entities and citizens. In the Part C Submittal, the City initially committed to make presentations to community groups. On November 29, 2005, the City requested that this commitment be changed to two (2) presentations to the Madison City Council or Board of Works over the permit term. The City remains committed to provide presentations to community groups as requested.

Measurable Goals: Deliver 1 presentation by the 2nd quarter of 2006 and a second presentation at the end of the permit term.

Permit Year 02 Progress Report

Per the City's November 29, 2005 letter to Cynthia Wagner, Madison requested a change to the original public presentation BMP that was described in Madison's Part C Submittal. See **Appendix 1.2. Letter to IDEM Requesting Part C Changes**. Since a written response to the 11/29/2005 letter has not been received from IDEM, the City has proceeded on the assumption that the proposed changes are acceptable.

The City's current commitment is to provide a minimum of two (2) presentations during the first 5-year permit cycle. A presentation is proposed to be delivered at a Madison City Council / Board of Works meeting no later than June 30, 2006. The presentation will be aired on public access TV. Therefore, Madison is currently on schedule with the public presentation BMP.

- 2.2 **Children's Education Programs:** The City of Madison will use the Children's Education Program to educate children about stormwater. The City has chosen to focus this program on fifth grade classes at three elementary schools located within the City of Madison (M.W. Anderson, Eggleston and E.O. Muncie).

Measurable Goals: Make one (1) presentation annually to each of seven fifth grade classes serving approximately 170 students.

Permit Year 02 Progress Report

Per the City's November 29, 2005 letter to Cynthia Wagner, Madison requested a change to the original children's education BMP that was described in Madison's Part C Submittal. See **Appendix 1.2. Letter to IDEM Requesting Part C Changes**.

Since a written response to the 11/29/2005 letter has not been received from IDEM, the City has proceeded on the assumption that the proposed changes are acceptable. Therefore, Madison is currently on schedule with the children's education BMP.

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As of May 5, presentations have been made to 5 classes, reaching approximately 125 students. Those presentations took place on April 6 and 21 (E.O. Muncie Elementary) and April 19 (Eggleston Elementary). A sixth presentation has been scheduled for May 22 (M.W. Anderson Elementary). Presentation slides are included in **Appendix 2.1 Children's Education Presentation**

The Jefferson County Soil and Water Conservation District provides and facilitates *Project WET (Water Education for Teachers)* training sessions. The *Project WET* curriculum includes science-based interdisciplinary activities and lesson plans. Two (2) members of the non-profit organization Girls Incorporated have participated in *Project WET* training sessions. Twenty five (25) high school level students were provided with water quality education using the *Project WET* curriculum at Madison Consolidated High School. These students were members of the school's Environmental Club and were under the guidance of a teacher who participated in the *Project WET* training sessions. In 2005, students participated in activities such as water quality monitoring and habitat assessment at Johnson Lake, litter pick-up at Hardy Lake, and the State Envirothon competition. The students also taught Boy Scouts how to conduct water quality monitoring.

- 2.3 **Household Hazardous Waste and Used Oil Disposal Programs:** By providing citizens with a safe and appropriate way to dispose of their household hazardous waste (HHW), dumping (i.e., illicit discharges) to storm drains are anticipated to be reduced.

Measurable Goals: The City of Madison will compile and report HHW data from the Southeastern Indiana Solid Waste District (SISWD) and distribute information to encourage citizen participation in the program.

Permit Year 02 Progress Report

Household hazardous waste (HHW) collection and disposal in the City of Madison was performed through the Southeastern Indiana Solid Waste District (SISWD). Their main collection facility is located approximately 3 miles north of Madison on the former Jefferson Proving Grounds military property. They also operated a separate automotive fluid collection facility at the Jefferson County Highway Garage which is located approximately 2 miles west of Madison.

To help publicize their services, Madison's storm water web page (under development) will include a link to the SISWD web-site (www.siswd.com).

During this reporting period, Madison has met its measurable goals for the HHW program BMP.

- 2.4 **Storm Drain Labeling Program:** The City of Madison will use the storm drain labeling program to communicate to the general public that storm drain pollutants are discharged directly to the river.

Measurable Goals: Mark a minimum of fifty (50) city owned storm sewer inlets per year.

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Permit Year 02 Progress Report

Per the City's November 29, 2005 letter to Cynthia Wagner, the City of Madison requested a revision to the measurable goal for the storm drain labeling to mark at least 50 drains annually. Therefore, a minimum of 250 drains will be marked by the end of the first 5-year permit cycle. See **Appendix 1.2. Letter to IDEM Requesting Part C Changes.**

Fifty (50) storm drains were labeled with stormwater decals in the downtown area. See **Appendix 2.2 Storm Drain Labeling.** As part of the storm sewer mapping BMP, marked drains will be identified on the map. That work is currently underway and results will be shown on the 50% complete map to be included in the PY 03 annual report.

Since a written response to the 11/29/2005 letter has not been received from IDEM, the City has proceeded on the assumption that the proposed plans changes are acceptable. Therefore, Madison is currently on schedule with the storm drain labeling BMP.

- 2.5 **CSO Program Consistency:** A revised LTCP was submitted to IDEM in March 2006 and regulatory review of this document is ongoing. In accordance with the Phase II requirements, the City has reviewed the current draft LTCP and Phase II commitments. Based upon this review, the CSO and Phase II programs are consistent and are not resulting in duplication efforts.

Chapter 3: Illicit Discharge Detection and Elimination

This chapter outlines the approach by the City of Madison to identify and eliminate illicit connections and discharges to the City's MS4. This approach includes measurable goals and timelines for mapping the stormwater drainage system, prohibiting illicit discharges, identifying problem areas via dry weather screening, and eliminating any illicit discharges that are found.

- 3.1 **Storm Sewer Mapping:** The City of Madison will map the storm sewer system, including outfalls and conveyances required via 327 IAC 15-13-14. The map will assist with locating outfalls, conveyances and areas of illicit discharge concerns.

Measurable Goals: Mapping will be conducted to achieve 25% of the system mapping, per year, for years 2-5 of the permit term.

Permit Year 02 Progress Report

The City of Madison met its measurable goal for storm sewer mapping by preparing a 25% complete storm sewer map. A hard-copy of this map is included in **Appendix 3.1. Summary of Permit Year 02 MS4 System Mapping.** This map includes a total of 93.7 miles of open channels and streams and 33.2 miles of sewer pipe and 437 manholes. It should be noted that Madison is a designated CSO community and that the pipe conveyances shown on the map represent combined sanitary / storm sewers.

- 3.2 **Illicit Discharge Ordinance:** The City of Madison will develop an Illicit Discharge Detection and Elimination Ordinance specifying allowable and prohibited flows or discharges to the storm drain system. This ordinance will establish a regulatory mechanism to issue fines and penalties to those responsible for illicit discharges.

Measurable Goals: Adopt an Illicit Discharge Detection and Elimination Ordinance and submit the Program Certification form by September 30, 2006.

Permit Year 02 Progress Report

Per the City's March 28, 2006 letter to Cynthia Wagner, the City of Madison requested to extend the deadline to adopt an illicit discharge ordinance by September 30, 2006. That request was granted, and the City fully expects to meet that deadline. See **Appendix 3.2 Ordinance Extension Correspondence.** To date, the City developed a draft ordinance in April 2006.

Despite the lack of an illicit discharge ordinance, progress has been made toward the identification and elimination of illicit connections to the storm system. In 2006, Madison's Sewer Department staff identified three (3) potential illicit discharge connections. Sanitary sewage was being discharged to the MS4 system and conveyed to an outfall on Crooked Creek. Each of those property owners was notified that their sanitary sewer services violated an existing City sewer ordinance; work is currently underway to resolve these problems. See **Appendix 3.3 Illicit Discharge Warning Letters.**

- 3.3 **Field Assessments:** The City of Madison will establish and implement an ongoing program for field assessments. The purpose of the program is to detect and eliminate

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illegal discharges and connections to the storm sewer system. Field assessments include outfall and manhole inspections and site inspections to track flows back to potential discharges.

Measurable Goals: Initiate the field assessment program in the 2nd quarter of 2007. Number and percentage of linear feet of storm sewer pipes inspected and number of illicit sources detected and eliminated.

Permit Year 02 Progress Report

The City has met its measurable goal for Field Assessments. Madison's original Part C Submittal called for field assessment work to begin in the second quarter of 2007. The City's current plan is to conduct dry-weather outfall screening in conjunction with the outfall mapping component of the storm sewer mapping BMP. Outfall screening will be based on visual observations. Television inspection equipment for checking storm sewer pipes is available from the Sewer Department, if necessary.

- 3.4 **Public Employee Education:** The City of Madison requested the addition of a Public Employee Education BMP to the Illicit Discharge Detection and Elimination BMP category in the November 29, 2005 letter to Cynthia Wagner. See **Appendix 1.2. Letter to IDEM Requesting Part C Changes.**

Measurable Goals: The City of Madison will conduct three (3) presentations during the first 5-year permit cycle.

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As described in the letter, the City plans to conduct three (3) training sessions to raise the awareness of the hazards associated with illicit discharge and improper disposal of waste. Training will be attended by at least one staff member from the Street, Water, Sewer, Wastewater Treatment Plant, and Park Departments. The first training session is scheduled to be performed by the end of 2006. Given that the City's requested plan change was accepted, Madison is currently on schedule with the Public Employee Training BMP.

- 3.5 **CSO Program Consistency:** A revised LTCP was submitted to IDEM in March 2006 and regulatory review of this document is ongoing. In accordance with the Phase II requirements, the City has reviewed the current draft LTCP and Phase II commitments. Based upon this review, the CSO and Phase II programs are consistent and are not resulting in duplication efforts.

Chapter 4: Construction Site Stormwater Runoff Controls

This chapter outlines the approach by the City of Madison to develop and implement an erosion prevention and sediment control (EPSC) program within the City's MS4 area. This program includes measurable goals and timelines for establishing the regulatory authority to review EPSC plan submittals, issue permits, conduct field inspections and enforce an EPSC program.

- 4.1 **Construction Site Runoff Ordinance:** The City of Madison will develop and adopt an ordinance to control polluted runoff from construction activities that disturb a land area of one (1) acre or more, or disturbances of less than one (1) acre that are part of a larger development that will ultimately disturb one (1) acre or more.

Measurable Goals: Adopt Construction Site Runoff Ordinance and submit the Program Certification form by September 30, 2006.

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Per the City's March 28, 2006 letter to Cynthia Wagner, the City of Madison requested to extend the deadline to adopt the construction site runoff ordinance in September 30, 2006. See **Appendix 3.2 Ordinance Extension Correspondence**. That request was granted, and the City fully expects to meet that deadline. Therefore, Madison is currently on schedule with the construction site runoff ordinance BMP. Upon adoption, the City will submit the Program Certification form verifying mechanisms to implement the program and staff to carry out the required objectives.

As per the City's November 29, 2005 letter to Cynthia Wagner, the City will request input from the Jefferson County Soil and Water Conservation District (SWCD) during the Ordinance adoption process. Once the City has the regulatory authority to implement the program the City will work with the Jefferson County SWCD on as needed basis.

- 4.2 **Information Submitted by the Public:** The City of Madison will develop procedures to receive, consider and track public inquiries, concerns, and information regarding local construction activities. The City is required to acknowledge and consider public information submittals but follow-up, response, or enforcement actions are not required.

Measurable Goals: A system to track public inquiries, concerns and information is in place.

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Currently, public inquiries are tracked through the Water and Sewer Department. To date, no calls have been received. The Jefferson County Soil and Water began tracking calls in January 2006. Between January and April 17, approximately 40 calls were received on Rule 5 issues (county-wide jurisdiction). It is not clear how many calls pertained to City projects.

The City plans to activate a stormwater web page by September 30, 2006. The web page will provide another avenue for citizens to submit inquiries and information regarding local construction activities.

Chapter 5: Post-Construction Stormwater Management

This chapter outlines the approach by the City of Madison to develop and implement a program to address discharges of post-construction stormwater runoff from new and redevelopment projects disturbing one or more acres of land within the City of Madison's MS4 area. This approach includes measurable goals and timelines for establishing the regulatory authority to enforce a post-construction stormwater management program, reviewing SWPPP plan submittals, issuing permits, enforcing BMP operation and maintenance requirements and conducting field inspections ensure compliance with the program.

- 5.1 **Post-Construction Stormwater Management Ordinance:** The City of Madison will adopt a Post-Construction Stormwater Management Ordinance. The Ordinance will include the minimum post-construction requirements of 327 IAC 15-5-6.5 (a)(8) for all projects disturbing one or more acres of land within the City or disturbances of less than one (1) acre that are part of a larger development that will ultimately disturb one (1) acre or more.

Measurable Goals: The City of Madison will adopt the Post-Construction Stormwater Management Ordinance and submit the Program Certification form three (3) months after the publication of the *Indiana Stormwater Quality Manual* or December 31, 2006, whichever occurs first.

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Per the City's March 28, 2006 letter to Cynthia Wagner, the City requested to extend the deadline to adopt a post-construction runoff ordinance. Per IDEM's March 31, 2006 letter to Mayor Al Huntington, IDEM granted the extension and required the City to adopt the Post-Construction ordinance within three (3) months following the publication of the *Indiana Stormwater Quality Manual* or by December 31, 2006, whichever occurs first. The City fully expects to meet that deadline. See **Appendix 3.2 Ordinance Extension Correspondence**.

Given that the City's requested plan change was accepted, Madison is currently on schedule with the Post-Construction Runoff Ordinance BMP.

The City will review existing post-construction runoff control ordinances of comparable Indiana Rule 13 communities and will require use of the published manual.

Chapter 6: Municipal Operations Pollution Prevention and Good Housekeeping

This chapter outlines the approach by the City of Madison to develop and implement a program to prevent or reduce pollutant runoff from municipal operations. This approach includes documenting maintenance activities and schedules, implementing pollution controls in operational areas, developing procedures for proper waste management, and employee training. The City of Madison has historically been proactive in the area of maintenance activities that reduce pollutants which could be discharged to the MS4.

- 6.1 **Street Sweeping and Cleaning:** The City of Madison will provide street sweeping services to reduce pollutants in stormwater runoff by removing residuals, debris and litter from roads, streets and parking areas.

Measurable Goals: Operate a continuous program from April through November and report upon the number of times each street is swept and tons of debris collected.

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The Madison Street Department owns and operates a Vac-All street sweeper. The City's street sweeping program involved the weekly sweeping of all downtown streets (approximately 55 miles) for the period of April through November, an estimated 100 cubic yards of solids were collected from these streets. Street sweeping was not typically performed in Madison's hilltop area because most of those streets drain to roadside swales, so the benefits of a street sweeping program would be less substantial. See **Appendix 4.1 Street Sweeper**.

Madison has met its measurable goal for the street sweeping BMP during this reporting period.

- 6.2 **Sidewalks, Plazas, and Parking Lot Cleaning:** The City of Madison will implement good housekeeping practices to decrease pollutants on sidewalks, plazas and parking lots associated with litter and vehicle use. The Public Works and Utilities Director will work with the City Council to coordinate this program. This program is already underway.

Measurable Goals: Number of litter receptacles placed and maintained by the City, the area swept and the amount of debris collected through the program.

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The City routinely swept one city-owned parking lot (approximately 0.9 acres) located along Vaughn Drive between Poplar Street and Central Avenue. The volume of material cleaned from this lot was estimated to be less than 1 cubic yard. Downtown sidewalks in Madison were swept using the City's Tennant sidewalk sweeper. The frequency of sidewalk sweeping was largely dependent on the schedule of the various festivals that took place in Madison from May through September, and typically occurred once weekly. The sidewalk cleaning areas included Main Street, Broadway Street, and Vaughn Drive. See **Appendix 4.1 Street Sweeper**. The City maintained 45 trash receptacles on Main Street and 22 on Vaughn Drive, which runs along the riverfront.

Madison has met its measurable goal for this BMP during this reporting period.

- 6.3 **Street Medians, Parks and Other Municipal Landscaped Areas:** The City of Madison will operate maintenance programs for street medians, parks and other municipal landscaped areas. These programs reduce pollutants in stormwater runoff by minimizing erosion and pollutants from fertilizers and pesticides. The utility manager will work with the City Parks and Recreation Department to coordinate this program.

Measurable Goals: The City of Madison will track and report on the certified pesticide applicators employed and the number of training sessions conducted for city employees on this program.

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The City of Madison employs three people who hold Certified Pesticide Applicators Licenses, two in the Parks Department and one in the Streets Department.

The Parks Department was responsible for fertilizer and pesticide applications on the City's golf course. Applications were done under the supervision of the Golf Course Superintendent, who holds an agronomy degree from Purdue University. Fertilizer applications were made in conjunction with soil testing to prevent their over-use. The golf course also features buffer zones between 10-ft and 80-ft wide along all creeks and ditches. At the Rucker Sports complex and street medians, fertilizers were applied by an outside contractor.

The Parks and Streets Departments shared responsibility for fertilizer and pesticide applications to street right-of-way and median areas.

Given that all of the pesticides and fertilizers used on City property were applied by licensed and trained personnel, Madison has met this measurable goal during this reporting period.

- 6.4 **Stormwater Drain System Cleaning:** The City of Madison is responsible for maintaining a stormwater conveyance system including underground stormwater conveyance piping, curb and gutter roadways, and side ditches and swales with a bottom width of two feet or more. In addition, the City cleans and maintains a large number of catch basins.

Measurable Goals: Develop and implement the storm drain system (MS4) cleaning by the first quarter of 2006. Track and report upon the number of inlets, basins and pipes inspected and the pounds of debris collected annually.

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The City's Vac-All street sweeper is equipped with a catchbasin cleaning attachment. In the downtown area, approximately 300 catchbasins were cleaned as part of the annual routine maintenance program. In other areas, catchbasins were cleaned in response to reported problems. During PY 02, between 50 and 75 cubic yards of material were removed from Madison's catchbasins. See **Appendix 4.1 Street Sweeper**.

Madison has met its measurable goal for MS4 cleaning during this reporting period.

- 6.5 **Structural Best Management Practices (BMPs):** The City will develop a strategy for maintaining the structural BMPs and for evaluating the possibility of developing future structural BMPs throughout the City.

Measurable Goals: The City will develop a written structural BMP inspection and maintenance schedule and a written structural BMP evaluation protocol developed as a cooperative effort among various city departments. The City will track and record the number of structural BMPs considered for implementation and the number of structural BMPs that are constructed.

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There are two (2) City-owned structural BMPs. Both retention ponds are located in Madison: a pond at the City's golf course (Sunrise Golf Course) and a small lake at a City park (Johnson Lake Park). Both of these BMPs were functioning properly during this reporting period and no maintenance was required or performed. The water quality of both was expected to be relatively good given the fact that both provide good fish habitat. Specifically, Johnson Lake was a popular public fishing spot. See **Appendix 4.2 Structural Best Management Practices (BMPs)**.

Madison met its measurable goal for the structural BMPs during this reporting period.

- 6.6 **Litter Pick-up:** The City of Madison will provide weekly litter pick-up service for all residential customers located within the City limits.

Measurable Goals: The City will track and report the tons of material collected and disposed of each year.

Permit Year 02 Progress Report

Per the City's November 29, 2005 letter to Cynthia Wagner, the City requested the addition of a litter pick-up BMP to the Pollution Prevention and Good Housekeeping MCM. See **Appendix 1.2 Letter to IDEM Requesting Part C Changes**.

As described in the letter, the City of Madison offers weekly litter pick-up service for all residential properties located in City limits. In 2005, an estimated 3,900 tons of trash were collected through this service. Trash was hauled to the City's transfer station where it was temporarily stored in a covered building prior to being hauled to a landfill. The transfer station featured an on-site drainage system that routes runoff from the property to the sanitary sewer system. See **Appendix 4.3 Transfer Station Building**.

Madison has met its measurable goal for the litter pick-up BMP during this reporting period.

- 6.7 **Street Department BMPs:** The City of Madison has several other BMP's in place that minimize the potential for storm water pollution from storage yards, transfer stations, and other City operations.

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Measurable Goals: Track and report on BMPs.

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- As part of the Street Department's snow removal operation, all salt was stored in a 225-ton capacity covered building. In 2005, the City used an estimated 635 tons of salt for snow removal.
- Containment / spill control measures were in place for all automotive fluids and other hazardous chemical stored at the Street Department's maintenance garage.
- Washing of City vehicles was performed in the Street Department's primary maintenance building. All wash-water runoff was routed to the sanitary sewer system via this building's floor drains.
- All fertilizer used by the City was stored in a covered building located at the Street Department complex.
- All gas and Diesel fuel distributed from the Street Department was stored in modern underground storage tanks (UST's) that feature leak detection equipment.

See **Appendix 4.4 Street Department BMPs**

- 6.8 **CSO Program Consistency:** A revised LTCP was submitted to IDEM in March 2006 and regulatory review of this document is ongoing. In accordance with the Phase II requirements, the City has reviewed the current draft LTCP and Phase II commitments. Based upon this review, the CSO and Phase II programs are consistent and are not resulting in duplication efforts.

Note: The City of Madison requested approval to remove BMPs associated with Rule 6 in the City's November 29, 2005 letter to Cynthia Wagner. Since a written response to the 11/29/2005 letter has not been received from IDEM, the City has proceeded on the assumption that the proposed plans changes are acceptable; therefore these BMPs are not reported for PY 02.

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Chapter 7: Stormwater Program Budget

The City of Madison's stormwater program is currently being funded via local tax dollars appropriated through the City's general fund.