

City of Chattanooga

Water Quality Program



Industrial/Commercial Inspections Manual Standard Operating Procedures (SOP)

March 2011

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Revision Date

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PURPOSE

The purpose of this document is to provide Standard Operating Procedures (SOP) for the Water Quality Program Industrial Inspection Program. These procedures shall be followed by the Water Quality Program Industrial Inspection team throughout the implementation of the Industrial Inspections activities. This SOP is to be updated and reviewed annually.

**CITY OF CHATTANOOGA
WATER QUALITY PROGRAM**

**INDUSTRIAL FACILITIES
WATER QUALITY INSPECTION SOP**

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**CITY OF CHATTANOOGA
WATER QUALITY PROGRAM**

**INDUSTRIAL/COMMERCIAL FACILITIES
WATER QUALITY INSPECTION SOP**

1. INTRODUCTION AND PURPOSE

In accordance with the City's National Pollutant Discharge Elimination System Permit Number TNS068063, Section 3.2.6.7, Chattanooga shall develop and implement a program to monitor and control, to the MEP, pollutants in runoff from the following industrial, commercial and high risk runoff facilities and activities:

- municipal landfills;
- hazardous waste treatment, storage and disposal facilities;
- industries subject to reporting requirements pursuant to SARA Title III section 313; and
- industrial and commercial facilities that the municipal permit applicant determines are contributing a substantial loading of pollutants to the municipal separate storm sewer system.

The permittees shall maintain a database of industrial and commercial facilities in the City, which shall include the following types of industries:

- those listed above;
- facilities covered by individual NPDES permits;
- facilities covered under the TMSP;
- facilities regulated by the pretreatment program; and
- facilities defined as industries by the EPA stormwater application rule of November 16, 1990.

This database must include, for example, NPDES permit numbers, if applicable, compliance information, property information, and water quality information.

The permittee shall update this database at least yearly and provide a listing in each Annual Report of any additionally identified industrial facilities which discharge stormwater into the MS4.

Inspections

The permittee shall inspect all industrial, commercial and high risk runoff facilities at least once every three years. The permittee shall establish and follow procedures for these routine inspections.

In addition to the routine inspections, the MS4s shall establish and follow procedures for inspections in response to illicit discharges, improper disposal, water quality monitoring or complaints. These procedures shall also include timely re-inspection for those facilities to verify that corrective actions have been taken.

The procedures for both routine and non-routine inspections must include a manual and checklist for inspectors. The inspection procedures must recognize and coordinate with existing programs, namely SARA Title III inspections performed by the Chattanooga Fire Department, pretreatment inspections performed by the Chattanooga Waste Resource Division, and NPDES inspections performed by Tennessee Department of Environment and Conservation. These procedures must include a manual and checklist for inspectors. The permittee must conduct and document inspector training annually.

City Code

The authority to conduct these inspections is found in the City of Chattanooga Code Part II, Chapter 31, Section 31-332. Inspectors will read this section of the code to fully understand the scope of their authority.

The purpose of this manual shall be to guide inspectors to perform the inspections, record and document the inspection results, and provide feedback to the inspected industries regarding violations and compliance with the City MS4 permit, City ordinances and Best Management Practices (BMPs).

2. DEFINITIONS AND ACRONYMS

Inspectors will familiarize themselves with the following terms and acronyms and their meaning prior to conducting industrial inspections.

- **SARA – Superfund Amendments and Reauthorization Act** – the federal law that requires facilities to keep records and inform their communities about chemicals they use, store and dispose. Section 313 of that law requires facilities to report to local agencies and others the quantities and types of chemicals periodically.
- **MS4 – Municipal Separate Storm Sewer System** – a City’s system of receiving, transporting and/or storing storm water for release that is separate from the City’s sanitary sewer system. Chattanooga has an MS4 system except for the downtown area in which sanitary and storm systems are connected.
- **NPDES-National Pollutant Discharge Elimination System** – the system of permits required by the Clean Water Act and other laws to control the discharge of anything into bodies of water in the United States. NPDES permits are issued through the state in which an industry does business and they regulate what can be discharged and state what an industry must do to control and monitor the discharge.
- **No Exposure Certification** – a certificate issued by a state to an industry showing that the industry has protected all industrial procedures and materials from contact with stormwater by a sheltering system. A No Exposure Certification may be issued in lieu of an NPDES permit.
- **BMP – Best Management Practices** – practices and procedures that serve to protect water quality by controlling discharges and preventing pollution by ensuring that waste products, raw materials, and non-storm water materials do not get into an industry’s storm drain system.
- **Industrial Outfall** – the point at which stormwater runoff leaves a facility’s stormwater collection/drainage system. Typically the outfall is the point at which the runoff enters the City’s drainage system or a receiving stream.
- **SWPPP – Stormwater Pollution Prevention Plan**– a written plan for a facility designed to protect the facility’s stormwater runoff from pollution. This plan will include: a designated pollution prevention team, a listing of potential pollutants, a site map showing all stormwater outfalls, BMPs and controls for stormwater management, and site compliance evaluations (inspections) to be conducted by the facility.
- **SPCC- Spill Prevention Control and Countermeasure Plan**- a document that outlines what control measures are in place to prevent the release of petroleum products from onsite tank storage.

3. THE ROLE OF THE INSPECTOR

The role or job of the inspector shall be to determine whether or not the inspected industry or commercial site is contributing a pollutant loading to the MS4 and if it is complying with the City of Chattanooga BMP ordinances. Also, the industry will be evaluated to verify if the industry is adhering to the language addressed in the facility's SWPPP and the facility's NPDES permit. Commercial sites are not regulated under EPA's NPDES guidelines.

The inspector must be knowledgeable of the proper methods of site inspection and assessment, as explained in this manual, and of the requirements of SARA, Title III, as well as of the general type of operations conducted by the inspected industry. The inspector must also be able to deal with the industry's representatives with integrity and courteousness on a consistent basis. Professionalism is essential during any industry inspection and all inspectors will behave in a professional and courteous manner.

City of Chattanooga industrial stormwater inspections are subject to be coordinated with a representative of the Tennessee Department of Environment and Conservation, a representative of the City of Chattanooga Waste Resources Division, and/or a representative of the Chattanooga Fire Department. Coordinating with other agencies is only required if the inspector deems it necessary. The inspector must contact the appropriate representatives of these agencies prior to scheduling inspections when necessary.

An important point for each inspector to understand is that many industrial processes are patented or protected through proprietary guidelines. Each inspector will respect the facility's right to protect its processes from inappropriate release to competitors and will not discuss processes, facilities, methods or related issues with any other industrial facility representatives.

The inspector must understand at all times that he or she represents the City of Chattanooga and its citizens. Accordingly, each inspector will wear appropriate City of Chattanooga identification cards and provide business cards with his or her name, telephone number, postal mailing address and electronic mail address to each inspected facility.

4. INSPECTION PROCEDURES

Each inspector will conduct the inspection in accordance with the following procedures. These procedures are designed to ensure that the inspector is prepared for the inspection, that he or she knows what to look for, and that he or

she knows how to provide effective and useful feedback to the inspected industry's representative.

a. Preparation

Before leaving the office, the inspector will need to:

- Identify the industry to be inspected,
- Review any previous inspection report for the facility,
- Prepare a location map showing the City Stormwater System,
- Have proper equipment (clothing, camera, inspection sheets, batteries, etc.)
- Coordinate with a representative of the Tennessee Department of Environment and Conservation, City's Waste Resources Division, and the Chattanooga Fire Department. Contacting any of the above agencies would be applicable if the inspector deems it necessary.

The inspector may contact the facility in advance to arrange a date and time for the inspection and will coordinate with the appropriate staff at the facility (usually the Health and Safety/Environmental manager or Facility Engineer). Unannounced inspections may be conducted at facilities following an accidental release or a spill incident. Facilities may also choose to invite representatives from their local, regional or corporate staffs to participate in the inspection and will need time to contact those people before the inspection.

b. Arriving at the Facility

When arriving at the facility, the inspector will identify oneself, provide own credentials, ask for an initial meeting with the industry representatives to explain the purpose and extent of the inspection, briefly discuss the elements on the inspection form and areas to be inspected, and answer any preliminary questions.

The inspector would visit the facility's grounds including areas of potential releases and stormwater structures and any water quality units. The inspector would conduct a concluding meeting to provide results to the facility. Reviewing of the facility records can occur at anytime during the inspection.

c. Facility Documentation Review

The following records will be reviewed:

- (1) the facility's NPDES Stormwater Permit or a "No Exposure" Certification" document;
- (2) the facility's stormwater sampling results for the previous three years and training on stormwater prevention for facility personnel;
- (3) the SWPPP and the SPCC (if applicable);

- (4) Best Management Practices maintenance records;
- (5) documentation of any accidental releases from the previous three years.

The inspector will make notes on an inspection report (See Section 6 of this manual) from the information contained in the records and will provide comments to the facility regarding any issues discovered in the records review. Items of concern are uncorrected violations from a previous City Stormwater Inspection, sampling results that exceed the cut-off limits for analytical stormwater sampling, and records of accidental releases that do not address the date and time of the release, the cause of the release, the type and quantity of material released, migration of material off-site, any damage to local streams by the release, clean-up/remediation efforts and corrective actions taken to prevent future releases.

Following the review of these documents, the inspector will ask for information needed to become familiar with the facility's manufacturing processes and their impact on stormwater runoff, identify any BMPs utilized by the facility, and identify the facility's stormwater outfalls.

d. Inspecting the Facility Grounds, Stormwater Structures, Water Quality Units and Outfalls

Following the records review, the inspector will ask the facility representatives to tour the facility and will inspect the facility in accordance with the Industrial/Commercial Inspection Form found page 10 of this manual.

In general, the inspector is looking for any condition or practice that contributes to pollution in the stormwater runoff from the facility or indicates the lack of good BMPs on the part of the facility. The checklist will require the inspector to inspect for oil/petroleum product sheen or pools, standing water with discoloration and/or odor, evidence of chronic discharges, soil erosion, equipment storage, vehicle storage, cleaning and fueling areas, drum and equipment staging and storage areas, waste storage areas, storm drain entry locations and outfalls, detention areas/swales, special areas such as outdoor painting areas, above-ground storage tanks (AST) locations and containment, general clutter, excessive dust/dirt (often a source of excessive solids in stormwater runoff) and any lack of general housekeeping/BMP utilization.

The inspector will look specifically at each stormwater outfall identified in the facility's SWPPP site map and verify the location and conditions of all outfalls list the SWPPP document. It is imperative that inspector documents all outside elements with photos.

e. Completing the Inspection, Reports and Data Entry (database)

Following the inspection of the facility grounds and outfall(s), the inspector will hold a conclusion meeting on the site and discuss his or her findings with the facility representatives.

The inspector will also answer any questions pertaining to the inspection and explain any violations requiring correction. Any violation or infraction of the City's Stormwater ordinance and/or with the NDPES/SWPPP guidelines will be documented in the Industrial Inspection Form.

Following the inspection, the inspector will write a letter (using the City Engineering Division letterhead) to the facility summarizing the inspection and specifying the date the facility is required to comply with any corrections. Enforcement letters shall include a site depicting location of stormwater concerns and photos. As a measure to preserve the integrity of the enforcement process, the degree of severity of violations or infractions will drive the level of enforcement on the facility (Notification, Written Warning, Notice of Violation, and Notice of Violation with Civil Penalty). The inspection letter will require the signature of the Water Quality Manager and/or a designee. A copy will be mailed: First class mail and/or Certified Mail. If the letter does not require corrections, it will be signed by the inspector and one copy mailed to the facility via first class mail.

The letter will be mailed to the inspected facility when all the necessary documentation has been completed by the Water Quality Program staff. Copies (electronic or mailed) will be provided to Tennessee Department of Environment and Conservation Division of Water Pollution Control and any other entity that is deemed to be informed of the inspection results.

Noted violations and/or infractions will be addressed on the part of the facility in the form of a "Corrective Action Plan" (CAP). The "Corrective Action Plan" timeline for submittal is typically thirty 30 days from the mailing date of the letter. Submittal for the CAP by the facility will address the facility's action to correct the noted violations and timeline for the corrective actions.

Follow-up inspections, if necessary, will be conducted within a timeframe that is conducive to both parties to confirm the facility compliance with the corrective actions. The inspector will inspect the facility to determine if corrections/compliance actions have been made.

All information regarding the inspection of the facility will be updated in the industrial database.

5. SAFETY

Industrial sites are often dangerous and safety on the site is a serious issue. Inspectors will be required if necessary to wear safety helmets, safety glasses, and protective footwear while on industrial sites in addition to any safety equipment required by the facility.

Inspectors will also comply with safety instructions given by the facility representative(s) while on site and will comply with the safety rules of the facility. Some facilities require a safety orientation and/or safety rule review and City inspectors will comply with these requirements while at the facility.

Inspectors will also remain aware of any safety hazards on site such as moving vehicles, cranes and industrial equipment, stockpiled materials and products, chemical pipelines and storage tanks.

6. INSPECTION FORM

The following form will be used in preparation for and conducting an industrial inspection. A master copy is maintained in this manual. Inspectors will make work copies as they need them.

- **Industrial Inspection Report Form (used for follow-up inspections as well) (Page 9)**

QA/QC Reviewer: _____ Date: _____

**Photos should be Included*

Further Action Required: Yes _____ No _____

**Site/Receiving Stream should be Mapped*

• Comments:



**CITY OF CHATTANOOGA - WATER QUALITY PROGRAM
COMMERCIAL/INDUSTRIAL WATER QUALITY EVALUATION
INSPECTION FORM**

DATABASE ID #: _____ **WATERSHED:** _____

DATE: _____ **PREVIOUS INSPECTION DATE** _____
(if applicable - 3 year cycle verification)

FACILITY:

ADDRESS:

FACILITY REPRESENTATIVE:

PHONE OR EMAIL:

FACILITY TYPE:

_____ **Commercial** _____ **Industrial**

(not required for commercial facilities)

PERMIT: NPDES TNMSP # _____

NO EXPOSURE CERTIFICATION _____

NONE NPDES FACILITY _____

HIGH RISK FACILITY _____

SIC: _____ **SECTOR(S):** _____

**CITY OF CHATTANOOGA STORMWATER INDUSTRIAL INSPECTION
PAGE 2**

INSPECTION

-----FACILITY GROUNDS-----	YES	NO	S/C
ARE MATERIALS STORED OUTSIDE?	[]	[]	[]
EVIDENCE OF SPILL OR ILLICIT DISCHARGES?	[]	[]	[]
ARE ALL DRUMS LABELED AND STORED PROPERLY?	[]	[]	[]
ARE DUMPSTERS PROPERLY CONTAINED?	[]	[]	[]
IS HOUSKEEPING ADEQUATE?	[]	[]	[]
IS THERE ANY EVIDENCE OF ACTIVE EROSION AND/OR DISTRESSED VEGETATION?	[]	[]	[]
IS ANY STEAM CLEANING CONDUCTED ON SITE?	[]	[]	[]
ARE VEHICLES WASHED ON SITE?	[]	[]	[]
ARE VEHICLES FUELED ON SITE?	[]	[]	[]
OUTFALLS HAVE SIGNS OF NON-STORMWATER DISCHARGES?	[]	[]	[]
ABOVE GROUND STORAGE TANKS ON SITE?	[]	[]	[]
TOTAL VOLUME (gallons) OF FLUID STORED ON SITE			

<p>COMMENTS/FINDINGS:</p> <hr/>
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**CITY OF CHATTANOOGA STORMWATER INDUSTRIAL INSPECTION
PAGE 3**

PERMIT & ANALYTICAL DOCUMENTATION <i>(not applicable to commercial sites)</i>	YES	NO	S/C
COPY OF PERMIT AVAILABLE?	[]	[]	[]
COPY OF VALID SWPPP AVAILABLE?	[]	[]	[]
COPY OF VALID SPCC AVAILABLE?	[]	[]	[]
SITE MAP AVAILABLE DEPICTING LOCATION OF <u>ALL</u> EXPOSED MATERIALS, OUTFALLS, & STORMWATER STRUCTURES?	[]	[]	[]
IS FACILITY REQUIRED TO SAMPLE STORMWATER RUNOFF?	[]	[]	[]
STORMWATER SAMPLE RECORDS AVAILABLE	[]	[]	[]
STORMWATER SAMPLE RECORDS RETAINED FOR 3 YEARS?	[]	[]	[]
DISCHARGE MONITORING REPORTS (DMRS) AVAILABLE? <i>(if applicable)</i>	[]	[]	[]
DMRS RETAINED FOR 3 YEARS?	[]	[]	[]
STORMWATER TRAINING RECORDS AVAILABLE?	[]	[]	[]
NON-STORMWATER DISCHARGE CERTIFICATION AVAILABLE IN SWPPP?	[]	[]	[]
ANNUAL STORMWATER TRAINING DOCUMENTED?	[]	[]	[]
SPIILLS DOCUMENTED IN SWPPP?	[]	[]	[]

<p>COMMENTS:</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

**CITY OF CHATTANOOGA STORMWATER INDUSTRIAL INSPECTION
PAGE 4**

BMPS AND WATER QUALITY UNITS DOCUMENTATION	YES	NO	S/C
ADEQUATE NON- STUCTURAL BMPS ON SITE?	[]	[]	[]
ADEQUATE STUCTURAL BMPS ON SITE?	[]	[]	[]
BMPS WELL MAINTAINED?	[]	[]	[]
DOCUMENTATION FOR ROUTINE MAINTENANCE INSPECTIONS OF BMPS AVAILABLE?	[]	[]	[]
DETENTION POND(S) ON SITE?	[]	[]	[]
OIL/WATER SEPARATOR ON SITE?	[]	[]	[]
ANY OTHER TYPE OF WATER QUALITY UNIT ON SITE? LIST:	[]	[]	[]
ANY POTENTIAL FOR MODIFICATIONS AND/OR RETROFITS FOR BMPS?	[]	[]	[]

<p>COMMENTS:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

REFERENCES

Chattanooga City Code, Part II, Article VIII, Chapter 31

BMP SOP

Section 402, Title IV, Clean Water Act of 1972 with Amendments

Sections 311, 312, and 313 Emergency Planning and Community Right-to-Know Act of 1986

Emergency Response Handbook, United States Department of Transportation, 2004 edition