

# Technical Memorandum

Date: Tuesday, February 16, 2016 (Revised)

Project: Stormwater Master Plan Update

To: City of Cedar Rapids

From: David Dechant, Mike Butterfield, Ron Geiger/HDR

Subject: TM 7.0 Future Considerations

This Technical Memorandum presents and discusses other considerations relative to the Stormwater Management Program.

It is organized as follows.

- Objective
- Summary
- Background
- Implementation
- Roles and Responsibilities
- Growth Areas
- Regulatory Requirements
- Flood Control System

The following are attached.

- Attachment A - MS4 Permit
- Attachment B – Construction General Permit

## Objective

The objective of this Technical Memorandum is to do the following.

- Provide background information with respect to the City's approach to Master Planning and Master Plan Implementation
- Identify Roles and Responsibilities for the Stormwater Management Program
- Present related considerations relative to future Growth Areas, future Regulatory Requirements, and the ongoing Flood Protection Project.

## Summary

This Technical Memorandum 7.0 Future Considerations can be summarized as follows.

The Master Plan is intended to be a living document with regular updates to maintain and progress the plan. These updates include annual updates to the prioritized Capital Improvement Project List, updates over the next several years to reflect additional modeling for

each of the major interceptor basins, development of a specific financial plan, and more comprehensive updates on a five year cycle.

The City Council, City Manager's Office, Stormwater Commission, Public Works Department, and Development Services all have a role in implementation of a stormwater management program. All must have a vested interest with regulatory compliance with the NPDES permit, meeting the needs of the public they serve, and the associated financial constraints. The primary responsibility to lead efforts to budget and fund the program and implement and update the elements of the Master Plan lies with the Public Works Sewer Utility Engineering Manager. Support will be provided by the Sewer Superintendent, Project Engineers, and Stormwater Coordinator.

Anticipated growth areas are identified in the City's 2015 comprehensive plan entitled EnvisionCR. Anticipation and planning for this growth is critical to cost effective implementation of a stormwater management program. Furthermore, cost effectiveness is dependent on initially targeting growth areas that can be cost effectively served, identifying the appropriate regional stormwater facilities to do so, sizing stormwater facilities associated with specific developments to be consistent with the broader plan, identifying the appropriate stormwater infrastructure cost sharing for each development, and avoiding the need to subsequently address problems that invariably result from failure to do so.

Federal and state regulatory requirements have historically and will continue to impact stormwater management staffing and funding levels. Stormwater related regulations continue to evolve at both the Federal and State levels. In particular, the EPA is currently working on crafting an updated version of its existing stormwater rules that is tied to a settlement agreement with the Chesapeake Bay Foundation on pollution in the Chesapeake Bay. The proposed rule may impact all Phase I, Phase II and non-regulated Municipal Separate Storm Sewer Systems (MS4). Under the most recent proposal, performance standards for discharges from new development and redeveloped sites will be established.

While not currently defined, the Cedar River flood control system will have a significant impact on future operations and maintenance staffing and funding levels. As currently anticipated, levee and floodwall maintenance will be performed by either Public Works or Parks & Recreation, and stormwater pump stations will likely be overseen by the Water Pollution Control division of the Utilities department. In any case, regular operation and maintenance will be necessary to maintain system integrity and readiness, to respond to rising river levels, and to continually provide City staff with the training to respond to rising river levels.

## **Background**

Reflective of actual costs for Dubuque and others, a comprehensive model-based master plan can cost on the order of \$70,000 to \$80,000 per square mile in 2015 dollars. For a City the size of Cedar Rapids, that translates to over \$5 million. The City of Cedar Rapids is taking a different approach to initiate preparation of a living Master Plan that will evolve with time. The different approach was necessitated by financial constraints as follows.

- A current operating budget of \$3.5 million per year generating approximately \$2 million per year for capital improvements.
- A stormwater capital need approaching \$50 million to implement 1998 Master Plan recommendations and address problems with flash flooding experienced in 2014.

This approach is described in more detail in the following section.

## Implementation

The prior 1998 Master Plan was not implemented as effectively as intended and was not updated over the years. Moving forward, this Master Plan is intended to be a living document that will be implemented and updated annually as funding becomes available, additional modeling is performed, and new policies are implemented.

The initial version of this Master Plan published in early 2016 is just a start to the planning process; the primary objective of the initial version being as follows.

- To establish the appropriate criteria and to prioritize previously identified stormwater capital improvements projects for FY2017 and the first few years thereafter.
- To develop a model that can be used for broader analysis of problems and project solutions in connection with implementation of capital improvement projects.
- To develop a living document that can be integrated with annual capital improvements planning and budgeting, and policy changes.

Implementation is intended to include continual use and updating of the plan on a regular basis. This section focuses on two key areas for implementation.

- Roles and Responsibilities of City staff.
- Updates to maintain and progress the Master Plan.

### Roles and Responsibilities

Roles and responsibilities for City staff are described in more detail in a subsequent section of this Technical Memorandum. With respect to development and implementation of this Master Plan, the primary responsibility lies with the Public Works Sewer Utility Engineering Manager. He/she will lead efforts to budget and fund the program and implement and update the elements of the Master Plan. Support will be provided by the Sewer Superintendent, Project Engineers, and Stormwater Coordinator.

### Plan Update

The Master Plan is intended to be a living document with regular updates as follows to maintain and progress the plan.

- Updates to the prioritized Capital Improvement Project List as part of the City's annual budgeting process to reflect additional information, staff experience, the City's priorities, and customer input (some of which will come from awareness of new problem areas).
- Additional modeling to reflect supplemental field information as available, to provide the necessary detail to refine upcoming projects in the capital improvements plan, and to

support studies to define stormwater needs in growth areas. The need for additional modeling and the results of that modeling should be incorporated into the Master Plan annually.

- A more comprehensive update to the Master Plan should be prepared every five years so that the document does not become disjointed with the aforementioned annual updates.
- Development of a specific financial plan that reflects the financial strategy outlined in the Financial Needs Technical Memorandum and the advice of Municipal Financial Advisor.
- Updates to the specific financial plan in conjunction with the five year updates to the Master Plan

## **Roles and Responsibilities**

The City Council, City Manager's Office, Stormwater Commission, Public Works Department, and Development Services all have a role in implementation of a stormwater management program. Clearly defined roles and responsibilities are critical in the daily execution and long term implementation of an effective stormwater management program. All must have a vested interest with regulatory compliance with the NPDES permit, meeting the needs of the public they serve, and the associated financial constraints. Roles and responsibilities for key players are defined below.

### **City Council**

The Cedar Rapids City Council consists of eight council members plus the mayor. The mayor and three council members are elected at large. The remaining five council members are elected by voters in each of five districts. The mayor and council, as a collegial body, are responsible for setting policy, approving the budget and determining the taxes and utility fees. The mayor is recognized as the political head of the municipality but is a member of the legislative body and does not have the power to veto legislative actions.

City Council Committees have been established to enhance communication between the City Council and City staff at an early phase in the development of significant items affecting public policy questions. These Committees enable City staff to obtain early feedback from representative members of the City Council on issues affecting public policy prior to their presentation to the full Council. City Council Committees do not replace the City Council as policy makers. Any discussion or feedback expressed or received at a Committee meeting should not be construed or understood to be a decision by or for the City Council.

The City Council Committees that may be relevant to stormwater policy within the City of Cedar Rapids include the following:

#### **INFRASTRUCTURE COMMITTEE:**

The purpose of the Infrastructure Committee is to enable the City Council to discuss and evaluate in greater detail issues that directly impact the quality and sustainability of the infrastructure of the City of Cedar Rapids. Meetings will typically be scheduled the third Tuesday of every month at 4:00 pm.

**FLOOD CONTROL SYSTEM COMMITTEE:**

The purpose of the Flood Control System Committee is to enable the City Council to discuss and evaluate in greater detail issues that directly impact the Cedar River flood protection system for the City of Cedar Rapids. Meetings are tentatively set to occur on a monthly basis. Meetings will typically be scheduled the third Thursday from 11:00-12:00 on the months they are held.

**DEVELOPMENT COMMITTEE:**

The purpose of the Development Committee is to enable the City Council to discuss and evaluate in greater detail issues that directly impact the physical, social, and economic vibrancy of the City of Cedar Rapids. Development Committee meets the 3rd Wednesday of every month at 3:00 p.m.

**City Manager's Office**

The City Council appoints a full-time city manager to carry out the policies it establishes and to oversee the day-to-day administrative operations of city government. The manager is also responsible for preparing the budget and personnel management. Each city department is managed by a director, who reports to the city manager.

The City Manager's Office is responsible for the following:

- Support the decision-making process of the Cedar Rapids City Council
- Ensure citywide alignment and implementation of City Council goals
- Coordinate and direct citywide strategic communications plans that proactively provide accurate and timely information to the citizens of Cedar Rapids
- Provide strategic leadership that ensures efficient, effective and responsive public service.

**Stormwater Commission**

The Cedar Rapids Stormwater Commission consists of five (5) members who are Cedar Rapids residents appointed by the Mayor with the advice and consent of the City Council. It is an advisory commission established by the Cedar Rapids City Council in December 2008 (Ordinance No. 041-08) to review current stormwater policies and recommend improvements to the policies as needed. The Stormwater Commission is an entity mandated by the Federal Clean Water Act per the City of Cedar Rapids state-issued National Pollutant Elimination System (NPDES) permit for the operation of a Municipal Separate Storm Sewer System (MS4).

The Stormwater Commission has general oversight of drainage issues. Duties of the Cedar Rapids Stormwater Commission include but are not limited to:

- Develops and recommends stormwater policies, such as water quality and watershed-based approaches.
- Reviews public input regarding stormwater drainage or erosion and sediment control. Recommends corrective actions.
- Advises the City Council in regards to stormwater Capital Improvements projects.

- Provides property owners with additional resources to resolve private drainage problems.

## **Public Works Department**

An organizational chart for the Public Works Department is included as Figure 1. The Public Works Department maintains existing and provides for future streets, bridges, stormwater, sanitary sewer and trail infrastructure in a clean, safe and responsive manner that sustains the life, health, welfare, environment and aesthetic enjoyment for all segments of the community through innovative, efficient and accountable design, construction, quality of materials and maintenance methods.

### **PUBLIC WORKS DIRECTOR**

The Public Works Director organizes, directs, and coordinates the programs and activities of the Public Works Department with broad guidance from the City Manager. The Public Works Director plans the construction of approved infrastructure capital improvements programs and directs, as necessary, to implement organizational change to achieve a more competitive service delivery process based on continuous improvement systems.

### **CITY ENGINEER**

The City Engineer manages the development, design, budgeting, bidding and implementation of public works engineering and construction projects for the City's Public Works Department and serves as a member of the Public Works management team.

### **FLOOD CONTROL PROGRAM MANAGER**

The Flood Control Program Manager oversees and directs the flood mitigation program to implement the City's Flood Protection System design. The Flood Control Program Manager ensures timely design and construction schedules are met and is responsible for ensuring that the City's Flood Protection System is FEMA accredited, once completed.

### **SEWER UTILITY ENGINEERING MANAGER**

The Sewer Utility Engineering Manager plans, monitors and manages the sanitary sewer utility and storm water utility for the Engineering Division of the City's Public Works Department.

Duties of the Sewer Utility Engineering Manager include but are not limited to the following:

- Plans, develops, supervises, evaluates and oversees the operational processes, procedures and functions of the Engineering Division's sanitary sewer and storm water utilities.
- Supervises Project Engineer and Design Engineer positions.
- Acts as City staff liaison to, and coordinates activities of the City's Storm Water Commission.

- Develops and maintains 10-year operations and CIP plan for Storm Water (304) and Sanitary Sewer (655) CIP and coordinates funding and implementation of said CIP Program.
- Develops 28E Cooperative Agreements with neighboring jurisdictions for regional utility issues, which cross corporate limits.
- Develops and maintains performance measurement and benchmarking to demonstrate utility effectiveness and create and implement associated process improvements.
- Develops and approves engineering reports, studies and preliminary designs for utility needs.
- Reviews final designs for implementation of capital improvement projects.
- Prepares request for proposals for engineers, contractors, consultants and vendors.

Duties of Project Engineers include but are not limited to the following:

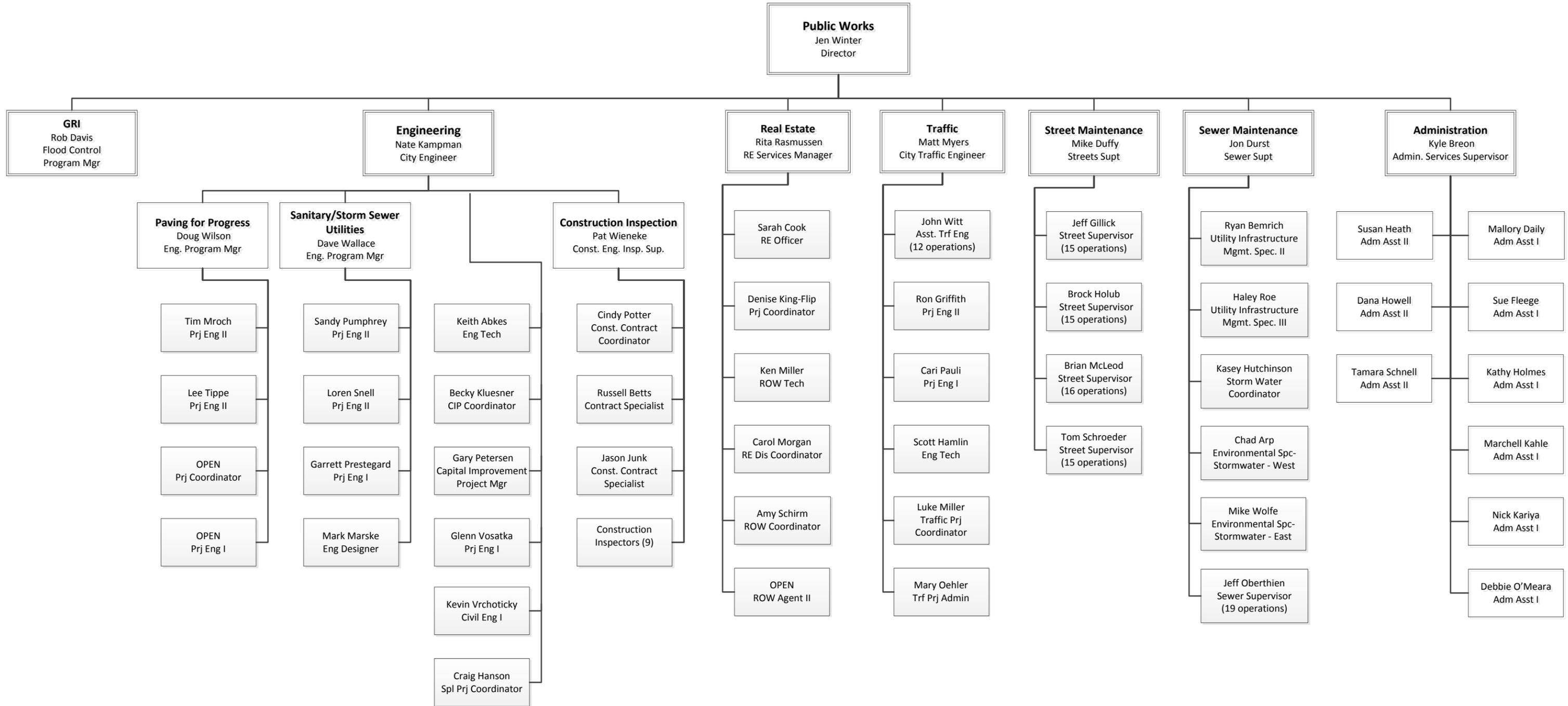
- Develops engineering designs of public works construction projects and activities.
- Develops project cost and materials estimates for current and projected public works activities.
- Develops engineering and construction project specifications defining project needs and parameters.
- Determines project surveying needs and coordinates requirements with survey and design personnel.
- Determines project right-of-way and property acquisition needs and requirements and develops accompanying legal descriptions.
- Reviews and recommends approval or modification of consulting engineering designs, plans and specifications for departmental projects.
- Conducts feasibility studies and field reviews of current and proposed projects to evaluate project need, determine parameters, recommend design features and modifications and prepare preliminary project costs.
- Coordinates utility location, easement and construction activities with utility representatives.
- Prepares documentation and obtains required construction permits.

#### **PROJECT ENGINEER**

Project Engineers develop engineering plans, designs and specifications for the City's Engineering Division.



Figure 1 Organizational Chart  
**City of Cedar Rapids Public Works**  
 09/14/2015





#### **ENGINEERING DESIGNER**

Engineering Designers design public improvement projects for the City's Engineering Division.

Duties of Engineering Designers include but are not limited to the following:

- Designs and performs CADD work to develop basic map plans, specifications and features for public improvement projects such as storm sewer systems, sanitary sewer systems, park trails and pedestrian bridges, and drainage and flood control systems.
- Recommends project improvement detail to engineers and contractors to increase constructability effectiveness.
- Develops drainage calculations based on storm frequency, topography, hydraulic and engineering calculations.
- Develops construction specifications, materials selections, proposed construction methodology and project cost estimates.
- Conducts feasibility studies and research.
- Analyzes projects budgetary costs of proposed capital improvement project.
- Conducts field and site reviews of proposed engineering and construction projects to develop project concepts and identify problems.
- Develops presentation materials, both technical and visual, charts, diagrams and computer presentations supporting projects.
- Monitors survey and drafting reports, parameters and data.

#### **SEWER SUPERINTENDENT**

The Sewer Superintendent manages and evaluates the maintenance and construction programs and activities for the City's storm water and sanitary sewer collection systems.

Duties of the Sewer Superintendent include but are not limited to the following:

- Plans, develops, manages and evaluates the operational processes, procedures and functions of the storm water and sanitary sewer construction and maintenance programs.
- Plans, assigns, schedules, motivates, and counsels city staff and crews, and evaluates the work of sewer construction and programs.
- Plans, develops, implements and monitors operational, capital improvement and capital equipment budgetary activities for the Sewer Maintenance section.
- Manages and coordinates the implementation and continued practice of cost tracking systems and continuous improvement processes for the Sewer Maintenance section.
- Develops and manages sewer basin research projects including the development of recommendations for the City's capital improvement program.
- Manages and documents the storm water and sanitary sewer maintenance and construction processes and compliance activities.
- Plans, develops and monitors the development and implementation of construction and maintenance plan compliance with Federal and State standards.
- Reviews and analyzes methods, policies, procedures and performance to implement or recommend implementation of sewer maintenance and construction improvement systems.
- Directs flood control activities and emergency actions and serves as media liaison concerning emergency procedures.

- Reviews Federal and State standards to determine maintenance and construction requirements and develops protocols and procedures to ensure project and activity integrity.

#### **GEOSPATIAL DATA SPECIALIST**

Geospatial Data Specialists supervise the development and maintenance of the infrastructure management programs, using Global Positioning System (GPS), Geographic Information System (GIS), and Computer Assisted Drafting (CAD) technology and software.

Duties of the Geospatial Data Specialists include but are not limited to the following:

- Plans, coordinates and supervises the development and implementation of the gathering and mapping of sewer system GPS data.
- Plans, coordinates and supervises the development of the sanitary and storm sewer piping network for a work flow management program.
- Develops and maintains the sewer infrastructure management information including entry of service lateral, sanitary and storm sewer piping segments and structures into GIS.
- Performs sewer and watershed modeling and analysis.
- Participates in the development of sewer related capital improvement projects and historical tracking.
- Schedules and produces reports on workforce production flow.
- Locates sewer lines for other city departments, contractors, and other utility companies for the purpose of excavation.
- Trains sewer personnel on operation of television inspection equipment and support equipment and the workflow management program.
- Plans, and develops the pipe evaluation television inspection program of the sewer collection system.
- Plans, coordinates and supervises the sewer infrastructure location program.

#### **STORMWATER COORDINATOR**

The Stormwater Coordinator is responsible for the City's compliance with the NPDES permit to operate an MS4 issued by the Iowa Department of Natural Resources (IDNR) as required by the Clean Water Act.

Duties of the Stormwater Coordinator include but are not limited to the following:

- Performs all functions necessary to coordinate the programs, operating procedures, and other items necessary to maintain NPDES MS4 permit compliance on a City-wide scale.
- Compiles data on City-wide activities that support NPDES MS4 compliance.
- Prepares and submits the required annual NPDES MS4 Report to the IDNR.
- Implements, updates, and enforces the City's Storm Water Management Program (SWMP).
- Coordinates with external entities to achieve a Cedar Rapids Metro Area Watershed Assessment.
- Develops and implements initiatives to further compliance with the NPDES MS4 permit.
- Complies with and educates City staff on updated storm water regulations as issued by State and Federal agencies.
- Maintains a public education outreach program to generate public acceptance and cooperation in stormwater program initiatives.

- Serves as the initial point of contact for drainage issues called into the City.
- Conducts site reviews of existing and proposed storm water facilities, including pipes, detention basins, streams, and water quality features.
- Conducts field data collection as required.
- Enforces City Code; specifically violations of Chapter 72 – Stormwater Management;
- Investigates drainage complaints and document resolutions.

#### **ENVIRONMENTAL SPECIALIST - STORMWATER**

Environmental Specialists administers the City of Cedar Rapids MS4 permit requirements in the area of erosion control. Environmental Specialists respond to customer inquiries, inspects construction activities, and inspects right-of-way for compliance with the City's MS4 permit issued by IDNR.

Duties of the Environmental Specialist - Stormwater include but are not limited to the following:

- Conducts inspections, as directed, in support of City storm water program.
- Conducts field inspections for erosion control issues.
- Conducts field inspections for detention basin operations/quality.
- Uses GPS gear for water quality monitoring and outfall monitoring.
- Maintains and updates data bases.
- Develops and maintains records and data for Storm Water Annual report.
- Conducts emergency response with sewer or other PW activities as necessary.
- Supports NPDES permit reporting and monitoring.
- Supports the Stormwater Coordinator in evaluation of customer responses.
- Supports inventories of PW infrastructure.

#### **Development Services**

Development Services administers the land development ordinances in Cedar Rapids to ensure the health, safety, and wellbeing of its residents through orderly growth. In doing so, all members of Development Services communicate stormwater related information with residents and neighborhood associations.

Development Services administers the review process of the following:

- Annexations.
- Rezoning.
- Floodplain Development.
- Future Land Use Map Amendments.
- Preliminary Plats.
- Preliminary & Administrative Site Development Plans.
- Conditional Uses.
- Pre-Applications.
- Concept Plans.
- Final Plats & Plat of Surveys.

#### **DEVELOPMENT SERVICES MANAGER**

The Development Services Manager works under direction of the Development Services Director. The Development Services Manager is the point of contact for developers in the City, provides project management for development services with appropriate city staff, assists staff in reviewing development projects, and reviews floodplain development permits.

## CIVIL ENGINEER

Civil Engineers in Development Services perform engineering, reviewing, planning, and designing of improvement projects.

Duties of Civil Engineers include but are not limited to the following:

- Reviews and coordinates responses on private development engineering designs of public works construction in accordance with City and industry standards.
- Performs engineering planning, design and drafting work to develop plans, specifications, bid documents, grant applications and features for public improvement projects such as roadway, traffic control, storm sewer systems, sanitary sewer systems, park trails, streetscaping, and pedestrian bridges, and drainage and flood control systems.
- Recommends project improvements to engineers and contractors to increase constructability effectiveness.
- Develops special engineering provisions and reviews the structural integrity of assigned design projects.
- Develops drainage and drain flow calculations based on storm frequency, topography, hydraulic and engineering calculations.
- Develops construction specifications, materials projections, proposed construction methodology and project cost estimates.
- Conducts feasibility studies and researches, analyzes and projects budgetary costs of proposed capital improvement projects.
- Conducts field and site reviews of proposed engineering and construction projects to develop project concepts and identify problems.
- Responds to inquiries and attends conferences concerning project concepts and design
- Prepares public improvement contract documents and recommends easement acquisition.

## Growth Areas

Anticipation and planning for growth is critical to cost effective implementation of a stormwater management program. Cost effectiveness is dependent on initially targeting growth areas that can be cost effectively served, identifying the appropriate regional stormwater facilities to do so, sizing stormwater facilities associated with specific developments to be consistent with the broader plan, identifying the appropriate stormwater infrastructure cost sharing for each development, and avoiding the need to subsequently address problems that invariably result from failure to do so.

Anticipated growth areas are identified in the City's 2015 comprehensive plan entitled EnvisionCR. A more thorough synopsis of EnvisionCR is included in TM 1.0 Existing System, but generally the plan identifies the following growth areas.

- **West.** Orienting development in response to the Iowa Highway 100 expansion, and incorporating the natural environment as an amenity.
- **Southwest.** Dedicating land for industrial projects and establishing a network of streets for emerging neighborhoods.

- **South.** Dedicating land for major employer and large parcel projects, while completing a network of projects that would relate to Kirkwood Boulevard, while setting the stage for future growth past the southern ridgeline, which necessitates improved infrastructure.
- **North.** Dedicating land for residential development, accompanied by a continuous parkway that connects neighborhoods and parks.
- **Northwest.** The concept completes the street network for neighborhoods and discourages development past the ridgeline, which necessitates improved infrastructure.

As noted above under Implementation, each area warrants its own planning study to define the appropriate stormwater infrastructure; likely in conjunction with defining other infrastructure needs as well.

## Regulatory Requirements

Stormwater related regulations continue to evolve at both the Federal and State levels. A brief history and anticipated regulatory requirements follow for both. As has been the case historically, future regulatory requirements could impact future staffing and funding levels.

### Federal

The Environmental Protection Agency (EPA) is charged with regulating stormwater pursuant to the 1972 Clean Water Act (CWA) intended to restore all "Waters of the United States" to their "fishable" and "swimmable" conditions. Point source discharges, which originate mostly from municipal wastewater (sewage) and industrial wastewater discharges, have been regulated under National Pollutant Discharge Elimination System (NPDES) permits since enactment of the CWA in 1972.

Congress broadened the CWA definition of "point source" in 1987 to include industrial stormwater discharges and municipal separate storm sewer systems (MS4), requiring these facilities to also obtain NPDES permits. This 1987 expansion was promulgated in two phases. Phase I required that all municipalities, like Cedar Rapids, of 100,000 persons or more, industrial dischargers, and construction sites of 5 acres or more have NPDES permits for their stormwater discharges. Phase I permits were issued in much of the U.S. in 1991. A copy of Cedar Rapids current MS4 permit is included in Attachment A.

Phase II subsequently required that all municipalities, industrial dischargers, construction sites of 1 acre or more, and other large property owners (such as school districts) have NPDES permits for their stormwater discharges. Phase II rules came into effect in 2003.

EPA issued a revised Construction General Permit (CGP) in 2012. The permit applies to construction sites with one or more acres of land disturbance. In 2009 EPA issued new discharge standards, called effluent guidelines, for construction sites. These requirements set a new national minimum standard for erosion controls and sediment controls, and pollution prevention measures. The effluent guideline provisions are incorporated into the EPA and state general permits. A copy of Cedar Rapids Construction General Permit is included in Attachment B.

The EPA is currently working on crafting an updated version of its existing stormwater rules. This update is tied to a settlement agreement with the Chesapeake Bay Foundation on pollution in the Chesapeake Bay. The proposed rule may impact all Phase I, Phase II and non-regulated Municipal Separate Storm Sewer Systems (MS4).

Currently, medium and large local governments with populations of more than 100,000 hold MS4 permits, as do small MS4s in urbanized areas. Under the most recent proposal, performance standards for discharges from new development and redeveloped sites will be established.

For new and redevelopment sites, which include residential, commercial, industrial and institutional, EPA is considering a retention-based standard that takes into account regional conditions. EPA says the standard could be applied strictly to development sites nationwide (outside of existing MS4s) or only those sites that discharge to an MS4.

If the EPA goes with the first option, the permit requirements rest with the developer during construction. After construction, the property would be required to maintain the standards as laid out under the permit.

Construction enforcement rests with the permit authority, which is generally the EPA or the state, where it has delegated authority like Iowa. The Iowa Department of Natural Resources (DNR) has transferred the oversight authority to local governments; this may mean additional responsibilities for the City.

On Feb. 21 2015, EPA and the Army Corp of Engineers sent the final “waters of the U.S.” guidance to the Office of Management and Budget for review. The guidance has yet to be finalized.

The waters of the U.S. guidance stems from an April 21, 2011, proposal to expand federal jurisdiction over U.S. waters by modifying the existing waters of the U.S. definition in the Clean Water Act (CWA).

This guidance has implications for counties with public infrastructure such as roads, ditches, flood control channels and culverts. It also has implications for other Clean Water Act (CWA) programs beyond the Section 404 permit program, the dredge and fill permit program, to programs such as the National Pollution Discharge Elimination System (NPDES), Total Maximum Daily Load (TMDL), state water quality standards and constructed wetlands.

Additionally, EPA is considering other options: extend the oversight of the current MS4 program; require large regulated local governments to manage discharges from existing sites, and designated government-owned maintenance yards as industrial sources.

The Federal Government through their regional offices is continuing to put emphasis on TMDLs, and trash. More and more MS4 permits are seeing, upon permit renewal, the inclusion of a TMDL Implementation Plan for any streams/rivers that have a TMDL on record and for which the MS4 watershed contributes discharge to the stream/river. These requirements are either a) setting a waste location allocation reduction target for the MS4, or b) providing a more general

requirement for reduction to the maximum extent practical (MEP). However, EPA Regional offices are not consistent in the development of these permit requirements at this time.

EPA has also indicated in communication in some regions that increased concern with trash in critical waters. While California has for years experienced Trash TMDLs, other areas of the country (such as Mobile, Alabama) are now being targeted to address trash.

### **State**

The Iowa DNR continues to work on the regulations associated with water quality and post construction requirements. Specifically it could impact the City in the following ways:

- Run off control – The size of a storm event could be defined and increased for the reasonable expectation.
- Discharge water quality – Specifications for dissolved solids or BOD could be made mandatory.

The impacts of the DNR changes could alter the required inspections of sites and monitoring requirements for detention basins.

The Iowa DNR contemplated significant revisions, known as the top soil rule, which would have required developers to provide 4 inches of soil on all sites post construction. The intent was to improve the vegetation / soil matrix, enhance infiltration/percolation, and reduce stormwater runoff. The rule met with considerable opposition from the development community and was not implemented. Many communities, including Cedar Rapids, are now proceeding with their own version of the top soil rule.

## **Flood Control System**

Cedar Rapids is implementing a permanent Cedar River flood control system (FCS) to mitigate a Cedar River flood event similar to the 2008 event. While yet to be defined, the FCS will have a significant impact on future operations and maintenance staffing and funding levels.

The FCS will consist of a series of earthen levees, concrete floodwall, storm water pump stations, removable walls, and road closure gates. It will be a 7.5 mile system that addresses both sides of the river.

The Cedar River Flood Control System Master Plan is described in detail on the City's website (<http://www.cedar-rapids.org/city-news/announcements/Pages/Community-Outreach-for-Flood-Control.aspx>), including the complete FCS Master Plan document, maps, and City Council presentations.

As various elements of the system are implemented, the City's Flood Response Plan will be updated to incorporate the newly built facilities. A copy of the plan is located on the City's website (<http://www.cedar-rapids.org/government/departments/public-works/engineering/Flood%20Protection%20Information/Pages/FloodResponseManualmainpage.aspx>).

Regular operation and maintenance will be necessary on each component of the system to maintain system integrity and readiness, and to respond to rising river levels. Maintenance programs will be developed for each element of the system. Additionally, training programs will need to be developed to provide City staff with necessary instructions to respond to rising river levels. Training, maintenance, and deployment programs will be tailored to specific components such as follows:

- Inspections of the entire system will be necessary on a bi-annual basis plus after high river events.
- Maintenance of the physical levees will include mowing, removal of trees/bushes from the earthen levees, removal of burrowing animals, etc.
- Concrete floodwalls will require routine maintenance to repair concrete defects, joint sealants, etc.
- Pump stations will need routine testing and ongoing preventative maintenance once start-up is complete. Regularly exercising pumps, screening equipment, and closure gates will be necessary to keep equipment in good, working order. Useful life of pump station equipment is less than concrete facilities (such as the building or floodwall); equipment will need to be replaced as-needed based on equipment condition. A reserve fund should be established for recapitalization, emergency replacements, and repairs.
- Removable wall systems and road closure gates will need to be deployed on a regular basis for purposes of training, inspection, and to demonstrate an ability to deploy to maintain system certification. Regular deployment of the entire system will be required on an annual basis.

Much like snow removal staffing and funding, FCS staffing and funding will be highly variable year to year. The associated costs for the FCS are not currently identified or accounted for in City budgets. It is currently anticipated that levee and floodwall maintenance will be performed by either Public Works or Parks & Recreation to source the proper staffing depending on the given tasks. Additionally, pump stations will likely be overseen by the Water Pollution Control division of the Utilities department, similar to their role in maintaining the sanitary sewer lift stations.

A key issue for successful long-term operation of the FCS is regular and expeditious deployment. Based upon the hydrograph of the 2008 flood, the City had approximately 48 hours notice of potentially major flooding (that is, a river stage greater than 19 feet at the USGS gaging station at 8<sup>th</sup> Avenue). The 48 hour window requires expeditious deployment of road closure, removable floodwalls, and other flood control measures not normally in place.

A study in 2011 by USACE Engineer Research and Development Center (ERDC) identified the length of removable floodwall and road closures they believed could be deployed in Cedar Rapids within 48 hours. However, because USACE only had authorization for a project on the east side of the Cedar River, ERDC's study only assessed the east side and did not account for any flood control efforts on the west side.

The adopted FCS Master Plan includes road closures and removable walls on both sides of the river. The time, effort, and cost to deploy the complete system will depend upon several factors, including the types of road closures and removable walls and the necessary labor force. The

types of closures and removable walls will dictate the amount of time needed to deploy the system in a particular area. In terms of labor effort, gates are preferable to panel system since gates can be closed quickly and easily.

Labor force is a critical component for deploying the FCS. Not only are adequate numbers necessary, but they must be appropriately trained. Heavy equipment will likely be necessary for some of the removable panel systems. Some of the activities during a flood fight will include:

- Moving removable panel systems to the appropriate locations
- Traffic control
- Crane operation to place panel systems
- Operators to close swing, miter, or roller gates
- Pump station operators to close storm water gates and monitor pumping operation
- Patrols to monitor the levees and floodwalls

The ERDC study only accounted for City staff being involved in flood system deployment. Use of contractors has been considered but is not settled. While this approach would provide for a larger labor force and more heavy equipment, insurance and retainage costs would be incurred. The deployment study needs to be updated to reflect the FCS as currently envisioned.





## **Attachment A – National Pollutant Discharge Elimination System (NPDES), Municipal Separate Storm Sewer (MS4) Permit**



# STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR  
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIPP, DIRECTOR

## CERTIFIED MAIL

January 21, 2016

Jen Winter  
Public Works Director  
City of Cedar Rapids  
500 15<sup>th</sup> Ave. SW  
Cedar Rapids, IA 52404

RE: Final MS4 Permit 57-15-0-05

Dear Ms. Winter:

Please find enclosed the final National Pollutant Discharge Elimination System (NPDES) permit for the discharge of storm water from your facility.

If you have any questions or comments concerning this matter, please contact me at 515-725-8417 or [joe.griffin@dnr.iowa.gov](mailto:joe.griffin@dnr.iowa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Griffin".

Joe Griffin  
NPDES Section  
Environmental Protection Division

Enclosure

cc: Field Office 1

RECEIVED

JAN 25 2016

CITY OF CEDAR RAPIDS  
PUBLIC WORKS DEPT.



# IOWA DEPARTMENT OF NATURAL RESOURCES

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

**PERMITTEE**

City of Cedar Rapids  
1201 6<sup>th</sup> St. SW  
Cedar Rapids, Iowa 52404

**IDENTITY AND LOCATION OF FACILITY**

City of Cedar Rapids

**IOWA NPDES PERMIT NUMBER:** 57-15-0-05

**RECEIVING WATERCOURSES**

Cedar River, Otter Creek, Hoosier Creek,  
Indian Creek, Prairie Creek, Morgan Creek  
and other, undesignated streams

**DATE OF ISSUANCE:** February 1, 2016

**DATE OF EXPIRATION:** January 31, 2021

**YOU ARE REQUIRED TO FILE**

**FOR RENEWAL OF THIS PERMIT BY:** August 4, 2020

**EPA NUMBER –** IA0075566

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567--64.13, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the monitoring requirements and other terms set forth in this permit.

You may appeal any conditions of this permit by filing written notice of appeal and request for administrative hearing with the director of this department within 30 days of receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this Iowa NPDES operation permit.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By   
\_\_\_\_\_  
Joe Griffin  
NPDES Section  
Environmental Protection Division

## PART I. DISCHARGES AUTHORIZED UNDER THIS PERMIT

### A. Permit Area

This permit covers all areas within the boundaries of the City of Cedar Rapids totaling approximately 63 square miles which is drained by the city's Municipal Separate Storm Sewer System (MS4) and any other areas added while this permit is in effect.

### B. Authorized Discharges

This permit authorizes all existing or new storm water point source discharges to waters of the State from the MS4. This permit also authorizes the discharge of storm water commingled with flows contributed by process wastewater, non-process wastewater, or storm water associated with industrial activity provided such discharges are authorized under separate NPDES permits, as required by law. This permit does not authorize discharges to the MS4.

### C. Limitations on Coverage

The following discharges are not authorized or regulated by this permit:

Storm water discharges that are mixed with non-storm water and storm water associated with industrial activity except where such discharges are:

1. in compliance with a separate NPDES permit; or
2. identified by and in compliance with Part IV. of this permit.

## PART II. STORM WATER POLLUTION PREVENTION & MANAGEMENT

The permittee shall implement the Best Management Practices (BMPs), measurable goals, implementation dates and frequencies described in the following sections:

### A. Public Education and Outreach on Storm Water Impacts

The permittee shall continue implementing a public education and outreach program about the impacts of storm water discharges and measures which the residents of the permittee can implement to reduce pollutants in storm water runoff that includes the following:

1. **General Storm Water Education Materials** – An informational brochure shall be made available to all residents, businesses and other target audiences served by the MS4. As new residents and businesses are served by the MS4 they shall also receive the brochures. The brochure shall present information regarding storm water impacts on water quality and measures residents can implement to reduce water quality degradation from storm water. The brochure shall be updated as appropriate.  
  
The brochure shall continue to be made available to all residents and business and distributed to new residents and businesses for the duration of the permit.
2. **Website** – The permittee's website shall contain information regarding storm water impacts on water quality, measures residents can implement to reduce pollutants in storm water, regulations, current local topics and links to other relevant websites. A form to be downloaded for reporting storm water complaints shall be provided on the website. The website shall be updated as appropriate.

The website information shall be maintained by the permittee for the duration of the permit.

3. Privately Owned Storm Water Structural Controls - Educational materials shall continue to be made available to landowners which outline proper maintenance procedures for privately owned structural controls.

The educational materials shall be made available by the permittee for the duration of the permit.

#### B. Public Involvement and Participation

The permittee shall implement a public involvement and participation program that includes the following:

1. Storm Water Pollution Hotline – The permittee shall maintain a 24-hour storm water pollution hotline to be used by the public to report storm water pollution or other problems. The hotline is to be advertised to the public and continually on the permittee’s website and maintained for the duration of the permit.
2. Storm Water Advisory Commission – The permittee shall organize and hold public meetings with an informal storm water stakeholders group to receive public input, hold public hearings and work with volunteer groups, as appropriate. Representatives of environmental groups, developers, builders’ associations, businessmen, city personnel and residents at large shall be allowed to participate, if interested. The meetings shall be held at least once each calendar year and as needed for the duration of the permit.

The stakeholders group shall continue to meet at least once each calendar year for the duration of the permit.

3. Public Notice Requirements - When implementing a public involvement and participation program, the permittee must comply with all state and local public notice requirements.

#### C. Illicit Discharges

The permittee shall continue implementing and enforcing a discharge detection and elimination program that includes the following:

1. Illicit Discharge Prohibition Ordinance – An ordinance shall continue to be amended as necessary and enforced by the permittee that prohibits anything other than storm water, allowable non-storm water and pollutants for which an NPDES permit has been issued and when the discharge is in compliance with the permit from entering the MS4. The ordinance shall include language that enables the permittee to inspect private property if an illicit discharge is suspected and penalties for non-compliance.

The ordinance shall be enforced by the permittee for the duration of the permit.

2. Illicit Discharge Detection and Elimination Program – A program shall continue to be implemented to identify and eliminate illicit discharge to the MS4. The program shall include annual dry weather flow inspections of all outfalls not already inspected since flows from newly developed or re-developed areas have been discharged from the outfalls, sampling and analyses of these dry weather flows, procedures to identify the sources of the dry weather flows and procedures for disconnecting illicit connections. Records shall be kept of when inspections are performed, the results of the inspections and measures taken to identify and, when appropriate, eliminate the sources of any dry weather flows. The plan shall be evaluated annually to assess the effectiveness of the program and any necessary changes made. All illicit discharges found must be eliminated no more than 21 days after discovery. If it is not possible to eliminate an illicit discharge within 21 days of discovery, the permittee shall submit to the Department

the reasons why the discharge cannot be eliminated within 21 days of discovery and a plan which contains a timeline of activities which will result in the elimination of the discharge. This statement and plan shall be submitted within 21 days of discovery of the illicit discharge. If the Department does not approve the plan, the permittee will then be required to eliminate the discharge no later than a date specified by the Department. All illicit discharges shall be reported to the Department no later than the end of the first business day after the day of the discovery.

The program shall be implemented by the permittee for the duration of the permit.

D. Construction Site Storm Water Runoff Control

The permittee shall continue implementing and enforcing a construction site storm water runoff control program to reduce pollutants in any storm water runoff from construction activities for which storm water permit coverage is required and that includes the following:

1. Construction Site Runoff Control Ordinance – An ordinance shall be amended as needed and enforced on all sites for which NPDES permits are required that requires proper soil erosion and sediment control. This ordinance shall also address waste at construction sites that may cause adverse impacts to water quality such as building materials, concrete truck washout, chemicals, solid waste and sanitary waste. Authority to issue an order to terminate activities due to failure to implement or maintain pollution control BMPs, authority for the permittee to enter private property for the purposes of compliance inspections and penalties for non-compliance shall be included. The ordinance shall require site plan and pollution prevention plan review and approval by the permittee prior to issuance of any permits for the site by the permittee. The ordinance shall require compliance with the Department's Storm Water General Permit no. 2.

The ordinance shall be enforced for the duration of the permit.

2. Construction Site Review and Inspection Program - The permittee shall require site plan and pollution prevention plan review and approval by the permittee prior to issuance of any permits for the site by the permittee for construction activities for which an NPDES permit is required. The program shall require compliance with the Department's Storm Water General Permit no. 2 and inspections by the permittee of all sites for which coverage under General Permit no. 2 is required. The program shall require each of these sites be inspected by the permittee at least once each calendar quarter and as complaints are received. City personnel shall ensure that all topsoil preservation requirements stipulated by General Permit no. 2 are implemented on those sites for which they are required.

The program shall be implemented by the permittee for the duration of the permit.

E. Post-construction Storm Water Management

The permittee shall continue implementing and enforcing a program to address storm water runoff from new construction and re-construction projects for which storm water coverage is required. The program must ensure that controls are in place that will prevent or minimize water quality impacts and shall include the following:

1. Construction Site Runoff Control Policy Ordinance – An ordinance shall continue to be amended as necessary and enforced which will address the control of runoff from building activities after construction has been completed. The ordinance shall require water quality and quantity components be considered in the design of new construction and implemented when practical. The ordinance shall promote the use of storm water detention, retention, infiltration, other Best Management Practices specific to each site which address water quality and quantity issues and proper operation and maintenance of these facilities.

The ordinance shall be enforced by the permittee for the duration of the permit.

2. Inspection of Runoff Control Devices – Storm water control devices and structures shall be inspected and reviewed for proper maintenance. Educational materials shall be developed and made available to landowners which outline proper maintenance procedures. The permittee shall properly maintain its own control devices and structures.

Inspections shall continue to be conducted by the permittee for the duration of the permit. The educational materials shall continue to be made available for the duration of the permit.

3. Inspection of Structural Controls – Storm water structural controls owned by the permittee shall continue to be inspected and reviewed for proper maintenance.

Inspections shall be conducted by the permittee for the duration of the permit.

4. Watershed Assessment Program – A watershed assessment program and comprehensive land use plan shall continue to be implemented which outlines measures to be implemented which reduce flooding, reduce erosion in ditches and streams, improve water quality and reduce degradation of habitat for fish and wildlife. The permittee shall then implement the program whenever possible to meet these goals.

The program shall be implemented by the permittee for the duration of the permit.

F. Pollution Prevention/Good Housekeeping

The permittee shall continue implementing an operation and maintenance program, including a training component, that shall prevent or reduce pollutant runoff from municipal operations and that shall include the following:

1. Operation and Maintenance of MS4 - A program for inspecting, maintaining and cleaning all components of the MS4 including street sweeping shall continue to be implemented. All above-ground components of the MS4 shall be inspected at least once every ten years and maintenance performed as appropriate

The program shall be implemented by the permittee for the duration of the permit.

2. Pesticide and Fertilizer Management Program – A pesticide and fertilizer management program shall continue to be implemented and enforced which shall reduce pollutant discharge associated with storage, application and disposal of pesticides and fertilizers for municipal operations. The program shall identify all entities that apply pesticides and fertilizers, require that application of these chemicals be applied by properly trained individuals, require training on management techniques addressing storage, application and disposal. Data regarding the application rates of pesticides and fertilizers shall be gathered and evaluated to determine if lower rates would be equally effective. Should it be determined that lower application rates would be equally or nearly as effective it shall be required that the lower rates be applied.

The program shall be implemented by the permittee for the duration of the permit.

3. Training Program for Municipal Employees – The permittee shall continue to implement a program for training appropriate municipal employees regarding practices to be implemented in city operations to reduce pollutants in storm water. This is not to be construed as requiring training for all municipal employees but only those whose activities would likely have an impact on storm water quality.

The program shall continue to be implemented by the permittee for the duration of the permit.

4. City Facilities BMPs – A program shall continue to be implemented to assess BMPs at city facilities to be implemented that reduce pollutants in storm water from these facilities. These measures shall then be implemented whenever practical for the duration of the permit.

The program shall continue to be implemented by the permittee for the duration of the permit.

#### G. Monitoring Industrial and High Risk Run-Off

The permittee shall require monitoring and the control of pollutants in storm water discharges from all municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the permittee determines are contributing a substantial pollutant loading to the MS4. An inventory of these facilities shall be maintained. The following activities are required:

1. These facilities shall be inspected in accordance with the approved SWMP.
2. The permittee shall ensure each facility certifies annually, on or before December 31 of each calendar year, that the facility complies with all applicable storm water management plans and with the facility's storm water permit.
3. Analyses shall be conducted once per calendar year for the following parameters:  
  
Any pollutants limited in an existing NPDES permit for the facility, oil and grease, chemical oxygen demand, pH, biochemical oxygen demand (5 day), total suspended solids, total phosphorus, total Kjeldahl nitrogen and nitrate plus nitrite nitrogen.  
  
A minimum of one grab sample shall be taken during the first one hour of discharge of a storm event resulting in 0.10 inches or more of rainfall. The storm event shall have occurred at least 72 hours since the previous storm event.
4. The permittee shall obtain information concerning the discharge or potential discharge of pollutants as required under 40 CFR 122.21(g)(7)(iii) and (iv).
5. The permittee shall ensure each facility provides sampling results. Inspection information and sampling results shall be reported in the annual report.

### PART III. REPORTING REQUIREMENTS

#### Annual Report

The permittee shall prepare an annual report to be submitted to the Department no later than July 31 of each calendar year. The report shall be submitted to the appropriate Department field office and shall include the following:

1. The status of implementing the components of this permit. Any modifications developed by the permittee and approved by the Department or required by the Department shall also be addressed.
2. A summary of the data, including monitoring data, that is generated within the reporting period including a narrative description of storm water quality improvements or degradation.

3. An estimate of the previous fiscal year's expenditures for implementation of the requirements of this permit and the budget for the current fiscal year.
4. A summary describing the number and nature of inspections, enforcement actions, illicit discharges discovered, ordinances adopted, public education programs conducted, components of the MS4 cleaned, stream restoration activities, meetings held and any other actions taken by the permittee required by this permit during the reporting period.

#### PART IV. SPECIAL CONDITIONS

Only storm water, allowable non-storm water, and pollutants for which an NPDES permit has been issued and when the discharge is in compliance with the permit, are allowed to be discharged to the MS4. The permittee shall not have nor allow any discharge of pollutants from a site, facility or source for which an NPDES permit is required unless an NPDES permit has been issued for the discharge. Upon discovery of any unpermitted discharge for which a permit is required or, if an NPDES permit has been issued for the discharge, a discharge not in compliance with the permit, the permittee shall report the discharge to the Department no later than the end of the next business day after the discharge is discovered. Floor drains and other potential sources of pollutants shall be considered discharges even if no actual pollutants have been observed entering the MS4 from such a source.

The permittee is prohibited from issuing any permit, authorization or license allowing any construction, excavating, clearing, grubbing, or any other soil disturbing activity and is prohibited from allowing a person, persons, company, political unit or other entity, public or private, from doing same for which, in whole or as part of another project, coverage under an NPDES permit is required without first ensuring that a storm water authorization from the Department has been issued for the activity.

A construction site inspection program shall continue to be developed and implemented for construction projects owned or operated by the permittee that include areas of soil disturbance for which NPDES permits are required. The inspection program shall be used to ensure that contractors are correctly implementing BMPs which have been approved in the pollution prevention plan and any additional necessary measures. The program shall require inspections by the permittee at least every 7 days and include any other provisions necessary to ensure compliance by contractors with the storm water General Permit no. 2. Inspections made by the permittee that satisfy the requirements of General Permit no. 2 may be used to satisfy the requirements of this permit.

A map of the MS4, including all outfalls, shall be maintained for the duration of this permit.

All salt storage shall be in a structure impervious to precipitation and any spillage due to handling activities in an area subject to runoff shall be immediately removed.

The permittee may directly place snow, free of trash, into or onto a Water of the State.

The manner in which actions required by this permit are accomplished by the permittee is subject to review and approval by the Department. Should the Department give notice to the permittee that the approach used by the permittee to comply with any permit provision is unacceptable, the permittee must modify its approach as required in order to be considered in compliance with the permit.

## PART V. STANDARD CONDITIONS

### A. Permittee's Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Issuance of this permit does not relieve the permittee of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of this facility (see 40 CFR 122.41(a) and 567-64.3(11) IAC).

### B. Duty to Provide Information

The permittee shall furnish to the Department, within a time specified by the Department, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee must also furnish to the Department, upon request, copies of any records required to be kept by this permit.

### C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### D. Signatory Requirements

Storm Water Pollution Prevention Plans, reports, certifications or information either submitted to the Department or that this permit requires be maintained by the permittee, shall be signed as follows:

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes 1) the chief executive officer of the agency, or 2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Certification Any person signing documents shall make the following certification:

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

### E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

### F. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

### G. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

H. State/Environmental Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

I. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

J. Inspection and Entry

The permittee shall allow the Department, an authorized representative or an authorized representative of the municipal operator of the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to: enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; inspect at reasonable times any facilities or equipment (including monitoring and control equipment); and to sample any discharge of pollutants.

K. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or discontinuance, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. This permit may be modified due to conditions or information on which this permit is based, including any new standard the Department may adopt that would change the required effluent limits.

L. Potential or Realized Impacts on Water Quality

If there is evidence indicating potential or realized impacts on water quality or on a listed endangered species due to any storm water discharge associated with industrial activity covered by this permit, the permit shall be modified to include different limitations and/or requirements of the Pollution Prevention Plan and its implementation.

M. Failure to submit fees

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within sixty (60) days of the date of notification that such fees are due.

N. Penalties For Violations of Permit Conditions

Section 309 of the CWA provides significant penalties for a person(s) who violates a permit condition implementing Section 301, 302, 306, 307, 318, or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under Section 402. Any person(s) who violates any condition of this permit is subject to a civil penalty not to exceed \$25,000 per day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

## PART VI. DEFINITIONS

1. Allowable Non-Storm Water means: discharges from fire fighting activities, fire hydrant flushings, potable water sources, waterline flushings, uncontaminated groundwater, foundation or footing drains where flows are not contaminated with process materials such as solvents, springs, riparian habitats, wetlands, irrigation water, air conditioning condensate, exterior building washwater when no detergents or other surfactants are used and

pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and when no detergents or other surfactants are used.

2. Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
3. Calendar Quarter means each of the following periods: December thru February, March thru May, June thru August and September thru November.
4. CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).
5. Department means the Iowa Department of Natural Resources (IDNR) or an authorized representative.
6. Discharge means the release of water and any elements, compounds, and particles contained within or upon, from property owned or controlled by an individual, individuals, or entity and where the release originates on said property.
7. Facility means any entity which discharges storm water.
8. Municipal separate storm sewer system means the conveyance or system of conveyances including storm sewers, roadways, roads with drainage systems, catch basins, curbs, gutters, ditches, constructed channels and storm drains owned or operated by the City of Cedar Rapids.
9. Permittee means the City of Cedar Rapids.
10. Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
11. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
12. Storm water means storm water runoff, snow melt runoff, snow and surface runoff and drainage.
13. Storm water discharge associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in paragraphs (i) through (x) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR Part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate

product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (i) to (xi) of this definition) include those facilities designated under 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection.

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards that are exempted under category (xi) of this definition);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(I) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations that have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but that have an identifiable owner/operator;
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- (v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;
- (vi) Facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45 and 5171 that have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or that are otherwise identified under paragraphs (i) to (vii) or (ix) to (xi) of this subsection are associated with industrial activity;
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR Part 503;
- (x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area that are not part of a larger common plan of development or sale;

Facility Name: City of Cedar Rapids Municipal Separate Storm Sewer System

Permit Number: 57-15-0-05 Final permit

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and that are not otherwise included within categories (i) to (x)).

14. Waters of the State means any river, stream, lake, pond, marsh, watercourse, waterway, well, spring, reservoir, aquifer, irrigation system, drainage system and any other body or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof.



## Attachment B – Construction General Permit

**IOWA DEPARTMENT OF NATURAL RESOURCES**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION  
SYSTEM (NPDES)**

**GENERAL PERMIT NO. 2**

**EFFECTIVE DATES  
OCTOBER 1, 2012 THROUGH OCTOBER 1, 2017**

**FOR**

**STORM WATER DISCHARGE ASSOCIATED WITH**  
**CONSTRUCTION ACTIVITIES**



**NPDES GENERAL PERMIT NO. 2**  
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**PART I. COVERAGE UNDER THIS PERMIT**

A. **PERMIT AREA** This permit covers all areas of the State of Iowa.

B. **ELIGIBILITY**

1. A. Except for discharges identified under Parts I.B.2. and I.B.3., this permit may authorize the discharge of storm water associated with industrial activity from construction sites, (those sites or common plans of development or sale that will result in the disturbance of one or more acres total land area), (hereafter referred to as storm water discharge associated with industrial activity for construction activities) occurring after the effective date of this permit (including discharges occurring after the effective date of this permit where the construction activity was initiated before the effective date of this permit), including storm water discharge associated with industrial activity from areas that are dedicated to producing earthen materials, such as soils, sand and gravel, for use at a single construction site.

B. This permit may authorize storm water discharge from a construction site that is mixed with storm water discharge associated with industrial activity from sources other than construction activities provided that the storm water discharge from the industrial (non-construction) source is in compliance with the terms of a NPDES general permit, other than this general permit, or individual permit authorizing such discharge. In addition, the storm water other than from construction, shall be in compliance with Part IV.D.6. of this permit.

2. **LIMITATIONS ON COVERAGE** The following storm water discharges associated with industrial activity for construction activities are **not** authorized by this permit:

A. storm water discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A.2. of this permit;

B. storm water discharges associated with industrial activity for construction activities which are covered by an existing individual NPDES permit or which are issued a permit in accordance with Part I.C. of this permit.

Storm water discharges authorized by an existing individual NPDES permit will be eligible to apply for coverage under this general permit as the existing individual permit expires; and

C. storm water discharges associated with industrial activity for construction activities that the Iowa Department of Natural Resources has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

D. new or expanded "storm water discharge associated with industrial activity" that discharges to Outstanding Iowa Waters or to Outstanding National Resource Waters.

3. **EXCLUSIONS** The following "storm water discharges associated with industrial activity" from construction activities do not require a NPDES permit:

discharges from agricultural and silvicultural activities including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations as defined in 40 CFR 122.23, concentrated aquatic production facilities as defined in 40 CFR 122.24, discharges to aquaculture projects as defined in 40 CFR 122.25, and discharges from silvicultural point sources as defined in 40 CFR 122.27.

C. **REQUIRING AN INDIVIDUAL PERMIT**

1. The Department may require any person authorized by this permit to apply for and obtain an individual NPDES permit. The Department may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief

statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit, coverage under this general permit shall automatically terminate. If an owner or operator fails to submit an individual NPDES permit application required by the Department under this paragraph, coverage of this general permit automatically is terminated at the end of the day specified for submittal of the individual NPDES application.

2. Any person authorized to discharge under this permit may apply for an individual NPDES permit. In such cases, the discharger shall submit the following in accordance with the requirements of subrule (567)--64.3(4) in the Iowa Administrative Code:

- A. an individual application, using DNR Form 1 and EPA Form 2F, and,

- B. all applicable fees identified in rule (567)--64.16 in the Iowa Administrative Code.

3. When an individual NPDES permit is issued to a discharger covered under this general permit, the applicability of this general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual NPDES permit.

When an individual NPDES permit is denied to a discharger otherwise subject to this permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Department.

**D. AUTHORIZATION**

A discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II of this permit in order for storm water discharge associated with industrial activity for construction activities pursuant to Part I.B. of this permit to be authorized to discharge under this general permit.

**PART II. NOTICE OF INTENT (NOI) REQUIREMENTS**

**A. DEADLINES FOR FILING A NOTICE OF INTENT**

For storm water discharge associated with industrial activity for construction activities where construction begins after October 1, 1992, construction activities shall not commence until an authorization has been issued for the project by the Department.

- B. FAILURE TO NOTIFY** Dischargers who fail to notify the Department of their intent to be covered, and discharge pollutants to water of the United States within Iowa, without an NPDES permit, are in violation of the Clean Water Act and the Code of Iowa.

- C. CONTENTS OF THE NOTICE OF INTENT** A complete Notice of Intent shall include the items described in Parts II.C.1., II.C.2., and II.C.3. of this permit.

1. A completed Notice of Intent (NOI) form, DNR Form 542-1415, signed in accordance with Part VI.G. of this permit. The information on the form shall include the following:

- A. Name, address, and location of the construction site for which this notification is submitted. The location should be provided as the 1/4 section, township, range, and the county in which the storm water discharge is located.

- B. The owner's name, address, telephone number, and status (federal, state, private, public or other entity).

- C. The name, address and telephone number of any operator (contractor) that has been identified as having a role in the storm water pollution prevention plan for the site required under Part IV.D.7. of this permit. Contractors (operators) identified after the submittal of the completed Notice of Intent shall be identified in the pollution prevention plan.

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2  
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D. The type of discharge (new or existing as related to October 1, 1992); whether or not the discharge is to a municipal separate storm sewer system; the date the discharge is to commence; the permit status of the discharge; and, the name of the receiving waters.

E. An indication if any existing quantitative data is available describing the concentration of pollutants in storm water discharges and a summary of available existing data. (Existing data should not be included as part of the NOI, it should retained as part of the Pollution Prevention Plan).

F. A brief description of the project; an estimated timetable for major activities; and, an estimate of the number of acres of the site on which soil will be disturbed.

G. A certification that compliance with G.(1). through G.(4). are met:

G.(1). the pollution prevention plan has been developed before this Notice of Intent is submitted to the Department;

G.(2). the pollution prevention plan will be implemented on October 1, 1992 for any existing storm water discharge associated with industrial activity for construction activities. For a storm water discharge associated with industrial activity for construction activities that commence after October 1, 1992, the pollution prevention plan shall be implemented with the start of construction activities;

G.(3). this Notice of Intent will be included and incorporated into the pollution prevention plan and will be updated as required; and,

G.(4). the storm water pollution prevention plan provides compliance with section 467A.64 of the Code of Iowa and local sediment and erosion plans and are consistent with the requirements of Part IV of this general permit.

2. APPLICABLE FEES The applicable fees specified in Iowa Administrative Code 567 -- 64.16(455B).

3. PUBLIC NOTIFICATION A demonstration that the public notice specified in Iowa Administrative Code 567--64.6(1)"c"(2) was published at least one day, in at least two newspapers with the largest circulation in the area in which the facility is located or the activity will occur.

D. WHERE TO SUBMIT Facilities which discharge storm water associated with industrial activity for construction activities must submit items described in Parts II.C.1., 2., and 3. of this permit to the Department at the following address:

Storm Water Coordinator  
Iowa Department of Natural Resources  
502 E. 9th St.  
Des Moines, IA 50319-0034

E. RENOTIFICATION Prior to the expiration of an authorization issued under this general permit, the permittee is required to resubmit a Notice of Intent (no additional public notices are required) with the Department for coverage under the new general permit. If a new general permit has not been reissued prior to the expiration of the current permit, the provisions and coverage of the current permit are extended until replaced by the adoption of a new general permit.

F. TRANSFER OF COVERAGE UNDER THIS PERMIT For storm water discharge associated with industrial activity for construction activities where the ownership changes, the Department must be notified of the title transfer within 30 days. Both the previous owner(s) and the new owner(s) are responsible for notifying the Department of the transfer and the new owner's name and contact information. This requirement shall be satisfied upon the Department's receipt of the notification of this information by either the previous owner(s) or the new owner(s). If a storm water discharge associated with industrial activity for construction activities is covered by this general permit, the new

owner(s) shall be subject to all terms and conditions of this general permit. A copy of the notice of transfer that was sent to the Department shall be included in the pollution prevention plan. For construction activity which is part of a larger common plan of development such as a housing or commercial development project, if a permittee transfers ownership of all or any part of property subject to this permit, both the permittee and transferee shall be responsible for compliance with the provisions of this permit for that portion of the project which has been transferred including when the transferred property is less than one acre in area. If the new owner(s) agree in writing to be solely responsible for compliance with the provisions of this permit for the property which has been transferred, then the existing permittee(s) shall be relieved of responsibility for compliance with this permit for the transferred property, from and after the date the Department receives written notice of transfer of responsibility. A copy of the notice of transfer of responsibility shall be included in the pollution prevention plan.

**G. NOTICE OF DISCONTINUATION**

1. Within 30 days after final stabilization at a construction site (as defined in Part VIII of this permit), the operator or owner of the facility shall submit a Notice of Discontinuation to the Department.
2. The Notice of Discontinuation shall include the following information:
  - A. the name of the owner/operator to which the permit was issued;
  - B. the general permit number and permit authorization number;
  - C. the date the construction site reached final stabilization; and,
  - D. the following certification signed in accordance with Part VI.G. of this permit:

"I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment

control measures have been removed or will be removed at an appropriate time. I understand that by submitting this Notice of Discontinuation, that I am no longer authorized to discharge storm water associated with industrial activity for construction activities by Iowa Department of Natural Resources General NPDES Permit No. 2. and that discharging pollutants from storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit."

**PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS**

**A. PROHIBITION ON NON-STORM WATER DISCHARGES**

1. All discharges authorized by this permit shall be composed entirely of storm water except for non-storm discharges listed in Part III.A.2.
2. Discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles in accordance with Part IV.D.2.C.(2); potable water sources including waterline flushings; irrigation drainage; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated groundwater; and foundation or footing drains where flows are not contaminated with process materials such as solvents; may be authorized by this permit provided the non-storm water component of the discharge is in compliance with Part IV.D.5. of this permit.

**B. RELEASES IN EXCESS OF REPORTABLE QUANTITIES** Any owner or operator identified in the pollution prevention plan is subject to the spill notification requirements as specified in 455B.386 of the Iowa Code. Iowa law requires that as soon as possible but not more than six hours after the onset of

a "hazardous condition" the Department and local sheriff's office or the office of the sheriff of the affected county be notified.

The storm water pollution prevention plan described in Part IV of this permit must be modified within 5 calendar days of knowledge of the release to provide a description of the release and the circumstances leading to the release and to identify and provide for the implementation of steps to prevent the reoccurrence of such releases and to respond to such releases.

#### **PART IV. STORM WATER POLLUTION PREVENTION PLANS**

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of the storm water discharge from the construction activities. In addition, the plan shall describe and ensure the implementation of practices which will be used to reduce the pollutants in storm water discharge associated with industrial activity for construction activities at the construction site and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

##### **A. DEADLINES FOR POLLUTION PREVENTION PLAN PREPARATION AND COMPLIANCE**

1. **POLLUTION PREVENTION PLAN PREPARATION DEADLINE** The pollution prevention plan shall be completed prior to the submittal of an NOI to the Department to be covered under this permit and shall be updated as appropriate.
2. **POLLUTION PREVENTION PLAN COMPLIANCE DEADLINE** The pollution prevention plan shall provide for compliance with the terms and schedule of the plan prior to the initiation of construction activities.

##### **B. SIGNATURE AND PLAN REVIEW**

1. The plan shall be signed in accordance with Part VI.G., and be retained at the construction site from the date construction activities begin to the date of final stabilization.
  2. The permittee shall make plans available to the Department upon request, or in the case of a storm water discharge associated with industrial activity for construction activities which discharge through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.
  3. The Department may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. After such notification from the Department, the permittee shall make changes to the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 3 business days after such notification to make the necessary changes.
  4. All storm water pollution prevention plans received by the Department from the permittee are considered reports that shall be available to the public under Section 308(b) of the CWA and Chapter 22 of the Code of Iowa. However, the permittee may claim any portion of a storm water pollution plan as confidential in accordance with Chapter 22 of the Code of Iowa and Iowa Administrative Code (561)--2.5.
- C. **KEEPING PLANS CURRENT** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in Part IV.D.2. of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharge associated

with industrial activity for construction activities. In addition, the pollution prevention plan shall be updated to: expeditiously change the site map to include changes at the site, include contractors identified after the submittal of the Notice of Intent as Co-permittees, described in Part IV.D.7. of this permit; identify any change in ownership or transference of the permit and permit responsibilities; or, if required, by the occurrence of a hazardous condition (as defined in Part VIII of this permit). Amendments to the plan may be reviewed by the Department of Natural Resources in the same manner as Part IV.B.2.

D. CONTENTS OF THE POLLUTION PREVENTION PLAN. The storm water pollution prevention plan shall include the following items:

1. SITE DESCRIPTION Each plan shall provide a description of the following:

A. a description of the nature of the construction activity;

B. estimates of the total area of the site and the area of the site that is expected to be disturbed by excavation, grading, or other activities;

C. an estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

D. a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and

E. the name of the receiving water(s) and the ultimate receiving water(s).

2. CONTROLS Each plan shall include a description of controls that will be implemented at the construction site. The plan will clearly describe the intended sequence of major activities and for each activity, the appropriate control measures and the timing during the construction process that the measures will be implemented. (For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization). The description of controls shall address the following minimum components:

A. EROSION AND SEDIMENT CONTROLS

A.(1). STABILIZATION PRACTICES A description of temporary and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as precluded by snow cover, stabilization measures shall be initiated on all disturbed areas as soon as practical but in no case where construction activity will not occur for a period of 21 or more calendar days later than the 14th day after no construction activity has occurred on such area. Where the initiation of stabilization measures by the 14th day after no construction activity occurs is precluded by snow cover, then stabilization measures shall be initiated as soon as practicable thereafter.

A.(2). STRUCTURAL PRACTICES A description of structural practices to the degree attainable, to divert flows from

exposed soils, store flows or otherwise limit runoff from exposed areas of the site. Such practices may include silt fences, earth dikes, brush barriers, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

A.(2).(a). For common drainage locations that serve an area with more than 10 disturbed acres at one time, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained shall be provided where attainable until final stabilization of the site has been achieved. The 3,600 cubic feet of storage area per acre drained does not apply to flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment basin. For drainage locations which serve more than 10 disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained is not attainable, sediment traps, silt fences, or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area.

A.(2).(b). For drainage locations serving 10 or fewer acres, sediment traps, silt fences or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area or a sediment basin providing for 3,600 cubic feet of storage per acre drained.

A.(2).(c). Unless infeasible, the following measures shall be implemented at all sites: utilize outlet structures that withdraw water from the surface when discharging from basins, provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration and minimize soil compaction. Topsoil shall be

preserved at all construction sites unless land use precludes the practice. The requirement to preserve topsoil shall be met only when the depth of topsoil after soil disturbing activities have been completed and final stabilization achieved for the permitted activity is equal to, or greater than, 4.0 inches, including soil contained in sod, on all areas of the site where the surface of the ground disturbed for the permitted construction activities is exposed and not covered by concrete, asphalt, gravel or other such material and where 4.0 inches or more of topsoil existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site. On areas where less than 4.0 inches of topsoil existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site, the minimum depth of topsoil after soil disturbing activities have been completed and final stabilization achieved for the permitted activity shall be equal to, or greater than, the depth of topsoil that existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site.

The final topsoil depth is to be measured after the soil has been compacted in a fashion generally considered adequate for an established lawn and so that the expected settling that will occur after measurement will be minimal and shall include the soil contained in any sod that has been placed on the site. The type of topsoil at the site after soil disturbing activities have been completed and final stabilization achieved for the permitted activity shall be similar to that which exists or existed in the general area of the site.

For construction activity which is part of a larger common plan of development, such as a housing or commercial development project, in which a new owner agrees in writing to be solely responsible for compliance with the provisions of this permit for the property which has been transferred or in which the new owner has obtained authorization under this permit for a lot or lots (as specified in subrule 567-64.6(6) of the Iowa Administrative Code), the topsoil preservation

requirements described above must be met no later than at the time the lot or lots have reached final stabilization as described in this permit.

For sites where less than 4.0 inches of topsoil is to be in place after soil disturbing activities have been completed and final stabilization achieved for the permitted activity, a soil survey conducted by properly qualified personnel who regularly conduct soil surveys as part of their normal job duties must be conducted prior to commencement of soil disturbing activities that are permitted under the current permit authorization for the site. The results of the soil survey shall become part of the Pollution Prevention Plan and shall indicate the depth of topsoil at a suitable number of points on the site commensurate with standard engineering practices established for the size of the site.

The topsoil preservation requirement described above shall be implemented for projects that have not received an authorization under this permit prior to October 1, 2012. The topsoil preservation requirements are not required to be implemented for projects that have been authorized prior to October 1, 2012. In residential and commercial developments, a plat is considered a project. For other large areas that have been authorized for multiple construction sites, including those to be started at a future date, such as those located at industrial facilities, military installations and universities, a new construction project not yet surveyed and platted out is considered a project. This stipulation is intended to be interpreted as requiring the topsoil preservation requirements on development plats and construction activities on other extended areas that may have several construction projects permitted under the same authorization to be implemented on those projects not yet surveyed and platted out prior to October 1, 2012 even if other plats and construction activities in the same development or other extended area were authorized prior to October 1, 2012.

**B. STORM WATER MANAGEMENT** A description of measures that will be installed during construction to control pollutants in

storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.

B.(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; and infiltration of runoff onsite; and sequential systems (which combine several practices). A goal of 80 percent removal of total suspended solids from those flows which exceed predevelopment levels should be used in designing and installing storm water management controls (where practicable). Where this goal is not met, the permittee shall provide justification for rejecting each practice based on site conditions.

B.(2). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions present prior to the initiation of construction activities).

**C. OTHER CONTROLS**

C.(1). **WASTE DISPOSAL** All wastes composed of building materials must be removed from the site for disposal in permitted disposal facilities. No building material wastes or unused building materials

shall be buried, dumped, or discharged at the site.

C.(2). Off-site vehicle tracking of sediments shall be minimized.

C.(3). The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, sanitary sewer or septic system regulations.

**D. APPROVED STATE OR LOCAL PLANS**

Facilities which discharge storm water associated with industrial activity for construction activities must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by State or local officials. Applicable requirements specified in sediment and erosion plans, site permits or storm water management plans approved by State or local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit even if they are not specifically included in a storm water pollution prevention plan required under this permit.

Operators of facilities seeking alternative permit requirements shall submit an individual permit application in accordance with Part I.C.2. of this permit along with a description of why requirements in approved State or local plans should not be applicable as a condition of an NPDES permit.

3. **MAINTENANCE** A description of procedures to maintain in good and effective operating conditions vegetation, erosion and sediment control measures and other protective measures identified in the site plan.
4. **INSPECTIONS** Qualified personnel (provided by the discharger) shall inspect disturbed areas of the construction site that have not been stabilized with a perennial, vegetative cover of sufficient density to preclude erosion at least once every seven calendar days. Unless erosion is evident or other conditions

warrant them, regular inspections are not required on areas that have been stabilized with a perennial, vegetative cover of sufficient density to preclude erosion.

A. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

B. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.1. of this permit and pollution prevention measures identified in the plan in accordance with paragraph IV.D.2. of this permit shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for implementation of any changes to the plan within 7 calendar days following the inspection.

C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.B. of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years after final stabilization has been achieved and a Notice of Discontinuation has been submitted to the Department. The report shall be signed in accordance with Part VI.G. of this permit.

5. **NON-STORM WATER DISCHARGES** Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm

water discharges associated with industrial activity from construction activities must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

6. ADDITIONAL REQUIREMENTS FOR STORM WATER DISCHARGE FROM INDUSTRIAL ACTIVITIES OTHER THAN CONSTRUCTION, INCLUDING DEDICATED ASPHALT PLANTS, AND DEDICATED CEMENT PLANTS This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:

A. the industrial source other than construction is located on the same site as the construction activity;

B. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and,

C. storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated cement plants) are in compliance with the terms and conditions, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

7. CONTRACTORS

A. The storm water pollution prevention plan must clearly identify for each measure in the plan, the contractor(s) and/or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part IV.D.7.B. of this permit in accordance with Part VI.G. of this permit. Upon signing the certification, the contractor or sub-contractor is a co-permittee with the

owner and other co-permittee contractors. All certifications must be included in the storm water pollution prevention plan.

B. CERTIFICATION STATEMENT All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with Part IV.D.7.A. of this permit shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the Iowa Department of Natural Resources NPDES General Permit No. 2 for "Storm Water Discharge Associated with Industrial Activity for Construction Activities" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Iowa, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES permit and the terms of this NPDES permit."

The certification must include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

**PART V. RETENTION OF RECORDS**

A. The permittee shall retain copies of storm water pollution prevention plans and all reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, for a period of at

- least three years from the date that the site is finally stabilized and a Notice of Discontinuation has been submitted to the Department.
- B. If there is a construction trailer, shed or other covered structure located on the property the permittee shall retain a copy of the storm water pollution prevention plan required by this permit at the construction site from the date of project initiation to the date of final stabilization. If there is no construction trailer, shed or other covered structure located on the property, the permittee shall retain a copy of the plan at a readily available alternative site approved by the Department and provide it for inspection upon request. If the plan is maintained at an off-site location such as a corporate office, it shall be provided for inspection no later than three hours after being requested.
- C. **ADDRESSES** All written correspondence to the Department should be sent to the following address:
- Storm Water Coordinator  
Iowa Department of Natural Resources  
502 E. 9th St.  
Des Moines, IA 50319-0034
- PART VI. STANDARD PERMIT CONDITIONS**
- A. **DUTY TO COMPLY**
1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Code of Iowa and the Clean Water Act and is grounds for enforcement action; for termination of coverage under this general permit; or, for denial of a request for coverage under a reissued general permit.
2. **TOXIC POLLUTANTS** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act (CWA) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.
- B. **CONTINUATION OF THE EXPIRED GENERAL PERMIT** This permit expires on October 1, 2017. An expired general permit continues in force until replaced by adoption of a new general permit.
- C. **NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **DUTY TO MITIGATE** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. **DUTY TO PROVIDE INFORMATION** The permittee shall furnish to the Department, within three hours, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department upon request copies of records required to be kept by this permit.
- F. **OTHER INFORMATION** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Department, he or she shall promptly submit such facts or information.
- G. **SIGNATORY REQUIREMENTS** All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Department or the operator of a municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed in accordance with rule 567--64.3(8) of the Iowa Administrative Code as follows:
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- 64.3(8) *Identity of signatories of operation permit applications.* The person who signs

the application for an operation permit shall be:

a. *Corporations.* In the case of corporations, a principal executive officer of at least the level of vice-president.

b. *Partnerships.* In the case off a partnership, a general partner.

c. *Sole proprietorships.* In the case of a sole proprietorship, the proprietor.

d. *Public facilities.* In the case of a municipal, state, or other public facility, by either the principal executive officer, or the ranking elected official.

e. *Storm water discharge associated with industrial activity from construction activity.* In the case of a storm water discharge associated with industrial activity from construction as identified in 40 CFR 122.26(b)(14)(x), either the owner of the site or the general contractor.

The person who signs NPDES reports shall be the same, except that in the case of a corporation or a public body, monitoring reports required under the terms of the permit may be submitted by the person who is responsible for the overall operation of the facility from which the discharge originated.

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H. CERTIFICATION Any person signing documents under paragraph VI.G. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are

significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I. OIL AND HAZARDOUS SUBSTANCE LIABILITY Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Clean Water Act.

J. PROPERTY RIGHTS The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

K. SEVERABILITY The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

L. TRANSFERS This permit is not transferable to any person except after notice to the Department. The Department may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C.

M. PROPER OPERATION AND MAINTENANCE The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions or this permit.

N. **INSPECTION AND ENTRY** The permittee shall allow the Department or an authorized representative of EPA, the State, or, in the case of a facility which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and,

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

O. **PERMIT ACTIONS** Coverage under this permit may be terminated for cause. The filing of a request by the permittee for a permit discontinuance, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

P. **ENVIRONMENTAL LAWS** No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

#### PART VII. REOPENER CLAUSE

If there is evidence indicating potential or realized impacts or water quality due to any storm water discharge associated with industrial activity for construction activities covered by this permit, the owner or operator of such discharge may be required to obtain individual permit in accordance with Part I.C of this permit.

#### PART VIII. DEFINITIONS

**"Best Management Practices"** ("BMPs") means schedules of activities, prohibitions of

practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**"Construction site"** means a site or common plan of development or sale on which construction activity, including clearing, grading and excavating, results in soil disturbance. A construction site is considered one site if all areas of the site are contiguous with one another and one entity owns all areas of the site.

**"CWA" or "Clean Water Act"** means the Federal Water Pollution Control Act.

**"Dedicated portable asphalt plant"** means a portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to.

**"Dedicated portable concrete plant"** means a portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

**"Dedicated sand or gravel operation"** means an operation that produces sand and/or gravel for a single construction project.

**"Department"** means the Iowa Department of Natural Resources.

**"Final Stabilization"** means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% for the area has been established or equivalent stabilization measures have been employed or which has been returned to agricultural production.

**"Hazardous condition"** means any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance on to the land, into a water of the state, or into the atmosphere, which creates an immediate or potential danger to the

public health or safety or to the environment.  
455B.381(2) 1991, Code of Iowa

**"Hazardous substance"** means any substance or mixture of substances that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons, radioactive materials; sludges; and organic solvents. "Hazardous substances" may include any hazardous waste identified or listed by the administrator of the United State Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act (49 CFR 172.101). 455B.381(1), 1991 Code of Iowa

**"Municipality"** means a city, town, borough, county, parish, district, association, or other public body created by or under State law.

**"NOI"** means Notice of Intent to be covered by this permit (see Part II of this permit.)

**"Outstanding Iowa Waters"** means those waters which constitute an outstanding state resource such as waters of exceptional recreational or ecological significance. These waters are identified in Appendix B of the Iowa Antidegradation Implementation Procedure manual.

**"Outstanding National Resource Waters"** means those waters which constitute an outstanding national resource such as waters of national and state parks and wildlife refuges and also waters of exceptional recreational or ecological significance. These waters are identified in Appendix B of the

Iowa Antidegradation Implementation Procedure manual.

**"Permittee"** means the owner of the facility or site.

**"Qualified personnel"** means those individuals capable enough and knowledgeable enough to perform the required functions adequately well to ensure compliance with the relevant permit conditions and requirements of the Iowa Administrative Code.

**"Runoff coefficient"** means the fraction of total rainfall that will appear at the conveyance as runoff.

**"Storm Water"** means storm water runoff, snow melt runoff, and surface runoff and drainage.

**"Storm water discharge associated with industrial activity"** means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR part 122. For the categories of industries identified in paragraphs (i) through (x) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling

equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in these paragraphs (i)-(xi) of the definition) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this definition;

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this definition);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;

(iii). Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining

operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-4225), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this definition are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2  
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES  
EFFECTIVE DATE - OCTOBER 1, 2012 TO OCTOBER 1, 2017

included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225, (and which are not otherwise included within categories (ii)-(x));

*"Storm water discharge associated with industrial activity for construction activities"* means activities that fall under subparagraph (x) in the definition of storm water discharge associated with industrial activity.

*"Topsoil"* means the fertile, uppermost part of the soil containing significant organic matter largely devoid of debris and rocks and often disturbed in cultivation.

*"Uncontaminated groundwater"* means water that is potable for humans, meets the narrative water quality standards in subrule 567-61.3(2) of the Iowa Administrative Code, contains no more than half the listed concentration of any pollutants in subrule 567-61.3(3) of the IAC, has a pH of 6.5-9.0 and is located in soil or rock strata.