INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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VIA CERTIFIED MAIL 7002 0510 0004 0440 3826

April 1, 2005

Mr. Matthew J. Kras
City Storm Water Engineer
(representing City of Valparaiso and Valparaiso University)
166 Lincolnway
Valparaiso, Indiana 46383

Re: **NOTICE OF SUFFICIENCY (NOS)**
Permit Number INR040073

Dear Mr. Kras:

IDEM has received and reviewed your Part C of the Storm Water Quality Management Plan. IDEM appreciates your efforts to date to move forward to address water quality impacts from storm water runoff in your community. This letter is to provide notice that the Plan, required for municipal separate storm sewer systems (MS4s), 327 IAC 15-13 (Rule 13), is sufficient to meet the requirements of the NPDES general permit rule.

IDEM wants to make you aware that there are a number of items that need to be addressed in your annual report. IDEM has included a checklist with comments from the Part C review. Please update any of your programmatic indicators as you move forward in the implementation phase of your plan. When the ordinance for Illicit Discharge is in place please send in the certification statement. IDEM does not do a technical review of the Illicit Discharge Ordinances. IDEM will continue to implement 327 IAC 13-5 until the City of Valparaiso has their ordinance and program for Construction in place. Then the City of Valparaiso needs to re-sign and submit the certification statement accompanied by a letter verifying compliance with the Construction Minimum Control Measure (MCM) to IDEM. Once this ordinance and program are in place, and the MS4 Operator has sent in the certification statement, IDEM will respond in writing approving the transition of this MCM to the MS4. Please remember that the Post-Construction program plan and regulatory mechanism is due two (2) years from the initial NOI letter receivership date.

If you have any questions regarding this letter or the storm water general permit requirements, please contact Christina York at 317/234-1601 or 1-800-451-6027, ext. 4-1601.

Sincerely,

Cynthia L. Wagner

Cynthia Wagner, Chief
Wet Weather Section
Office of Water Quality

City of Valparaiso

STORM WATER QUALITY MANAGEMENT PLAN
PART C – PROGRAM IMPLEMENTATION
327 IAC 15-13-8

February 2, 2005

Storm Water Quality Management Plan for Valparaiso, IN
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Section One: Executed Certification Forms

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Section Two
Current Storm Water Program

Section Two: Current Storm Water Program in Valparaiso, IN

A. Existing Activities that Address Elements within MCMs (Minimum Control Measures)

1. Public Education/Outreach – Northwest Indiana Regional Plan Commission (NIRPC) has been contracted by the City of Valparaiso to fulfill this requirement on behalf of the City.

2. Public Involvement/Participation - Northwest Indiana Regional Plan Commission (NIRPC) has been contracted by the City of Valparaiso to fulfill this requirement on behalf of the City.

3. Illicit Discharge Detection and Elimination – The City of Valparaiso currently depends on its citizens, engineering department, public works department, utilities department, and all city departments to report illicit discharges and remediate the problem immediately.

4. Construction Site Storm Water Run-off Control - The city's current erosion control ordinance addresses construction site storm water runoff control and is being enforced by the city's engineering department. The City's ordinance is also being revised and should be in effect by December 31, 2005.

5. As per the City's drainage ordinance (Valparaiso Zoning Ordinance Part II Article VI), post construction storm water runoff must be detained and released at its predeveloped rate using acceptable storm water BMPs (Best Management Practices).

6. Municipal operations are being addressed, in part, with the recent purchase of a new street sweeper for increased debris collection within the city, as well as increased catch basin cleaning, redesign of the City's public works department, and increased employee education.

B. Current Use of Structural and Nonstructural BMPs (Best Management Practices)

1. BMPs in Use Today

Structural/Nonstructural BMPs and Potential Sites For Additional BMPs

Catch basins – Valparaiso requires catch basins in all new developments, and all catch basins are cleaned by the City's Utility Department on a priority basis determined from

past cleanings. In 2003 the Utility Department cleaned 2,884 intakes, 95 bee-hives, and 563 catch basins, cleaning out 729.9yd^3 of waste.

Roadside Swales – good condition; maintained and cleaned as needed by Valparaiso's Public Works.

Detention Basins – good condition; maintained and cleaned as needed (grass mowed, debris picked up) by Valparaiso's Utility Department and Parks Department.

City Owned and Operated Detention Basins

a. Candlewood Pond – Investigate design and construction of a controlled outlet (standpipe) to restrict flow and extend the time storm water runoff is detained in the pond. At present the discharge from the pond flows directly to the 36" sewer constructed by the City to alleviate flooding in the development. City detention facilities are cleaned and mowed by the City's Utilities Department on a regular basis.

b. Fairgrounds Park – Sizeable basin that only has water in it during very large storm events. The City's Parks Department uses the site as a park to hold softball leagues, picnics, a walking/running track, playgrounds for children, and some City events. The site may be impacted more as the Valparaiso Street project is completed.

c. Hotter Lagoon – Wetland area used to naturally filter and detain storm water runoff. Deed restrictions have been placed on the properties within the Hotter Lagoon Area to ensure its use as a water quality facility. An onsite detention basin was created downstream of the wetland to further detain runoff that is routed to Hotter Lagoon. A study of the area may be beneficial to determine added water quality benefits of modifications to the lagoon to improve water quality (i.e. spill protection, wet detention).

d. Knode Creek Basin #1 – Also referred to as *Thorgren Pond*, this basin needs to be evaluated to maximize its usefulness. Installing a standpipe will detain more runoff from smaller rain events. Leveling the bottom of the pond to the outlets invert elevation will allow for some wetlands that, with proper vegetation, can filter runoff. Leveling the bottom of the pond will also add 14 acre-feet of storage capacity.

e. Knode Creek Basin #2 – This basin was recently completed (October 2003) as part of the Chicago Street extension project. The basin is used to detain storm water from Knode Creek during large storm events.

f. Wall Street Basin – Detention basin is in good condition; standpipe may be reevaluated to decrease release rate.

Street Sweeping – the Public Works Department sweeps all public streets and parking lots. Additional sweeping is done on an as needed basis. The City also uses a sidewalk

sweeper in the downtown area for cleaning. In 2003 the City's Public Works Department picked up 2,488.1 tons (1,752 yd^3) of debris from street sweeping.

Public Participation/Education/Involvement – Storm Water Advisory Committee (S.W.A.C.) formed in June 2003 to advise and review Storm Water and Rule 13 issues. The City of Valparaiso has entered into an agreement with NIRPC to have them manage public education/outreach and public involvement/participation issues for storm water quality.

Erosion Control Ordinance – Valparaiso's erosion control ordinance (Valparaiso Zoning Ordinance Part IV Article XXVIII) currently exceeds rule 5, requiring erosion control measures are in place for sites over 3,000 ft^2, and is being reviewed for modification to facilitate administration and enforcement. The City's Storm Water Management Board (SWMB) is considering requesting an increase in violation fines.

Harrison West - An environmentally friendly community built using sustainable site designs, conservation zones, and vegetated swales (Rather than Storm Sewers). This subdivision recently received the INAFSM (Indiana Association for Floodplain and Storm Water Management, Inc.) award for "Excellence in Storm Water Management".

Stimson Drainage Project – This project consisted of a study and design of Best Management Practices (BMPs) and Alternative Best Management Practices (ABMP) to control the water quality and quantity that leaves the 527.5 acre Stimson Drain watershed, located southwest of Valparaiso, Porter County, IN. The designed practices can be used by developers as a guide when developing the site and used for other future developments in and around Valparaiso. The study, BMPs, and ABMPs are all accessible on the City's website located at *http://www.ci.valparaiso.in.us/* (1/10/05)

Porter County Jail Demonstration Project – The City of Valparaiso has created the Porter County Jail Alternative Storm Water Demonstration Project on the Porter County Jail Grounds to improve storm water management.
The site uses (BMPs) to:
- Reduce the quantity of water leaving the site, and
- Improve the quality of the remaining water leaving the site.

This site will improve the watershed, and will serve as a catalyst for future projects.

Valparaiso's RainGardens - Valparaiso's Water Department has just constructed a raingarden at its main office, and will be installing another at its lab facility.
These raingardens are used to
- Detain and filter storm water runoff
- Give nearby residents something beautiful to enjoy, and
- As an alternative for residents and developers to manage small depressions that would pond and cause water problems.

2. Current Conditions and Performance

Structural BMPs:
a. Catch basins/Inlets – The Collections Department cleaned out 729.9 cu. yards of debris throughout the city in 2003
b. Roadside swales – The Public Works Department cleans roadside swales as need.
c. Street Sweeping – The Public Works Department collected 2488.1 tons/1752 cu. yards of debris throughout the city in 2003.
d. Detention basins – See *City Owned and Operated Detention Basins, page 5*

Nonstructural BMPs:
a. Public Education/Outreach and Public Involvement/Participation - The City of Valparaiso formed a Storm Water Advisory Committee (S.W.A.C.) composed of a representative core group of the public. In 2004 the committee has met on a quarterly basis to discuss various Rule 13 issues and the WWTP's (Waste Water Treatment Plant's) LTCP (Long Term Control Plan).
Valparaiso and NIRPC entered into an agreement on August 25, 2004 to have NIRPC responsible for Public Education/Outreach and Public Involvement/Participation.

b. Erosion Control Ordinance – Valparaiso is currently rewriting its erosion control ordinance to incorporate updated standards (Valparaiso Zoning Ordinance Part IV Article XXVIII).

C. Update of SWQMP (Storm Water Quality Management Plan) Part B – On-going Characterization Report

Biological Monitoring:

The City of Valparaiso signed an agreement with Valparaiso University on February 12, 2004 to have the university do monitoring of the City's receiving waters.

A biology class at Valparaiso University collect benthic macroinvertebrates and calculates a Pollution Tolerance Index (PTI) based on *DNR's Hoosier Riverwatch: Volunteer Stream Monitoring Training Manual.*

Benthic Macroinvertebrates – Why Do We Monitor Them?
Benthic macroinvertebrates are animals that are big enough (macro) to be seen with the naked eye. They lack backbones (invertebrate) and live at least part of their lives in or on the bottom (benthos) of a body of water.

Biological stream monitoring is based on the fact that different species react to pollution in different ways. Pollution-sensitive organisms such as mayflies, stoneflies, and caddisflies are more susceptible to the effects of physical or chemical changes in a stream than other organisms. These organisms act as indicators of the absence of pollutants. Pollution-tolerant organisms such as midges and worms are less susceptible to changes in physical and chemical parameters in a stream. The presence or absence of such indicator organisms is an indirect measure of pollution. When a stream becomes polluted,

pollution-sensitive organisms decrease in number or disappear; pollution-tolerant organisms increase in variety and number.

In addition to being sensitive to changes in the stream's overall ecological integrity, benthic macroinvertebrates offer other advantages to scientists looking for indications of stream pollution.

- ⌘ Benthic macroinvertebrates are relatively easy to sample. They are abundant and can be easily collected and identified by trained volunteers.
- ⌘ They are relatively immobile. Fish can escape toxic spills or degraded habitats by swimming away. Migratory animals may spend only a small portion of their life cycles in a particular stream before moving to larger rivers, wetlands, or other streams. However, most macroinvertebrates spend a large part of their life cycle in the same part of a stream, clinging to objects so they are not swept away with the water's current.
- ⌘ Benthic macroinvertebrates are continuous indicators or environmental quality. The composition of a macroinvertebrate community in a stream reflects that stream's physical and chemical conditions over time. Monitoring for certain water quality parameters (such as the amount of dissolved oxygen) only describes the condition of the water at the moment in time the samples were taken.
- ⌘ Benthic macroinvertebrates are a critical part of the aquatic food web. They form a vital link in the food chain connecting aquatic plants, algae, and leaf litter to the fish species in streams. The condition of the benthic macroinvertebrate community reflects the stability and diversity of the larger aquatic food web.

Chemical Monitoring:

The City of Valparaiso's Water Reclamation Utility has agreed to do chemical monitoring of the City's receiving waters starting with a trial run in October of 2004 and continuing to monitor once a year for the length of the City's permit.

Many types of chemical tests can be performed to assess varying aspects of stream water quality. The WWTP will test several parameters in order to calculate a Water Quality Index (WQI) based on *DNR's Hoosier River Watch – Volunteer Stream Monitoring Training Manual.* Hoosier Riverwatch uses eight chemical tests considered by the National Sanitation Foundation to be most useful in determining stream water quality.

1. Dissolved Oxygen
2. pH
3. Biochemical Oxygen demand
4. Phosphate (Ortho- and Total)
5. E. coli and Coliform Bacteria
6. Water Temperature Change
7. Nitrate and Nitrite
8. Transparency/Turbidity

How the water quality index (WQI) works:

The WQI provides a simple analysis of the results of the eight chemical tests. If at least six of the eight tests are completed, one can derive a single score that will indicate whether the stream results are: Excellent, Good, Medium, Bad, or Very Bad for that particular monitoring session. This value can also be used to track changes in the site over time, or to compare with other stream sites.

Each of the tests is weighted according to its level of importance to the overall water quality (in this particular index). Dissolved oxygen has the highest weighting factor (0.18); therefore, the oxygen results are the most important value in determining the water quality rating using the index. The weighting scheme allows analysts to condense complex test results into a common water quality measurement that can be readily communicated to the public. The WQI score is like a final grade – weighting the results of multiple tests.

Salt Creek TMDL:

Salt Creek is considered a sensitive water needing priority protection. Steelhead Salmon populate the creek in the spring and fall when the Salmon make their runs from Lake Michigan to spawn. Salt Creek is identified on IDEM's 303(d) list as impaired for E. coli contamination. IDEM started a (Total Maximum Daily Load) study for the creek in 2001, which is almost complete. A draft of the Salt Creek TMDL was released January 19, 2004, which addresses Rule 13. The draft indicates that a 55% decrease in nonpoint source load allocations may need to be attained in order to reach the appropriate reduction in E. coli contamination. This reduction will be partially achieved through Valparaiso's incorporation of the six minimum control measures required in Rule 13.

Industrial Permits:

The City of Valparaiso currently has 29 industrial storm water dischargers that are permitted under IDEM's Rule 6. These dischargers are located primarily in the industrially zoned area of Valparaiso, with some exceptions falling in the commercially zoned area. A complete list of Valparaiso's 29 industrial dischargers is included on page 20 of this report. These industrial storm water dischargers are subject to more stringent standards including:

- New facilities must submit to IDEM a NOI (Notice of Intent) form at least 180 days prior to the start of operations, existing facilities which discover that they lack a required storm water runoff permit must submit an NOI as soon as possible.
- Include a $50 application fee with the NOI
- Develop a storm water pollution prevention plan
- Submit storm water sampling for 3 precipitation events
- Submit 2 visual inspection reports per calendar year
- Pay an annual fee of $100

Section Three
Storm Water Program for the Six Minimum Control Measures

Section Three: Storm Water Program for Six Minimum Control Measures:

A&B. Public Education and Outreach / Public Participation and Involvement

1. Program Description - The Storm Water Public Education/Outreach and Public Participation/Involvement Plan, derived from the requirements of the Phase II MS4 permit, focuses on improving urban storm water quality through public education and involvement and meeting the required MCMs to:

1. Improve quality and reduce quantity of storm water runoff from existing urban areas to meet or exceed state and local standards.
2. Improve quality and reduce quantity of storm water runoff from all new development and redevelopment to meet or exceed state and local standards.
3. Integrate the storm water management program with the goals and objectives of the regional watershed management plan.
4. Assess constituent knowledge and practices as they relate to storm water quality.
5. Identify, implement, and evaluate BMPs.

a. Narrative discussion of activities to reach all sectors of community.

The City of Valparaiso has entered into an agreement with Northwestern Indiana Regional Planning Commission (NIRPC) to have NIRPC manage public education/outreach and public involvement/participation issues for storm water quality for 5 years.

NIRPC Responsibilities:

1. NIRPC is responsible for record keeping and annual reporting to the communities and IDEM for the two MCMs – Public Education and Outreach and Public Participation and Involvement.
2. NIRPC is responsible for the baseline surveys and assessments and the tracking surveys completed at the end of permit year 3 and permit year 5.
3. NIRPC is responsible for research and applying for grant funding for the Rule 13 – MS4 cooperative project.
4. NIRPC will identify the measurable goals for the MCMs addressed.
5. NIRPC will work with the communities to document complaints and track follow-up actions.
6. NIRPC will organize and facilitate the Municipal Separate Storm Sewer System (MS4) Advisory Workgroup.
7. NIRPC will be responsible for public meetings and notification.

8. NIRPC will develop the Storm Water Website and keep the site current.
9. NIRPC will work with its communities to avoid duplications in educational materials
10. NIRPC will facilitate the annual project review meeting.

b. Method to assess constituents to identify base-line knowledge.

Prioritization	Construction Professionals	Schools & Universities	Occasional Users	Residents	Private Sector	Policy Makers
Very Important	Developers Consultants (architects, engineers, etc.) Home Builders Contractors	Students K-12 Student/Youth Groups		Homeowners Landlords Auto Owners Property Owners (public and private) Tenants	Big Business Owners Facility Managers	Elected Officials Municipal Staff (Parks, recreation, streets, etc.)
Important		College Students	Recreational boaters, anglers, swimmers Recreational auto vehicle owners		Small Business Owners	School Administrators School Transportation Directors

2. Measurable Goals including time-line for implementation.

a. Define for each activity (BMP) specific target outreach or reduction goal percentages:

BMP 1: Storm water Baseline Surveys designed for particular stakeholder group; follow-up surveys (2yrs, 5yrs)
Target Audience: Stakeholder groups (see chart above)
Target Topics: Storm water
Measurable Goal, including timeline: Number of completed surveys from each group; January – February 2005

BMP 2: Newsletter Articles
Target Audience: Stakeholder groups (see chart above)
Target Topics: Storm water
Measurable Goal, including timeline: Number of articles produced, number of articles distributed, amount of medial coverage; July – August 2007

BMP 3: Development of regional newsletter, community involvement, volunteer meetings, stakeholder and public meetings, regional video and exhibit board, website development
Target Audience: Stakeholder groups (see chart above)
Target Topics: Storm water

Measurable Goal, including timeline: Number of presentations, number of hits to the site, number of links to the site; November – December 2008

BMP 4: Organization of MS4 steering committee
Target Audience: Representatives from each MS4 entity
Target Topics: Storm water
Measurable Goals including timeline: Hire outreach coordinator; September 2004

BMP 5: Classroom Educational Programs
Target Audience: K-12, college, teachers
Target Topics: Storm water
Measurable Goals, including timeline: Number of classrooms and students reached, number of train-the-trainer workshops, workshop evaluations; Teacher training- at least once a year, student activities – at least one region-wide event each year.

BMP 6: Educational programs for builders, developers, elected officials, business and industry
Target Audience: Builders, developers, elected officials, business and industry
Target Topics: Storm water
Measurable Goals including timeline: The number of programs offered and the number participating and how the number changes over the five year period; at least one per year.

BMP 7: Educational programs for community organizations
Target Audience: community organizations
Target Topics: Storm water
Measurable Goals including timeline: Presentations to community groups – at least six per year

BMP 8: Community programs - Lawn care, car care, HHW, waste disposal
Target Audience: community residents
Target Topics: Lawn care, car care, HHW, waste disposal
Measurable Goals, including timeline: Number of volunteer programs that are developed, number of volunteers in the program, number of citizens that participate at events, SWMDs (Solid Waste Management Districts) numbers - conduct at least four volunteer programs per year

BMP 9: Community cleanup events, certification for construction professionals, Report-A-Polluter program - coordinated programs with the SWCD, RC&D (Resource Conservation & Development) programs, park departments, stream clean-up, and stream monitoring
Target Audience: Stakeholder groups (see chart above)
Target Topics: clean-up events, certifications, monitoring programs
Measurable Goals, including timeline: Number of events, volunteers, and participants; now through the end of the permit

BMP 10: Reforestation Program
Target Audience: Stakeholder groups (see chart above)
Target Topics: Trees
Measurable Goals, including timeline: Number of trees planted, acres restored, volunteers, tree planting events – at least one per year

b. Program strategies

i. Improvement in disposal practices:
- Public Works Department is looking at purchasing more efficient garbage trucks
- Recycling program has stopped sorting recyclables and is having them trucked out
- Heated salt brine is being applied to streets for winter snow removal instead of pure salt and should decrease amount of salt used.

ii. Cast storm drain cover installations with message:
- Storm drain stenciling has occurred in the city's wellhead protection areas (2003)
- NIRPC contracted to provide Education/Outreach and Involvement/Participation
- refer to Section 3 –A&B of this document or contact NIRPC at (219) 763-6060

iii. School curricula or website implementation:
- NIRPC contracted to provide Education/Outreach and Involvement/Participation
- refer to Section 3 –A&B of this document or contact NIRPC at (219) 763-6060

iv. Educational material distribution:
- NIRPC contracted to provide Education/Outreach and Involvement/Participation
- refer to Section 3 –A&B of this document or contact NIRPC at (219) 763-6060

v. Outreach to every population sector:
- NIRPC contracted to provide Education/Outreach and Involvement/Participation
- refer to Section 3 –A&B of this document or contact NIRPC at (219) 763-6060

C. Illicit Discharge Detection and Elimination

1. Program Description.

a. Strategies to detect and eliminate illicit discharges to MS4:

The City of Valparaiso, currently relies on physical visual inspection of our MS4 system to identify illicit discharges. The City has had two instances in the past two years of illicit discharges being identified by visual inspection.

The first discharge occurred at Hotter Lagoon located on the east side of the city. A petroleum spill was reported in February of 2003 and remediated as soon as the snow melted in March.

The second discharge occurred in the summer of 2003. The discharge from an outlet pipe located in the southern part of the City off the east side of Franklin Street was reported to be foaming and soapy. The City's collection department was able to trace the

discharge back to Porter Memorial Hospital, where a sanitary sewer (containing the hospital laundry discharge) had been accidentally connected to the storm sewer. The hospital quickly disconnected the line and connected it to their sanitary line.

These instances of illicit discharge have brought to the attention of the City the possible need to adopt an "illicit discharge ordinance." The City's MS4 Operator and the Engineering Department are currently investigating the possibility of enacting this ordinance.

ii. Notification procedures to owner of illicit discharge:

Owners of illicit discharges are notified as soon as possible and required to cease illicit discharge.

iii. Enforcement procedures:

The City of Valparaiso currently relies on voluntary compliance from owners of illicit discharge connections.

iv. Implementation procedures and schedule:

The City of Valparaiso is considering an illicit discharge ordinance to facilitate compliance and enforcement procedures.

v. MS4 personnel and equipment dedicated to do illicit discharge detection and elimination (IDDE).

The City MS4 Operator, engineering department, Public Works Department, and Collections Department all look for illicit discharges on routine inspections and complaints. The City also relies on notification from the public for IDDE.

vi. All active industrial facilities updated annually:

#	Facility Name	City	SIC Code	NOI Rcvd	Exempt	NOT/Exempt Rec
1	UGN, Inc.	Valparaiso	3714	11/14/2000	No	
2	ALTERNATE RECYCLING & DISPOSAL	Valparaiso	4953	5/17/1996	No	
3	BEACH ASPHALT CO. INC.	Valparaiso	2951	4/2/1997	Yes	22-Mar-04
4	AOC, L.L.C.	Valparaiso	2821	9/18/1992	No	
5	OWENS-CORNING FIBERGLASS TANK DIVISION	Valparaiso	3079	10/7/1992	Yes	
6	OZINGA BROTHERS INC.	Valparaiso	3714	6/23/1998	Yes	
7	PORTER COUNTY MUNICIPAL AIRPORT	Valparaiso	4581	7/11/1994	No	
8	POWDERTECH CORPORATION	Valparaiso	3499	8/14/1995	Yes	
9	SMITH NUPPNAU READY MIX	Valparaiso	3273	7/8/1994	Yes	20-May-04
10	UGIMAG INC. / MAGNEQUENCH-UG, INC.	Valparaiso	3499	2/16/1994	Yes	05-May-04

11	VALPARAISO AUTO PARTS	Valparaiso	5015	8/15/1994	Yes	
12	JET CORR, INC.	Valparaiso	2653	3/13/2000	No	
13	VALPARAISO MUNICIPAL STP	Valparaiso	4952		No	
14	REXAM BEVERAGE CAN COMPANY	Valparaiso	3411	6/19/1995	Yes	
15	MCGILL MANUFACTURING CO.	Valparaiso	3562		Yes	28-Jul-03
16	KANE MAGNETICS ACQUISITIION, LLC	Valparaiso	3499		No	
17	CONTINENTAL/MIDLAND, LLC	Valparaiso	3452	2/12/2002	Yes	21-Apr-04
18	North American Packaging Corp.	Valparaiso	3089		Yes	13-Dec-02
19	Auto Salvage Yard (Donna Craig)	Valparaiso	5015		No	
20	BUBBA TOWING	Valparaiso	5015		No	
21	GREEN SERVICE INC	Valparaiso			Yes	03-Oct-03
22	KENNELLYS AUTO DIV CLASSY CHASSIS	Valparaiso			Yes	20-Oct-03
23	L & W AUTO SALVAGE	Valparaiso	5015		No	
24	METRO AUTO PARTS	Valparaiso	5015	6/3/2003	No	
25	SHORELAND METALS INC c/o Onyx Special Services, Inc.	Valparaiso	3441		No	17-Nov-03
26	AL TIRE	Valparaiso	5015		No	
27	ARCHIES AUTO RECYCLING INC	Valparaiso	5015		Yes	18-Jun-03
28	B & E HONDA	Valparaiso			Yes	30-Jun-03
29	SOUTH HAVEN SEWER WORKS, INC.	Valparaiso	4952		No	

b. Mapping strategy:

Discussion of overall strategy for completing MS4 conveyance and outfall map:

Mapping is done in the early spring and in the late fall when most vegetation is at a minimum and conveyances and outfalls are most easily seen. The City has finished mapping approximately 25% of all outfalls with a 2-foot or greater diameter and all conveyances with a 2-foot or greater bottom width.

The City of Valparaiso is regarding open ditches as a conveyance; meaning a structural process for transferring storm water between at least two (2) points.

The City of Valparaiso is continuing to define its "Waters of the State" (receiving waters) as those shown as a solid blue line on a United States Geological Survey 7.5-minute quadrangle map. Therefore, the City of Valparaiso has no new "Waters of the State" to report at this time.

<u>Waters of the State</u>
Beauty Creek
Sager Run
Salt Creek

c. Education program for public employees, business, and general public on hazards of illicit discharges:
- City's monthly safety meetings address concerns to City safety officers, who in turn relay information to City employees.
- S.W.A.C. meetings are held quarterly with representatives from different entities within the City (i.e. schools, businesses, residents) and are used to discuss Rule 13 requirements and what will raise awareness and benefit the City's residents.

d. Recycling program for commonly dumped wastes (motor oil, antifreeze, pesticides):

There are several businesses in Valparaiso that will ~~except~~ accept some common car wastes during regular business hours.

	Motor Oil	Antifreeze
AutoZone	x	
Jiffy Lube	x	x
WalMart	x	

The City of Valparaiso's Public Work's Department also does curbside pickup for the following recycling.

1. CLEAR, BROWN, OR GREEN GLASS: provided that they have been rinsed and the caps removed. Labels can be left on. We do not recycle plate glass, automotive windows, or ceramics.

2. ALUMINUM, STEEL & TIN CANS: provided that they are clean. Lids accepted if put in the can and pinch the top.

3. PLASTIC CONTAINERS # 1s & #2s: (such as milk, detergent, and pop bottles) provided that they are rinsed and with the lids removed. The City prefers containers to be flattened if possible. Labels can be left on containers. The City accepts motor oil containers if drained thoroughly.

4. NEWSPAPERS, INSERTS, CATALOGS, MAGAZINES & CARDBOARD: bundled and tied or paper bagged.

5. SCRAP METAL, APPLIANCES, AND ELECTRONICS: Scrap metal and large appliances must be called into our offices as a special pickup. Small appliances can be set out with the regular garbage.

6. BATTERIES: such as automobile-type and bags or boxes of household batteries.

In addition to these recycling options, the Porter County Solid Waste Department (219-465-3694) sponsors household hazardous waste collections throughout the year. The dates and locations for the 2005 year are as follows:

Date	Location
May 21, 2005	Hebron High School
June 11, 2005	Porter County Fairgrounds & Expo Center
July 9, 2005	WestChester Middle School
August 6, 2005	Portage High School
October 1, 2005	Kouts? (Location not definite)

2. Measurable Goals.

a. Define specific outreach and reduction goal percentages and timeline:

BMP 1: Salt Brine usage in street de-icing
Timeline for Implementation: implemented winter 2004/2005
Measurable Goal: A reduction in salt usage in de-icing streets

BMP 2: Monthly City Safety Meetings
Timeline for Implementation: Already in place
Measurable Goal: Time spent on Rule 13 discussion and awareness

BMP 3: Quarterly S.W.A.C. meetings
Timeline for Implementation: Implemented June of 2003
Measurable Goal: Rule 13 awareness to public

BMP 4: Prepare Illicit Discharge Ordinance
Timeline for Implementation: December 31, 2006
Measurable Goal: Adoption of Ordinance

BMP 5: Prepare Ordinance regarding Regulations Controlling Environmental Impacts from Land Disturbing Activities
Timeline for Implementation: December 31, 2005
Measurable Goal: Adoption of Ordinance

3. Results of review and update of CSOOP (Combined Sewer Operation and Overflow Plan) and LTCP to incorporate SWQMP Public Education (PE) activities.

The City of Valparaiso submitted its LTCP for December 1, 2003. At this time, Valparaiso's LTCP is under review by IDEM.

The City of Valparaiso currently operates the Elden Kuehl Pollution Control Facility (EKPCF), a class IV (Single Stage Air Activated Sludge) Wastewater Treatment

Plant (WWTP). The plant has an average design flow of 6.0 million gallons per day (mgd) and a peak hydraulic capacity of 9.0 (mgd) with the ability to capture a first flush of 4.5 mgd into 3 combined sewer overflow detention basins (CDTs) during wet weather periods, thus providing the City a total capacity of 13.5 mgd. Current expansion plans will provide a proposed average design flow of 8.0 mgd and a peak flow of 18.0 mgd, therefore allowing an additional 9.0 mgd to be treated during wet weather events.

Once the WWTP has reached its peak flow of 9.0 mgd and has retained the 4.5 mgd first flush, the excess flow will then be diverted to Combined Sewer Overflow(CSO) Outfall Point No. 002. The untreated wastewater stored in the CSO detention basins will eventually be bled back through the WWTP. CSO modifications include improved screening, solids settling, aeration, overflow weirs, and pumping to allow the CSO tanks to function as a (flow-through) treatment facility. As a flow through treatment facility, the tanks will provide treatment equivalent to primary clarification, thus meeting one of United States Environmental Protection Agency's (USEPA's) Nine Minimum Controls for CSOs and essentially improving the quality of CSOs entering the receiving stream.

Currently, the WWTP has three combined sewer overflow basins, influent flow monitoring, screening, grit removal, primary clarifiers, single stage nitrification aeration tanks, secondary clarifiers, phosphorous removal with ferrous chloride, mixed media filters, disinfection facilities using ultraviolet irradiation, post-aeration, and effluent flow monitoring. Sludge treatment includes dissolved air flotation thickening of waste-activated sludge, anaerobic digestion, and lagoons for temporary storage of biosolids. The facility is authorized to land apply the WWTP's generated and processed biosolids in accordance with requirements contained in IDEM's Land Application Permit. All treated wastewater is discharged to Salt Creek, a salmonoid fishery tributary to Lake Michigan.

The City is required to operate the IDEM-approved Industrial Pretreatment Program. At this time, the pretreatment program regulates 4 Significant Industrial Users (SIUs) through issued industrial wastewater discharge permits. There are approximately 45 additional industrial users not defined as significant which are monitored within the program.

The Elden Kuehl Pollution Control Facility achieves excellent removals, which are consistently within the 90th percentile removal range. The facility adheres to proper and efficient means of operation. The recent Expansion and Upgrade of the WWTP will allow the facility to improve in overall performance by including more efficient and modern technical means of process control.

*Note: See maps in **Appendix G***
Map A: Combined Sewer Area
Map B: Permitted CSO Outfall #002

Implementation of the CSO Notification Procedure is the responsibility of the City of Valparaiso Water Reclamation Utility Management Staff. These responsibilities include:

- Submitting the required plan to the IDEM commissioner six (6) months after the effective date of this Rule.
- Including the CSO Notification Procedure in Valparaiso's approved Combined Sewer System Operational Plan (CSSOP)
- Fully implementing the CSO Notification Procedure no later than ninety (90) days after the date of submission
- Modifying the CSO Notification Procedure as needed, so the procedure is consistent with the Rule if either the IDEM Commissioner requests such modification within six (6) months of the date of submission of the notification procedure, or a member of the affected public requests that IDEM reevaluate the notification procedure.
- Documenting required public notification efforts on Valparaiso's CSO discharge monitoring report (DMR).
- Maintaining a record of required public notification reports at the wastewater treatment plant.
- Availability of these public notification reports to the IDEM Commissioner's representatives during normal working hours.

The CSO Notification Procedure has been and will continue to be a topic of discussion with the City of Valparaiso's Storm Water Advisory Committee (SWAC). SWAC meets on a monthly basis and the scope of its discussions involve Phase II Storm Water Regulations and the Long Term Control Plan for the City of Valparaiso.

Valparaiso's community notification methods will be discussed regularly with the Public Focus Committee. Any disagreements with notification recipients regarding the acceptable manner of notification will be discussed with the Public Focus Committee, and the committee will decide on what would be a reasonable and effective means of notification.

PEOPLE MOVERS PROGRAM – REVERSE 911

The City of Valparaiso has purchased an interactive community notification system called "Reverse 911." Reverse 911 is a Windows-based program that uses a combination of database and Geographic Information System (GIS). Reverse 911 offers features, which are particularly useful to drinking water utilities, wastewater utilities, and other City departments.

The program can quickly select a list, define a specific geographic area such as an entire county, city, district, or specific neighborhood, and within 5 to 10 minutes start delivering a recorded message to about 500 people per hour (dependant upon the amount of phone lines available), within the designated area.

Reverse 911 is used effectively in over 100 U.S. communities, counties, commercial businesses, and nonprofit organizations to dramatically improve the lines of communication to the general public, and targeted groups.

Reverse 911 will be the primary tool used to notify CSO notification participants in English.

D. Construction Site Storm Water Run-off Management

1. Program Description

The City of Valparaiso recognizes that soil erosion resulting from land disturbing activities can cause a significant amount of sediment and other pollutants to be transported to locations including watercourses, wetlands, lakes, and reservoirs. The City therefore has an erosion control ordinance (Valparaiso Zoning Ordinance Part IV Article XXVIII) to manage this problem. The objective of Valparaiso's Erosion Control On Sites With Land Disturbing Activities 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 vegetation cover has been disturbed. The ordinance applies to land disturbing activities including those associated with agricultural, commercial, industrial, institutional, residential, and highway development.

i. Specific BMPs for control of sediment, erosion, and other wastes:

Specific Requirements
The City of Valparaiso's existing ordinance states:

Control of erosion and sediment through the entire duration of the land disturbing activity is the responsibility of the builder/developer. 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.*

ii. Review and approval process for construction plans which must occur prior to land disturbance activity:

The City of Valparaiso's existing ordinance states:

An erosion control plan shall be submitted with each application for an Erosion Control Permit (part of the Building Permit). The Board of Public Works and Safety shall have the authority to waive any of the requirements for the plan. The Engineering Department will review, accept the plan, and give the Erosion Control Permit or determine the plan to be inadequate, ask that changes be made, and not release a permit until the plan is adequate.

ONE, TWO AND THREE FAMILY HOME SITES:
The erosion control plan for one, two and three family home sites shall be made a part of the sketch provided with the application for a building permit. It shall be prepared by the applicant and shall show, as a minimum, the direction of surface

slopes (arrows), any watercourses on the lot, and the location of the silt fence and/or other erosion control installations proposed.

MULTI-FAMILY, AND ALL NON-RESIDENTIAL SITES

The Erosion Control Plan for multi-family and all non-residential sites shall conform to the following:

1. *The plan shall be prepared by an Indiana Licensed Professional Land Surveyor, Engineer, Architect or Landscape Architect.*
2. *The plan shall be drawn to a scale adequate to clearly show the site and the required information. In no case shall the plan be drawn to a scale less than 1"=100'.*
3. *The plan may incorporate one or more sheets as necessary to clearly convey the intent of the plan. The plan may also incorporate text to explain any specifics of the plan, cover the specifications for the materials required or convey the development phasing.*
4. *As a minimum the plan shall show all existing and proposed:*
   a. *Site boundaries, lots, etc.*
   b. *All watercourses (with sizes), ponds, lakes, wetlands.*
   c. *Apparent floodplains, floodway fringes, and floodways.*
   d. *Soil types and their erodability. The information provided in the Soil Survey of Porter County, Indiana, as published by the U.S. Dept. of Agriculture, Soil Conservation Service, is appropriate.*
   e. *Vegetative cover such as crops, grass, weeds, and/or trees.*
   f. *Utilities, structures, road pavements and other improvements.*
   g. *Existing contours at an interval not greater than 2 feet. An adequate number of spot elevations may be provided in lieu of the contours.*
   h. *Locations and dimensions (where applicable) of all proposed erosion control measures.*
   i. *Provisions for maintenance of the erosion control measures during the course of the project.*
   j. *Provisions for removal of the temporary measures when final vegetation And control structures are established.*

iii. Site inspection program:

Most construction sites are currently inspected on a regular basis.

iv. Procedures to identify priority sites and the enforcement program for violations and corrective action:

In the current ordinance priority sites are defined as: *Those sites that are immediately adjacent to a storm sewer inlet, ditch, stream, wetland or other watercourse, or those sites on ground with a slope of 6 percent or greater.*

The City has the following 5 options to enforce the ordinance:

A. *STOP WORK ORDER*
The Board may post a stop work order per the provisions of chapter 30 of the Municipal Code for any work not conforming to the requirements of this ordinance. The stop work order may be lifted only after the work has been made to conform with this ordinance or by appeal to the Board. If, after the stop work order has been issued for a period of not less than 10 calendar days and the work is not in compliance with this ordinance the Board may serve notice of forfeit of any surety provided with the permit.

B. *WITHHOLD PERMITS*
The Building Commissioner may refuse to issue building permits to any applicant who is in violation of this ordinance and has received notification of that violation. The permits may be for sites other than those where the violations have occurred. The Building Commissioner may withhold issuance of the permits until the violations are corrected to the satisfaction of the City Engineer.

C. *FINES FOR VIOLATION*
In addition to any and all other remedies set forth in this ordinance for a violation thereof, the City Engineer may, for any violation of this ordinance, levy a fine against the violator(s) of up to $50.00 for each occurrence, each day being a separate occurrence. The City Engineer shall notify the violator(s) of such fine, in writing, on a form approved by the Board. The violator shall pay the levied fine through the Local Ordinance Violations Bureau. The City Engineer may levy a fine for each and every day that the violation is continued.

D. *REVOCATION OF SURETY*
In the event that other enforcement remedies listed herein do not cause the correction of the violation(s) the Board, acting on the recommendation of the City Engineer, may initiate a claim upon any bond or surety posted with the application. The Board may seek recovery of any costs associated with the correction of the violation(s) along with any fines levied and not paid.

E. *COURT ACTION*
The Board may elect, in lieu of the fine set forth above but in addition to all other remedies set forth in this Ordinance, to seek a fine for such violation in a court of competent jurisdiction in an amount up to the maximum permitted by IC 36-1-3-8.

v. Procedures to receive and consider public input, inquiries, and concerns:

New Developments are required to have a site review meeting. These meetings are open to the public. Representatives of all City Departments are present to answer questions and concerns regarding the project and also respond to any calls or complaints.

vi. Training program for employees responsible for the construction site program, inspection of sites, enforcement procedures and protocols, including documentation process:

Staff are trained in-house in accordance with the City ordinance Erosion Control On Sites With Land Disturbing Activities (Valparaiso Zoning Ordinance Part IV Article XXVIII) to look for erosion control inadequacies. They also attend workshops sponsored by DNR regarding pertinent subjects.

vii. The requirement that IDEM receives a copy of the NOI from the construction site operator:

The City currently makes a verbal agreement with the developer that IDEM will receive a copy of the NOI.

viii. Local SWCD participation in the review of the permit requested by the construction site operator:

Currently, the City of Valparaiso does its own reviews for erosion control in-house. Rule 5 permits are reviewed by the SWCD at this time. The City plans on continuing to review plans in-house and will need to coordinate with the local SWCD.

b. The program to address construction projects owned by MS4 operator or MS4 municipalities within the MS4 area:

Construction projects owned by the City are required to meet the same requirements as all other projects within the MS4 area.

i. The approach if MS4 entity project leaves Right-of-way (R-O-W) and involves utility relocations, material hauling and transport routes, borrow pits, temporary staging and material stockpiles, and temporary disposal areas for waste materials:

MS4 projects must comply with the City's Erosion Control Ordinance

2. Measurable Goals

BMP 1: Revision of City's Erosion Control Ordinance
Timeline for implementation: December 31, 2005
Measurable Goals: Adoption of revised ordinance by Common Council

BMP 2: Adopt Inspection Program (Part Revision of City's Erosion Control Ordinance)
Timeline for Implementation: December 31, 2005
Measurable Goals: Adoption of revised ordinance by Common Council

BMP 3: Reexamine Violation Fines and Enforcement (Part Revision of City's Erosion Control Ordinance)
Timeline for Implementation: December 31, 2005
Measurable Goals: Adoption of revised ordinance by Common Council

E. Postconstruction Storm Water Run-off Control

1. Program Description

The City of Valparaiso has adopted, as part of its zoning ordinance, REQUIREMENTS FOR STORM DRAINAGE AND FLOODPLAINS (Valparaiso Zoning Ordinance Part IV Article XXVIII). The purpose of this ordinance is to provide for the adequate control of storm water runoff so that certain natural resources are preserved and the quality of the water and the health, safety, and welfare of the residents is not compromised.
The ordinance states:
Any new development or construction, addition or renovation requiring a building permit from the City, shall provide storm water runoff controls as provided herein. Appropriate reference shall be made to the latest revision of the "Specifications and Standards for Acceptance of Municipal Improvements" for specific requirements.

Drainage Plans Required:

The City's current drainage ordinance, Part II, Article VI, of the Zoning Ordinance states:

All drainage plans must be approved by the City Engineer before permits are issued or formal approvals granted. Said approval by the City Engineer shall mean that the plan appears to meet the requirements of the City and shall not be interpreted to provide any guarantee or warrantee against damage or inconvenience by flooding or the runoff relate problem.
Individual One and Two Unit Residential Sites:
By virtue of applying for a building permit the applicant acknowledges that he is familiar with the characteristics of the site and the lands adjacent and that the storm water control measures proposed are appropriate for those characteristics and the proposed house.
Drainage plans may be shown on a sketch prepared by the applicant. It should be drawn as accurately as possible and clearly show all the storm water control measures proposed for the site. Arrows may be used to show the direction of surface flow. Locations of swales, downspouts and sump pump discharges should be shown with their direction of flow. Specific elevations are not required.

Multiple Units Residential, Commercial, and Industrial Sites:
Drainage plans and drainage calculations shall be prepared by a Registered Professional Engineer, Land Surveyor, Architect or Landscape Architect licensed to practice in the State of Indiana. Drainage plans and drainage calculations for sites over three (3) acres in size, or with unique and/or sensitive drainage issues shall be prepared by a Registered Professional Engineer or Land Surveyor licensed to practice in the State of Indiana. The designer of the drainage plan shall be liable for any shortcomings or inadequacies in the plan that may reveal themselves after construction.
Drainage plans shall show topographic features, utilities, and locations and existing and proposed elevations of the ground, pavements, drainage course, drainage structures, detention basins, finished floors, and other items that might impact drainage. The drainage plan shall be of sufficient detail to serve as construction drawings and may be incorporated with the site plans required under other sections of this ordinance or other ordinances of the City.
Drainage calculations shall be provided for the analysis of existing drainage courses and/or the design of any proposed drainage course and/or detention basin and discharge control structures. The calculations shall be in a form and shall use methods as required by the City Engineer and as spelled out in the Standards.
The drainage plan and calculations shall be thorough enough to allow a complete analysis of the expected impacts on the site and the areas downstream.

Subdivisions, condominium developments, and Planned Unit Developments (PUD):
Reference should be made to the appropriate sections of this ordinance or other appropriate ordinances of the City.

Drainage plans shall comply with the requirements of paragraph B above. The drainage plan shall be presented in concept at the pre-preliminary review stage of the City's approvals process. If the concept is approved the drainage plan shall be presented in sufficient detail at the Primary Plat stage to be able to make sound judgments concerning the adequacy of the proposed system. The drainage plan shall be presented in final form prior to the Secondary Plat (or equivalent) stage. The drainage plan and drainage calculations must be approved by the City Engineer prior to, or simultaneous with, the approval of any construction plans.

Regulations:
The City's current drainage ordinance, Part II, Article VI, of the Zoning Ordinance states:
General requirements for drainage follow. More specific requirements are per the Standards.
A. Two systems provided
Whenever drainage control measures are proposed or considered, two systems shall be provided, the Minor System and the Major System.

1. Minor System - The minor system shall be designed to convey the runoff from the more frequently experienced rainfall events. Generally this system is designed for the storm with the ten (10) year frequency of recurrence. The system shall consist of swales, inlets, sewers and ditches.

2. Major System - The major system shall be designed to convey and manage the runoff from the least frequently experienced rainfall events. This system shall be designed for the storm with the hundred (100) year frequency of recurrence. The system shall consist of swales, inlets, sewers, ditches, and streets. It shall be designed to safely convey and manage the runoff and to minimize property damage.

Pass Through Runoff
All drainage plans shall accommodate the runoff that enters the site from other locations in the tributary watershed. The runoff may be diverted around the site or accommodated directly in the design of the site storm runoff control measures. In no event shall off site drainage be blocked or restricted by the proposed development.

When appropriate, and at the request of the City Engineer, the pass through runoff shall be directed through the site detention basins to provide downstream protection from the storms with the more frequent recurrence interval. When this is required the discharge structure and overflow shall be designed to accommodate the pass through runoff.

Exit Characteristics
The characteristics of the runoff exiting a site shall not differ substantially after development from those that existed before development. Any runoff concentrated through the course of development into a sewer, culvert, swale or ditch shall only be discharged into a defined and established drainage course.

It may be necessary to improve the drainage course downstream from a site so that it is capable of conveying the increase runoff from the development. This may be necessary to handle either the rate of discharge or the duration of discharge.

D. Public and Private Systems
During the course of the planning and design of the runoff control measures it shall be determined and documented whether the measures are to be public or private.
1. Public Systems - The public system shall be maintained by the City of Valparaiso after their acceptance by the City. Generally, public systems shall be those in and/or under public streets, or those conveying the runoff from large areas of the City.

2. Private Systems - The private systems shall be privately maintained. Generally private systems shall be those in and under private streets and private sites. Rear year swales, ditches that convey the runoff from individual sites, or development detention basins constructed as runoff control measure for a development, shall be private systems.

Provisions shall be made for the maintenance of private systems. On an individual site the owner shall maintain the system. In a development a property owners association, or some other vehicle, shall be established to provide for said maintenance. Documentation of the provisions for maintenance shall be provided to the City Engineer and accepted by him if, in his opinion they are appropriate.

If the system is not maintained so that it functions in the manner that it was designed and constructed and thereby threatens to affect or damage properties owned by others, or is not in compliance with any agreement between the owner and the City, the Board may, after notice by registered mail to the owner of the property:
Cause the necessary repairs to be completed. The cost of said repairs may be assessed to the property owner(s) through the City's assessment process, and/or
Levy a fine against the owner of the property of up to $50.00 for each violation and/or occurrence, each day constituting a separate occurrence. The City Engineer shall provide written notification of the alleged violation and fine to the owner(s) of the property. The notice shall be delivered in person to the owner or his representative, or sent by registered mail. The administration of the procedure shall be through the City's "Local Ordinance Violations Bureau." The Board may levy a fine for each and every day that the violation is continued.

Recorded easements shall be provided over all components of public and private systems. The easements shall run to the Public and the City of Valparaiso for purposes of maintaining the facilities located in said easements. However, the establishment of said easements shall in no manner obligate the City to maintain private systems but shall, in the event of an emergency, allow the City to enter and make temporary emergency repairs to the system. The cost of said emergency repairs may be billed to the entity responsible for the maintenance of the system.

Individual Sites
On individual sites proposed for development the runoff control measures shall specifically provide for adequate surface slopes away from all building structures. They shall also provide for the appropriate elevation of said structure as it may relate to ground water elevations and/or flood elevations from adjacent streams, ponds, detention basins, or street low points.

The location and configuration of downspouts and/or sump pump discharges shall be such that the runoff does not damage or inconvenience adjacent properties. In general, downspouts and sump pump discharge shall be directed towards the front or rear of the site and not at the adjacent site property lines. In no event shall downspouts, sump pumps, footing tiles, or any other surface or ground water source be discharged into the sanitary sewer system.

a. Narrative description of how strategy will "use" or "allow/disallow" the following practices:

i. Infiltration practices in wellhead protection areas must be disallowed.

The City of Valparaiso has no rule against infiltration in wellhead areas, but the City promotes rain gardens to do so. The City intends to recharge the aquifer in the wellhead areas and closely monitors business and construction activities in these areas. The City and County work with businesses to see that they follow

best management practices and are containing any hazardous material properly. If the quality of the water run off is treatable by natural processes, the City encourages draining into the aquifer in a wellhead recharge area.

For additional information, contact Daryl Brown with the Valparaiso Water Department at (219) 462-6174.

ii. Disallow discharges into sink holes or fractured bedrock without treatment that meets groundwater standards as referenced in 327 IAC 2-11.

The City of Valparaiso has no sinkholes or fractured bedrock.

iii. Discharge from Class V injection well must meet groundwater standards as referenced in 327 IAC 2-11.

iv. Regulate flow rate through conveyance of MS4 to reduce outfall scouring and streambank erosion, as site conditions allow.

Flowrates are addressed through the City's drainage ordinance (Valparaiso Zoning Ordinance Part II Article VI). The ordinance was addressed in the Post Construction Runoff Control of this report.

v. Vegetated filter strip along unvegetated swales/ditches as site conditions allow.

Vegetative filter strips are encouraged where conditions allow.

vi. New, redeveloped (after tank pull) retail, local, state and federal refueling operations must design and install proper practices to reduce lead, copper, zinc and polyaromatic hydrocarbons in storm water runoff.

Currently, The City of Valparaiso is exploring options to reduce these pollutants from leaks and spills.

b. Narrative description of program to train MS4 operator personnel doing plan review, inspection, and enforcement (annual).

Currently, the MS4 operator has a college degree in engineering with special interest in environmental aspects and an interest in environmental responsiveness. The MS4 operator uses continued education workshops, seminars, and classes that are related to storm water drainage and erosion control to remain current on accepted practices and procedures.

c. Narrative description of approach to develop and implement written operational and maintenance plan that addresses inspection frequency, operational testing or observation of BMPs, maintenance procedures, preventative maintenance and record keeping:

The City of Valparaiso is currently discussing these issues to better preserve and maintain storm water quality.

2. BMPs / Measurable Goals

BMP 1: Controlled Discharge Required (City of Valparaiso Drainage Ordinance)
The runoff from any combined roof and pavement area over 5,000 square feet, or pavement area alone over 3,500 square feet, shall be controlled and managed in some manner, approved by the City Engineer, before it discharges to the City street or sewer system.
Single and duplex residential construction shall be exempt from the strict requirements of this paragraph. However, the runoff from said construction shall be controlled in a manner that minimized problems to adjacent properties.
Timeline for Implementation: Currently in place
Measurable Goal: Continued application of the ordinance

BMP 2: Storm Sewers, Structures, Ditches, Swales, and Culverts (City of Valparaiso Drainage Ordinance)
All storm sewers, structures, ditches, swales, and culverts shall be designed and constructed according to the requirements of the Standards and sound engineering practice. They shall be designed to safely convey the appropriate designed flows and to minimize maintenance and repair needs.
Timeline for Implementation: Currently in place
Measurable Goal: Continued application of the ordinance

BMP 3: Detention Basins (City of Valparaiso Drainage Ordinance)
Detention basins shall be required for any site proposed for development except individual single and duplex residential construction. The requirements for detention maybe waived by the City Engineer if provisions are made in the overall development for appropriate runoff management.

General
Detention basins shall be designed with a consideration for the welfare of the residents who live in the vicinity and the safety of those who might be attracted to the facility. Basins and their appurtenances shall be designed to require minimum maintenance. Slopes should be flat enough for safe walking and mowing. The areas designed for detention basins shall be designed to be used for other purposes such as recreation, man-made wetlands, open space, or other uses. The use of fences shall be kept to a minimum.

The designer is encouraged to make the facility as aesthetically pleasing as possible. Slopes should vary. Straight lines should be avoided. Long sweeping curves should be used to make the facility appear natural and part of the overall landscape. Basins should be landscaped with tress and shrubs appropriate to that location.

Storage Volume and Discharge Rate
Detention basins shall provide a storage volume adequate to contain the runoff from the developed site that results from a storm event with a 100-year frequency of recurrence. The discharge rate through the discharge control structure shall not exceed the runoff rate from the undeveloped site that results from a storm with a two (2)-year frequency of recurrence.

Dry Bottom Basins
Dry bottom basins shall be designed with adequate bottom slopes to minimize standing water after the stored runoff has been discharged. Underdrains may be required to provide additional drainage, particularly in the vicinity of the discharge control structure.

Wet Bottom Basins
Wet bottom basins shall be designed to provide a permanent water depth adequate to retard weed growth and to sustain aquatic life. They shall incorporate provisions for walkways around the perimeter of the pool to allow for recreational use and for access for weed control and emergency response. The ground slopes below pool level shall be sufficiently flat to allow an individual who falls in, to recover and walk from the water without great difficulty.

The design of this type of basin shall consider the need for shoreline bank protection from wave action and the need for a supplemental water supply for use during periods of low rainfall. Wet bottom basins generally present more difficult maintenance requirements than do the dry bottom basins.

These requirements include, but are not limited to, weed control, algae control possible wildlife management, erosion control at the shoreline, and maintenance of the supplemental water supply equipment. The developer shall make adequate prevision for these items.

Paved Area Basins
Paved areas such as parking lots may be used for detention basins where appropriate. The basins shall be designed so that the maximum stored water depth is not likely to cause damage to vehicles or adjacent property. Generally, the basin (s) should be located in the more remote areas of the lot and/or in the service drives if possible.

Underground Basins
Underground detention basins are permitted but should be used only when no other options are available. Underground basins shall be designed using vaults, pipe networks, or other means that allow access for inspection, cleaning, and/or maintenance. Storage of runoff in the voids of aggregate beds shall be avoided.
Timeline for Implementation: Currently in place
Measurable Goal: Continued application of the ordinance

BMP 4: Proper Design and Construction of Discharge Control Structure and Overflow (City of Valparaiso Drainage Ordinance)
Discharge Control Structures shall be designed to be safe, simple, and easily maintained. Their design shall be such that they are not subject to clogging with debris. They shall not rely on manual operation of valves or gates. Wherever possible they shall be designed to provide storage from the runoff generated by storm events with the greater frequencies of recurrence, as well as the "major storms (s)."
Timeline for Implementation: Currently in place
Measurable Goal: Continued application of the ordinance, number of reported problems/complaints downstream

BMP 5: Requirement for Improved Storm Water Management with Renovation of Existing Developed Sites (City of Valparaiso Drainage Ordinance)
There are certain sites in the City that were developed without providing appropriate drainage control measures. If any renovations or additions that require a building permit are proposed for these locations the applicant shall also provide reasonable drainage control measures appropriate for the site.
Timeline for Implementation: Currently in place
Measurable Goal: Number of renovated existing sites

F. Good Housekeeping and Pollution Prevention

1. Program Description

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.

Outfall scouring is either reported by residents and concerned citizens or discovered on routine inspections of creeks and outfalls. An example is the following:

Clover Lane Project – This project involved heavy scoring at the headwaters of a branch of Beauty Creek. Three large diameter pipes located several feet above the creek bottom discharged into the creek. Years of heavy flow had caused severe erosion and outfall scouring to the stream banks and outfall locations. After monitoring the situation, the

City decided to add drop structures, new pipe, and heavy rip-rap to remedy the situation. The project was started and completed in the summer of 2004. Today, erosion at the site is to a minimum, the banks are stabilized, and the area looks more inviting, thanks to the erosion control blankets and hydroseeding of the disturbed soil areas.

The City's Public Works Department provides regular trash pickup, as well as leaf pickup each Fall, and are in the process of buying new, more efficient, trucks. The Public Works Department also performs all street sweeping. Street sweeping is done throughout the City of Valparaiso at least once a year, or more frequently on an as needed basis. The City has just purchased a brand new streetsweeper at a cost of $126,000.00 to aid in cleaning debris from the streets and preventing it from entering the City's receiving waters. Roadside vegetation and plantings are done by either the Public Works department or the Parks Department and done on an as needed basis.

a. How program ensures that local, state, and federal facilities in the MS4 area are managed to reduce contamination from their operations.

   No state or federal facilities exist within the MS4 area except for the state highway department, which is under the responsibility of INDOT.

b. Description of program to implement controls to reduce pollutants from operations areas and be sure you address the following controls:

   i. Covering or otherwise reducing pollutants from de-icing or sand storage areas

      The City's Public Works Department is currently planning and designing a new salt storage area and facility.

   ii. Establishing snow disposal areas that have minimal potential for run-off impact to MS4

      Local snow is generally stockpiled in areas adjacent to streets and in the end caps or end spaces of parking lots. The City has two snow disposal areas, on is located at the WWTP and the other is on the west side Franklin Street south of the C.S.X. railroad. The City is considering a relocation of these areas to keep snowmelt pollutants from near storm water conveyances.

   iii. Containment for accidental losses of concentrated solutions, acids, alkaline, salts, oils, or other polluting materials

      If a minor spill takes place, the Public Works Department uses "dry oil" absorbents to soak up the spill. If large spills occur, Porter Counter HazMat is called for guidance on proper cleanup procedures.

iv. SOP for spill prevention and clean up at fueling operations

The City has an emergency shut off switch located at each refueling station, and a number to call is posted for spills by pumps.

v. BMPs for vehicular maintenance areas

"Dry oil" absorbents are used to soak up spills.

vi. Prohibition of equipment of vehicle wash waters and concrete or asphalt hydrodemolition waste waters

The City of Valparaiso has not used hydrodemolition for any road grinding projects. If hydrodemolition is used in the future, the slurry will be contained and disposed of as necessary.

vii. Minimization of pesticide and fertilizer use

The Valparaiso Golf Courses apply pesticides and fertilizers by an operator who is certified to apply the chemicals. Certification requires knowledge of safety precautions and dosages.

d. Description of program addressing the requirement for procedures for the proper disposal of waste or materials removed from separate storm sewer systems and operational areas.

The Valparaiso Utilities department disposes of sewer materials by first drying the materials at "drying beds" located at the WWTP. Once dry, the material is then landfilled.

e. Description of program addressing the requirement for assessment of new flood management projects for their impacts on water quality and how existing flood management projects are examined for incorporation of additional water quality protection devices or practices.

Due to the location of the City on the morraine, the City does not have "flood management practices."

The City does have practices in place for development in floodplains, per the City of Valparaiso's ordinance for "Requirements for Floodplains," (Part II Article VI of the City's Zoning Ordinance).

Statement of Purpose:

To promote the public health, safety, and general welfare, to minimize flood losses in areas subject to flood hazards, and to promote wise use of the "floodplain," this floodplain zoning ordinance has been established with the following purposes intended:

A. Prohibiting certain uses which are dangerous to life or property in time of flood
B. Restricting uses which would be hazardous to the public health in time of flood
C. Restricting uses, which are particularly susceptible to flood damage, so as to alleviate hardship and reduce demands for public expenditures for relief and protection.
D. Requiring permitted floodplain uses, including public facilities, which serve such uses, to be protected against floods by providing "flood proofing" and general flood protection at the time of initial construction.

f. Description of program addressing training for MS4 entity employees to ensure that they have been properly trained, with periodic refresher sessions.

The City's employees are trained using safety videos, attendance at appropriate workshops and seminars, and instruction from their supervisors.

2. Measurable Goals

BMP 1: Salt Storage Facility
Timeline for Implementation: 2007
Measurable Goal: Completion of the Facility

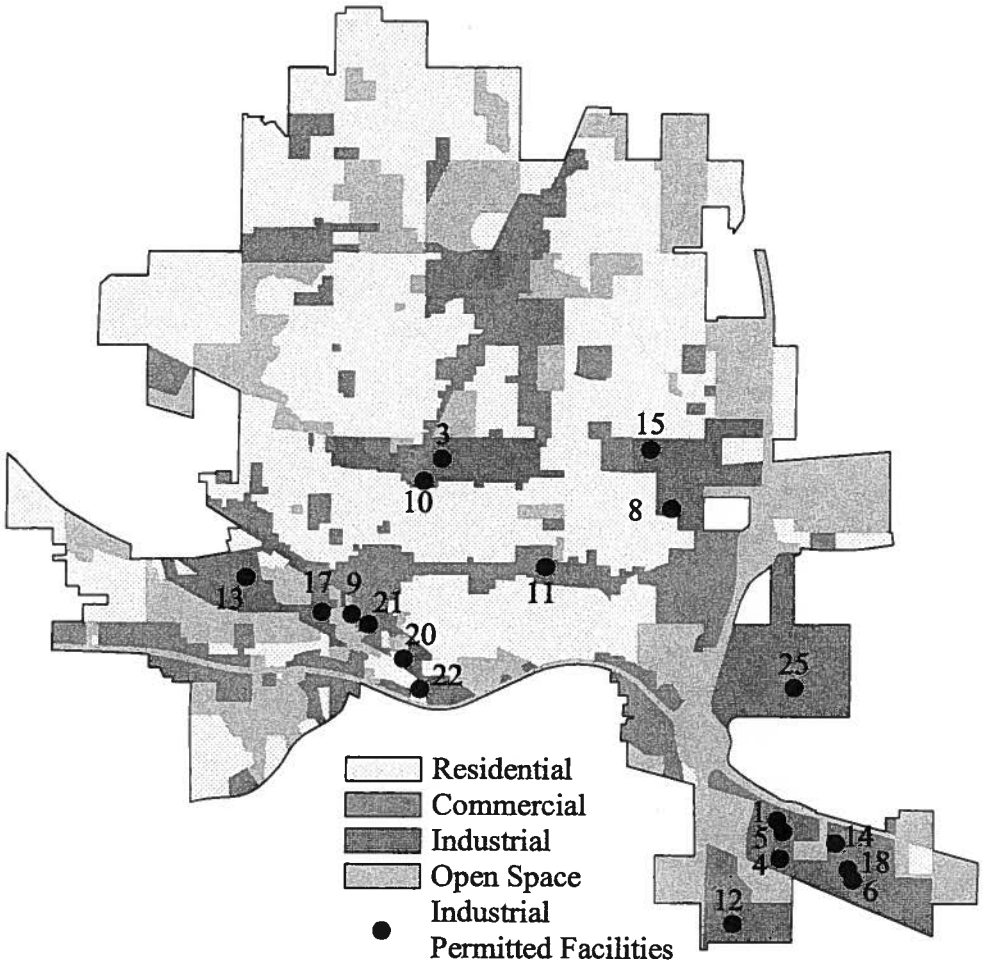
BMP 2: Partnering with Valparaiso University regarding salt storage and management
Timeline for Implementation: 2007
Measurable Goal: Completion of agreement for V.U. to use the City's salt storage facility, end using its own salt storage facility, and therefore eliminate an unneeded potential for additional pollution.

BMP 3: Physical Improvements to Public Works Department Regarding Water Quality
Timeline for Implementation: 2007
Measurable Goal: Completion of Improvements

Section Four
Narrative and Mapped Description of the MS4 Boundaries

A. Narrative description of the boundary of the MS4 regulated area.

The City of Valparaiso is in the northern half of Porter County, northwest Indiana, located in sections 7, 8, 17, 18, 19, 20, 29-33 of Township 35 North, Range 5 West and in sections 1, 11-15, 22-27 of Township 35 North, Range 6 West. The City's population is currently approximately 29,000.



B. Estimate of linear feet of MS4 system and documentation of the method of estimation.

Storm Sewers – approximately 313,882 linear ft
MS4 system – approximately 316,000 linear ft

The estimations for linear footage of storm sewers and overall MS4 system collected field measurements and CAD (Computer Aided Drafting).

Section Five
Narrative Summary of Allowed Structural BMP Types for New and Redevelopment

A. Narrative discussion of overall structural BMP approach. List of approved structural BMPS is provided in Appendix C.

The City of Valparaiso currently is limited to the use of conventional BMPs regarding storm water management. We are planning on expanding our list of allowable BMPs and are in the process of determining appropriate new BMPs and ABMPs.

B. Description of Structural BMPs Selection Criteria and Performance Standards

Currently, the City of Valparaiso uses the topography of the area, soil conditions, and available land for determination and selections of Structural BMPs.

Section Six
Programmatic Indicators for MCMs

The following represents the list of programmatic indicators that are referenced in 327 IAC 15-13-8(b). Those that are checked will be used during the permit period. In addition, other indicators are added at the bottom of the list.

1. Number or percentage of citizens, segregated by type of constituent as referenced in section 327 IAC 15-13-12(a) of Rule 13, that have an awareness of storm water quality issues.	☒
2. Number and description of meetings, training sessions, and events conducted to involve citizen constituents in the storm water program.	☒
3. Number or percentage of citizen constituents that participate in storm water quality improvement programs.	☐
4. Number and location of storm drains marked or cast, segregated by marking method.	☒
5. Estimated or actual linear feet or percentage of MS4 mapped and indicated on an MS4 area map.	☒
6. Number and location of MS4 area outfalls mapped.	☒
7. Number and location of MS4 area outfalls screened for illicit discharges.	☐
8. Number and location of illicit discharges detected.	☒
9. Number and location of illicit discharges eliminated.	☒
10. Number of, and estimated or actual amount of material, segregated by type, collected from Household Hazardous Waste collections in the area.	☒
11. Number and location of constituent drop-off centers for automotive fluid recycling.	☐
12. Number or percentage of constituents that participate n the HHW Collection program.	☐
13. Number of construction sites obtaining an MS4 entity-issued storm water run-off permit in the MS4 area.	☒
14. Number of construction sites inspected.	☒
15. Number and type for enforcement actions taken against construction site operators.	☐
16. Number of, and associated construction site name and location for, public information requests received.	☐
17. Number, type and location of structural BMPs installed.	☐
18. Number, type and location of structural BMPs inspected.	☒
19. Number, type and location of structural BMPs maintained or improved to function properly.	☒
20. Type and location of nonstructural BMPs utilized.	☒
21. Estimated or actual acreage or square footage of open space preserved and mapped in the MS4 area, if applicable.	☒
22. Estimated or actual acreage or square footage of pervious and impervious surfaces mapped in the MS4 area, if applicable.	☒

23. Number and location of new retail gasoline outlets or municipal, state, federal or institutional refueling areas, or outlets or refueling areas that replaced existing tank systems that have installed storm water BMPs.	☒
24. Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting materials.	☐
25. Estimated or actual acreage or square footage, amount, and location where pesticides and fertilizers are applied by a regulated MS4 entity to places where storm water may be exposed within the MS4 area.	☒
26. Estimated or actual linear feet or percentage and location of unvegetated swales and ditches that have an appropriately sized vegetated filter strip.	☐
27. Estimated or actual linear feet or percentage and location of MS4 conveyances cleaned or repaired.	☒
28. Estimated or actual linear feet or percentage and location of roadside shoulders and ditches stabilized, if applicable.	☐
29. Number and location of storm water outfall areas remediated from scouring conditions, if applicable.	☒
30. Number and location of de-icing salt and sand storage areas covered or otherwise improved to minimize storm water exposure.	☒
31. Estimated or actual amount, in tons, of salt and sand used for snow and ice control.	☒
32. Estimated or actual amount of material by weight collected from catch basin, trash rack, or other structural BMP cleaning.	☒
33. Estimated or actual amount of material by weight collected from street sweeping, if utilized.	☒

Section Seven
Estimated Budget and Funding Source

A. Summary of the Estimated Program Budget for Five-Year Permit Period (Budget Attached as Appendix D)

The City of Valparaiso's Storm Water Management Board (SWMB) has set aside $62,000 to use in 2005 for Phase II (Rule 13). NIRPC is providing the requirements for Public Education/Outreach and Public Involvement/Participation for the City. The 2005 cost for NIRPC's services is $7,848.46 and each year after that is $9,357.00 for the permit term.

The City's SWMB is also spending $27,641.00 annually for the purchase of a new $126,000.00 streetsweeper. The remainder of the SWMB's $62,000 annual phase II budget will be split among the other 4 MCMs on an as-needed basis.

The SWMB also funds construction projects repairing or stabilizing stream, repairing areas from outfall scouring, funding sewer separation projects.

B. Identification of Funding Source for Permit Implementation

The City's SWMB established a storm water utility fee based on the amount of impervious area a property contains. Part of the annual fees collected is used to fund the City's Rule 13 compliance. This fee will be the main source of funding for Rule 13 compliance throughout the length of the permit period.

List of Appendices

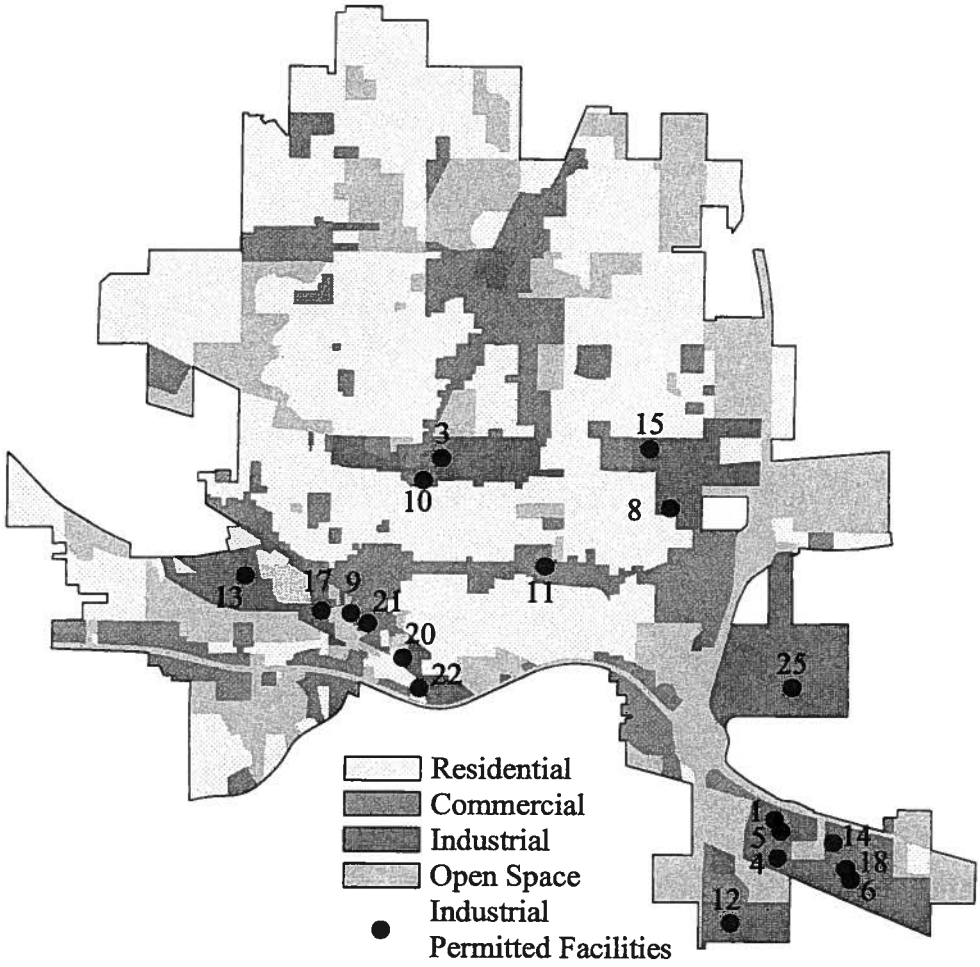
Appendix A: Map of MS4 Boundaries
Appendix B: List of all known industrial facilities discharging to MS4
Appendix C: List of Allowed Structural BMPs
Appendix D: Five-Year Program Budget
Appendix E: Documentation of Legal Agreements for Sharing Program Responsibilities
Appendix F: Documentation of Implementation of Regulatory Mechanisms
1. Illicit Discharge Program
2. Construction Site Run-off Control Program

Appendix G: Maps of Combined Sewer Area and Permitted CSO outfall #002

Appendix A:

Map of MS4 Area Boundaries

The City of Valparaiso is in the northern half of Porter County, northwest Indiana, located in sections 7, 8, 17, 18, 19, 20, 29-33 of Township 35 North, Range 5 West and in sections 1, 11-15, 22-27 of Township 35 North, Range 6 West. The City's population is currently approximately 29,000.



Appendix: B

List of All Known Industrial Facilities Discharging to MS4

#	Facility Name	City	SIC Code	NOI Rcvd	Exempt	NOT/Exempt Rec
1	UGN, Inc.	Valparaiso	3714	11/14/2000	No	
2	ALTERNATE RECYCLING & DISPOSAL	Valparaiso	4953	5/17/1996	No	
3	BEACH ASPHALT CO. INC.	Valparaiso	2951	4/2/1997	Yes	22-Mar-04
4	AOC, L.L.C.	Valparaiso	2821	9/18/1992	No	
5	OWENS-CORNING FIBERGLASS TANK DIVISION	Valparaiso	3079	10/7/1992	Yes	
6	OZINGA BROTHERS INC.	Valparaiso	3714	6/23/1998	Yes	
7	PORTER COUNTY MUNICIPAL AIRPORT	Valparaiso	4581	7/11/1994	No	
8	POWDERTECH CORPORATION	Valparaiso	3499	8/14/1995	Yes	
9	SMITH NUPPNAU READY MIX	Valparaiso	3273	7/8/1994	Yes	20-May-04
10	UGIMAG INC. / MAGNEQUENCH-UG, INC.	Valparaiso	3499	2/16/1994	Yes	05-May-04
11	VALPARAISO AUTO PARTS	Valparaiso	5015	8/15/1994	Yes	
12	JET CORR, INC.	Valparaiso	2653	3/13/2000	No	
13	Valparaiso Municipal STP	Valparaiso	4952		No	
14	REXAM BEVERAGE CAN COMPANY	Valparaiso	3411	6/19/1995	Yes	
15	McGill Manufacturing Co.	Valparaiso	3562		Yes	28-Jul-03
16	KANE MAGNETICS ACQUISITIION, LLC	Valparaiso	3499		No	
17	Continental/Midland, LLC	Valparaiso	3452	2/12/2002	Yes	21-Apr-04
18	North American Packaging Corp.	Valparaiso	3089		Yes	13-Dec-02
19	Auto Salvage Yard (Donna Craig)	Valparaiso	5015		No	
20	BUBBA TOWING	Valparaiso	5015		No	
21	GREEN SERVICE INC	Valparaiso			Yes	03-Oct-03
22	KENNELLYS AUTO DIV CLASSY CHASSIS	Valparaiso			Yes	20-Oct-03
23	L & W AUTO SALVAGE	Valparaiso	5015		No	
24	METRO AUTO PARTS	Valparaiso	5015	6/3/2003	No	
25	SHORELAND METALS INC c/o Onyx Special Services, Inc.	Valparaiso	3441		No	17-Nov-03
26	AL TIRE	Valparaiso	5015		No	
27	ARCHIES AUTO RECYCLING INC	Valparaiso	5015		Yes	18-Jun-03
28	B & E HONDA	Valparaiso			Yes	30-Jun-03
29	South Haven Sewer Works, Inc.	Valparaiso	4952		No	

Appendix C:

List of Allowed Structural BMPs

1. Catch Basins
2. Curb/Gutter
3. Detention Basins
4. Inlets
5. Inlet filters
6. Rain Gardens
7. Rain Store Detention
8. Roadside Swales
9. Sediments Traps
10. Silt Fence
11. Storm Sewers

In addition to this list of general Structural BMPs the City of Valparaiso's *Drainage Ordinance* and *Specifications and Standards For Acceptance of Municipal Improvements* disallow discharge from surface or subsurface drains including sump pumps, footing drains, downspout drains, or similar drains (as determined by the office of the City Engineering Director or the Board of Public Works and Safety) from being within ten feet of a public street right-of-way line and that the location and configuration of downspouts and/or sump pump discharges shall be such that the runoff does not damage or inconvenience adjacent properties. These stipulations are aimed at improving drainage conditions and water quality by having the water drain over a vegetated area that will allow for filtration of pollutants and infiltration of water into the ground.

Appendix D:

Five-Year Program Budget

ANNUAL RULE 13(PHASE II) BUDGET: $62,000.00

#	Minimum Control Measures	2005 Budgeted Amount ($)	2006 Budgeted Amount ($)	2007 Budgeted Amount ($)	2008 Budgeted Amount ($)	2009 Budgeted Amount ($)
1	Public Education and Outreach*	5,000.00 (3,924.23 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)
2	Public Involvement/ Participation*	5,000.00 (3,924.23 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)	5,500.00 (4,678.50 to NIRPC)
3	Illicit Discharge Detection and Elimination	5,666.67	5,000.00	5,000.00	5,000.00	5,000.00
4	Construction Site Storm Water Run-off Control	5,666.67	5,000.00	5,000.00	5,000.00	5,000.00
5	Post-Construction Water Management in New Development and Redevelopment	5,666.67	5,000.00	5,000.00	5,000.00	5,000.00
6	Pollution Prevention/Good Housekeeping for Municipal Operations**	35,000.00 (27,641.00 to Streetsweeper)	35,000.00 (27,641.00 to Streetsweeper)	35,000.00 (27,641.00 to Streetsweeper)	35,000.00 (27,641.00 to Streetsweeper)	35,000.00 (27,641.00 to Streetsweeper)
	TOTALS	**62,000.00**	**62,000.00**	**62,000.00**	**62,000.00**	**62,000.00**

* $3,924.23 is paid to NIRPC in year 1 of the permit for Public Education and Outreach and Public Involvement/Participation; NIRPC is paid $9,357.00 for years 2-5 of the permit.

** $27,641.00 is used annually for Pollution Prevention/Good Housekeeping for Municipal Operations to pay for the cost of a new street sweeper.

Appendix E:
Documentation of Legal Agreements for Sharing Program Responsibilities

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) AGREEMENT
between
The City of Valparaiso, Porter County, Indiana
and
The Lutheran University Association
(Valparaiso University)

This AGREEMENT, made and entered into as of the 12 day of February, 2004, by and between the City of Valparaiso, acting by and through its Board of Public Works and Safety, and hereafter called CITY, and The Lutheran University Association, hereinafter referred to as UNIVERSITY. (The term UNIVERSITY includes all faculty, staff and other employees of the University)

WITNESSETH THAT:

Whereas, the Indiana Department of Environmental Management, hereinafter referred to as "IDEM", has designated both the CITY and the UNIVERSITY as MS4 Entities under the provisions of 327 IAC 15-13 (Rule 13), and

Whereas, the UNIVERSITY is an entity substantially located within the corporate limits of the CITY, and

Whereas, IDEM encourages regulated communities and entities to coordinate their MS4 activities, and

Whereas, the CITY and the UNIVERSITY recognize that efforts towards improving water quality will be facilitated if said parties coordinate their MS4 activities, and

Whereas, the coordination of said MS4 activities will be cost effective to both parties and thus to the public, and

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. The lands contained within the corporate limits of the CITY, including those lands within the City's corporate limits and owned by the UNIVERSITY are hereby included and designated as the "Valparaiso Joint MS4 Area", and hereinafter known as the "MS4 AREA".

2. CITY will be the responsible entity for the application, development, implementation and permit compliance for the MS4 program within said MS4 AREA and will designate the MS4 "Operator", the "Responsible Individual", the "Qualified Professional" and the "Primary Contact Person".

3. UNIVERSITY will designate an MS4 campus coordinator, hereinafter called "Coordinator", to assist the CITY with the responsibilities of being the permitted entity. Coordinator, together with the CITY Operator, will establish written protocol for the effective development, implementation, enforcement and reporting of the MS4 activities within the UNIVERSITY area depicted on the plat attached hereto and hereinafter referred to as the UNIVERSITY MS4 AREA. The UNIVERSITY MS4 AREA shall not include any land used for residential purposes other than student dormitories.

4. UNIVERSITY will designate one individual to actively serve on the CITY's Storm Water Advisory Committee (SWAC) and assist in the review and development of the City's Storm Water Quality Management Plan (SWQMP). It is expected that said individual will attend and conscientiously contribute to the relevant discussions and decisions of the SWAC. If a situation arises where such individual will not or cannot so attend and contribute, UNIVERSITY shall, in a timely manner, appoint another individual to replace the prior appointee.

5. UNIVERSITY will designate one individual as their "responsible individual" hereinafter known as UNIVERSITY RESPONSIBLE INDIVIDUAL to execute the Notice of Intent, this AGREEMENT and other documents pertaining to MS4 activities on behalf of the UNIVERSITY. Said individual shall have appropriate authority to execute said documents on behalf of the UNIVERSITY. Said UNIVERSITY RESPONSIBLE INDIVIDUAL shall be the Vice President, Administration and Finance.

6. UNIVERSITY will, in a timely manner, furnish the CITY with all pertinent plans, maps, sketches and diagrams of the UNIVERSITY's surface water drainage plans showing buildings, utilities and special drainage features including, but not limited to catch basins, inlets, sewers, ditches, swales and field tiles. Said maps, plans, etc. shall include, where available, the topography of the sites so that the routes of any overland flows may be determined.

7. UNIVERSITY will, in a timely manner, furnish the CITY with all known locations of illicit connections or discharges, and/or any illegal dumping activities within the UNIVERSITY MS4 AREA, and will notify the CITY of any such locations that may be discovered at any time during the term of this AGREEMENT. The UNIVERSITY will work with the CITY to establish an acceptable protocol to eliminate such illicit discharges and/or dumping.

8. UNIVERSITY will, to the maximum practical extent possible, incorporate Best Management Practices (BMPs) in any new construction or reconstruction occurring within the UNIVERSITY MS4 AREA and will develop a program to retrofit existing developed facilities with said BMPs where appropriate and as finances allow. The BMPs shall be those identified in the CITY's MS4 program and established by ordinance as acceptable measures for use within the MS4 AREA.

9. UNIVERSITY will operate, maintain, and repair all BMPs existing and installed or constructed in the UNIVERSITY MS4 AREA.

10. UNIVERSITY will develop, implement and enforce the activities, operations and procedures necessary to comply with the (SWQMP) once developed by the CITY.

11. CITY and UNIVERSITY agree to participate in the "Public Education and Outreach" and the "Public Involvement and Participation" minimum control measures (MCMs) being developed by the Northwestern Indiana Regional Planning Commission (NIRPC) for the three county region covered by the Metropolitan Planning Organization. Said MCMs may be supplemented from time to time with activities specifically planned by and for either the CITY and/or the UNIVERSITY. Any costs associated with said participation shall be prorated between the parties according to the areas of the respective entities' lands.

12. CITY and UNIVERSITY agree to individually pay the costs of any future fees, permit charges or other costs levied or assessed by IDEM, their successor or assigns, as a part of the parties' involvement under the MS4 program. Unless specifically designated to CITY or UNIVERSITY, said costs shall be prorated according to the areas of the respective entities' lands.

13. In return for the CITY being the responsible party with respect to the MS4 program and agreeing to include UNIVERSITY under its permit, University agrees to conduct monitoring of the receiving waters in the MS4 AREA as defined under the program. Said monitoring shall be conducted once in the 6 month period immediately following the submission of the Notice of Intent (NOI) by the CITY, and thereafter at least once annually on each receiving water body at locations to be mutually determined by CITY and UNIVERSITY. The intent of the monitoring is to establish the baseline character of the water quality in each receiving water body and thereafter check for the maintenance or improvement of said quality. The results of each monitoring activity shall be submitted in report form to the CITY's Operator within 30 days of the actual monitoring. Said monitoring shall be conducted at one location each on Salt Creek, Beauty Creek and Seeger's Run by an undergraduate biology lab class during their field trip under the supervision of their UNIVERSITY instructor. The UNIVERSITY shall not be required to furnish any certified, registered or otherwise licensed professional person in connection with performing such monitoring. All reports generated by said personnel will include a disclaimer which shall read as follows: *"The above report was generated by students of Valparaiso University as a result of a field trip for the exclusive use of the UNIVERSITY, CITY and IDEM and should not be relied upon by any other person or entity for any purpose whatsoever".*

14. CITY will make all components of the MS4 program available to the UNIVERSITY for review, discussion and comment.

15. CITY and UNIVERSITY may mutually agree to amend this agreement at any time during its term.

16. The term of this AGREEMENT shall run concurrently with the National Pollutant Discharge Elimination System (NPDES) permit associated with the activities described herein. CITY and UNIVERSITY agree to evaluate the terms of this AGREEMENT at least one hundred eighty (180) days prior to its expiration. At that time the parties may agree to amend, extend or terminate the AGREEMENT at the time of the expiration of the current permit.

17. Should either the CITY or the UNIVERSITY fail in its obligations provided herein and after notice refuse to correct said failure, either party may terminate the AGREEMENT upon sixty (60) days written notice to both the other party and to IDEM. Said notice shall be made by certified mail served to the officer(s) who executed this AGREEMENT or the current office holder. The designated Offices/Office holders are:

For the CITY: Jon Costas, Mayor
City of Valparaiso
166 Lincolnway
Valparaiso, IN 46383

For the UNIVERSITY: Charlie Gilliapie, Vice Pres. Admin and Finance
Kretzman Hall
Valparaiso University
Valparaiso, IN 46383

Each entity is responsible to advise the other of any change in such service designee.

IN WITNESS WHEREOF, the parties have executed this AGREEMENT in two (2) identical originals.

LUTHERAN UNIVERSITY ASSOCIATION: BY: Charles E. Gilliapie
Charlie Gilliapie, Vice President

STATE OF INDIANA)
)SS:
COUNTY OF PORTER)

Before me, the undersigned Notary Public, this 12th day of February, 2004, appeared Mr. Charlie Gilliapie, Vice President for Finance and Administration, Valparaiso University, who acknowledged the execution of the above and foregoing Agreement.

WITNESS, my hand and seal: Barbara Neff Cuban
Signature Notary Public

Barbara Neff Cuban
Name Printed

I am a resident of Porter County.

My commission expires: 10/18/2010.

CITY OF VALPARAISO: BY: Jon Costas, Mayor

Attest: Sharon Swihart
Sharon Swihart, Clerk Treasurer

Joan A. Hardwick, Member

David L. Pilz, Member

Appendix F:
Documentation of Implementation of Regulatory Mechanisms

1. Illicit Discharge Program

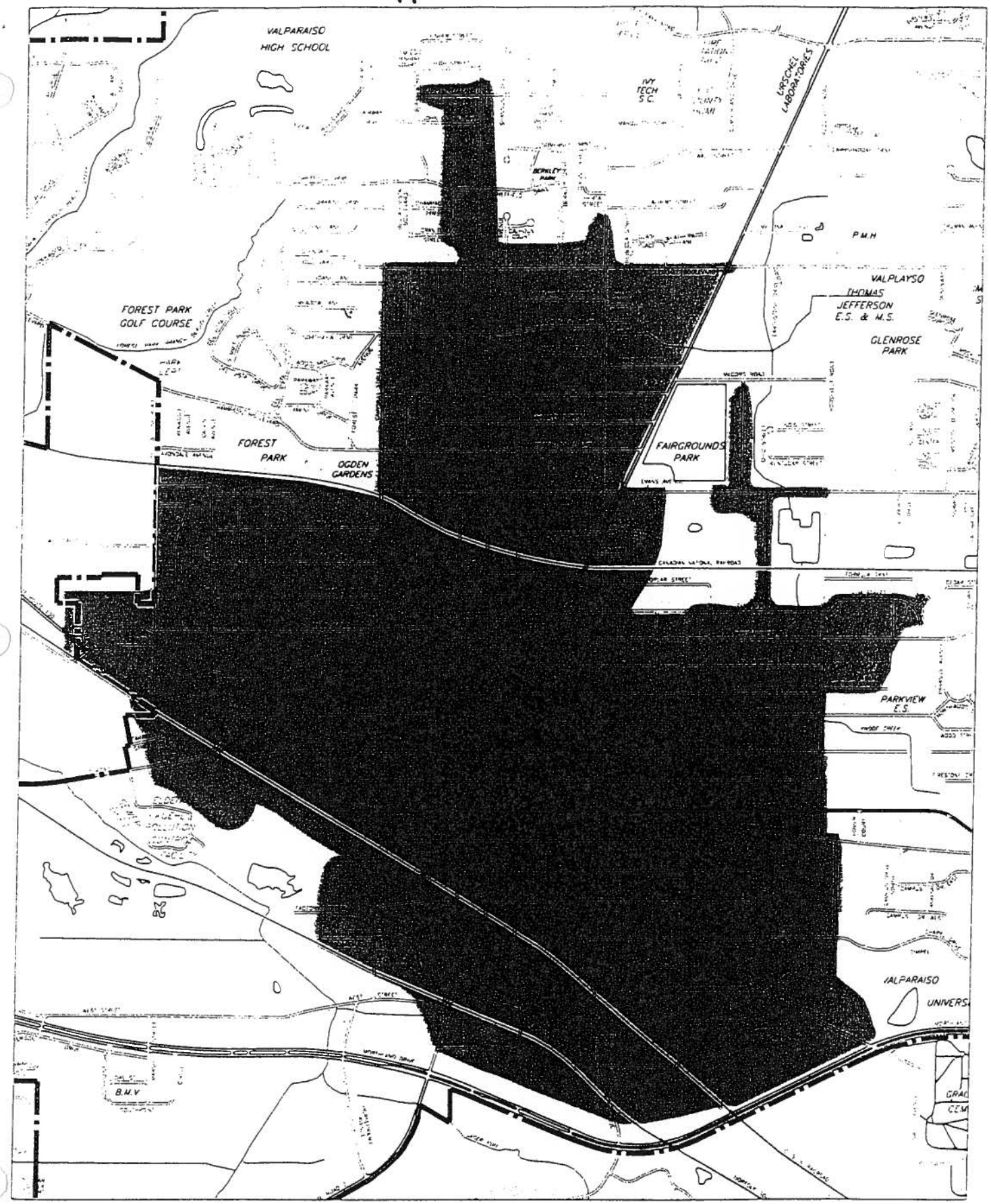
The City of Valparaiso is currently researching "illicit discharge" ordinances and considering the enactment of such an ordinance. In 2005, the City's MS4 operator and Engineering Department will continue to research and develop a suitable "illicit discharge" ordinance for presentation to the City's SWMB.

2. Construction Site Run-off Control Program

The City of Valparaiso has an erosion control ordinance contained in Part IV, Article XXVIII, of the City's Zoning Ordinance. The objective of Valparaiso's Erosion Control On Sites With Land Disturbing Activities 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 vegetation cover has been disturbed. The ordinance applies to land disturbing activities including those associated with agricultural, commercial, industrial, institutional, residential, and highway development.

The City Engineering Department and SWMB are currently revising the existing ordinance to further minimize erosion and examine enforcement procedures. A draft copy of this ordinance is complete and currently under revision.

Appendix 6

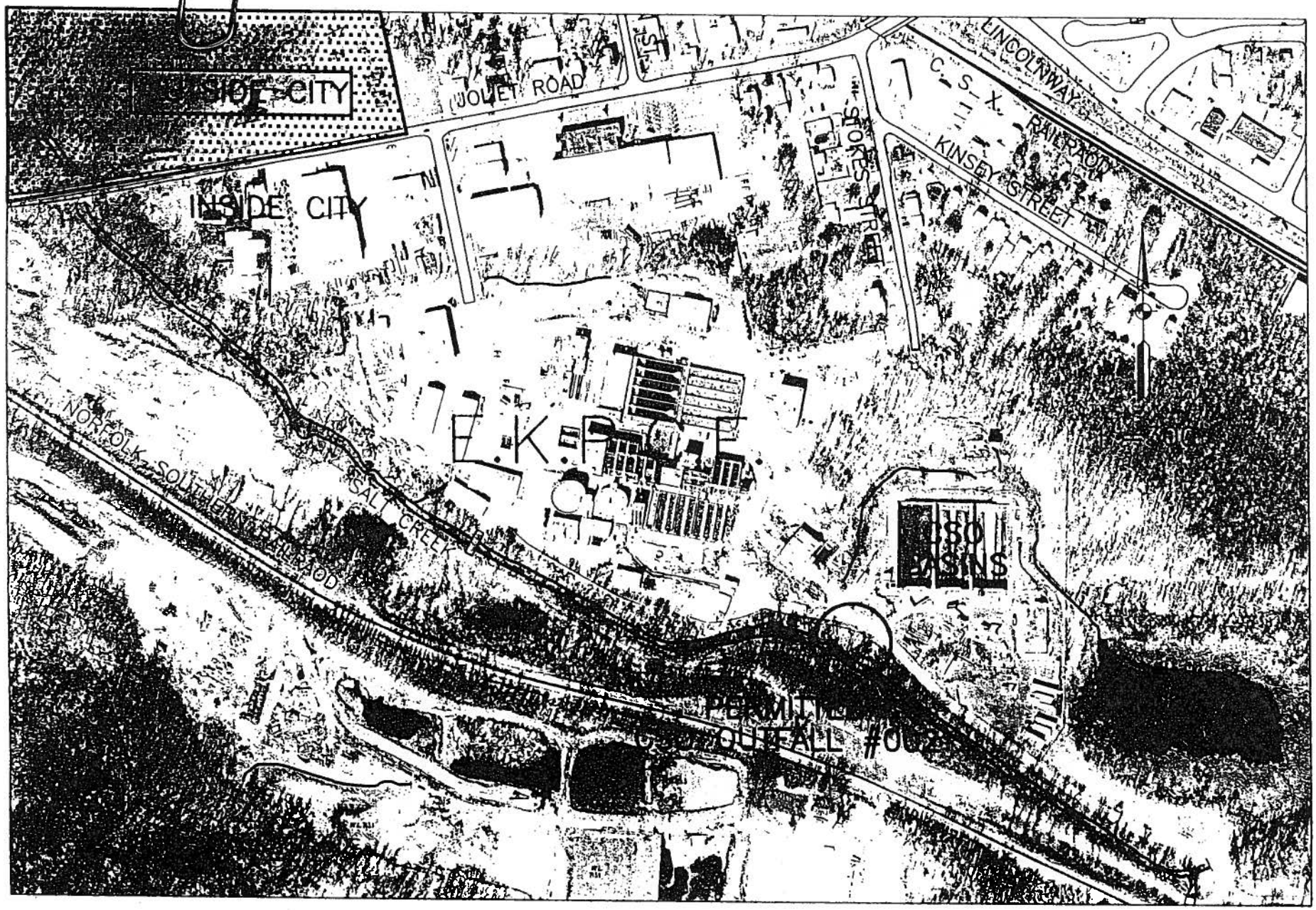


MAP A: COMBINED SEWER AREA

VALPARAISO CORPORATION LIMITS (12.0± Sq. Miles)

APPROXIMATE COMBINED SEWER AREA (2.2± Sq. Miles)

JWGFiles\WRRDAVE\VALPOS COMBINE.dwg, 10/17/2003 1:38:30 PM



MAP B: PERMITTED CSO OUTFALL #002