Sector AC - Stormwater Discharges Associated With Industrial Activity From Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods

# 1. Discharges Covered Under This Section

The requirements listed under this section shall apply to stormwater discharges associated with industrial activity from a facility engaged in manufacturing the following products and generally described by the SIC codes shown below:

SIC	Sector AC: Facilities That Manufacture Electronic and Electrical	Sampling	Table
Code	Equipment and Components, Photographic and Optical Goods	Required?	Number
3571	Electronic Computers	No	
3572	Computer Storage Devices	No	
3575	Computer Terminals	No	
3577	Computer Peripheral Equipment, NEC	No	
3578	Calculating and Accounting Machines, Except Electronic Computers	No	
3579	Office Machines, NEC	No	
3612	Power, Distribution, and Specialty Transformers	No	
3613	Switchgear and Switchboard Apparatus	No	
3621	Motors and Generators	No	
3624	Carbon and Graphite Products	No	
3625	Relays and Industrial Controls	No	
3629	Electrical Industrial Apparatus, NEC	No	
3631	Household Cooking Equipment	No	
3632	Household Refrigerators and Home and Farm Freezers	No	
3633	Household Laundry Equipment	No	
3634	Electric Housewares and Fans	No	
3635	Household Vacuum Cleaners	No	
3639	Household Appliances, NEC	No	
3641	Electric Lamp Bulbs and Tubes	No	
3643	Current-Carrying Wiring Devices	No	
3644	Noncurrent-Carrying Wiring Devices	No	
3645	Residential Electric Lighting Fixtures	No	
3646	Commercial, Industrial, and Institutional Electric Lighting Fixtures	No	
3647	Vehicular Lighting Equipment	No	
3648	Lighting Equipment, NEC	No	
3651	Household Audio and Video Equipment	No	
3652	Phonograph Records and Prerecorded Audio Tapes and Disks	No	
3661	Telephone and Telegraph Apparatus	No	
3663	Radio and Television Broadcasting and Communication Equipment	No	
3669	Communications Equipment, NEC	No	
3671	Electron Tubes	No	
3672	Printed Circuit Boards	No	
3674	Semiconductors and Related Devices	No	
3675	Electronic Capacitors	No	
3676	Electronic Resistors	No	
3677	Electronic Coils, Transformers, and Other Inductors	No	
3678	Electronic Connectors	No	
3679	Electronic Components, NEC	No	
3691	Storage Batteries	No	
3692	Primary Batteries, Dry and Wet	No	
3694	Electrical Equipment for Internal Combustion Engines	No	
3695	Magnetic and Optical Recording Media	No	
3699	Electrical Machinery, Equipment, and Supplies, NEC	No	

## Tennessee Storm Water Multi-Sector General Permit for Industrial Activities (TMSP) Sector AC

SIC Code	Sector AC: Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods	Sampling Required?	Table Number
3812	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical Systems and Instruments	No	
3821	Laboratory Apparatus and Furniture	No	
3822	Automatic Controls for Regulating Residential and Commercial Environments and Appliances	No	
3823	Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products	No	
3824	Totalizing Fluid Meters and Counting Devices	No	
3825	Instruments for Measuring and Testing of Electricity and Electrical Signals	No	
3826	Laboratory Analytical Instruments	No	
3827	Optical Instruments and Lenses	No	
3829	Measuring and Controlling Devices, NEC	No	
3841	Surgical and Medical Instruments and Apparatus	No	
3842	Orthopedic, Prosthetic, and Surgical Appliances and Supplies	No	
3843	Dental Equipment and Supplies	No	
3844	X-Ray Apparatus and Tubes and Related Irradiation Apparatus	No	
3845	Electromedical and Electrotherapeutic Apparatus	No	
3851	Ophthalmic Goods	No	
3861	Photographic Equipment and Supplies	No	
3873	Watches, Clocks, Clockwork Operated Devices and Parts	No	

When an industrial facility, described by the above coverage provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

### 2. Special Conditions

Prohibition of Non-stormwater Discharges. Except for those allowable non-stormwater discharges included in Part 3.1.2 (Allowable Non-Stormwater Discharges) of this permit, there are no other non-stormwater discharges authorized in this Sector.

#### 3. Stormwater Pollution Prevention Plan Requirements

- 3.1 Deadlines for Plan Preparation and Compliance. There are no additional deadlines for plan preparation and compliance, other than those stated in subpart 4.1.
- 3.2 Contents of Plan. The plan shall include, at a minimum, the following items:
- 3.2.1 Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a stormwater Pollution Prevention Team that are responsible for developing the stormwater pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's stormwater pollution prevention plan.

- 3.2.2 Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to stormwater discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:
- 3.2.2.1 Drainage. A site map indicating an outline of the portions of the drainage area of each stormwater outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in stormwater runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part 11.AC.3.2.2.3 (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls.

For each area of the facility that generates stormwater discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, the plan should include a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in stormwater discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

- 3.2.2.2 Inventory of Exposed Materials An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to stormwater between the time of 3 years prior to the date of the submission of an NOI to be covered under this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with stormwater runoff between the time of 3 years prior to the date of the submission of an NOI to be covered under this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in stormwater runoff; and a description of any treatment the stormwater receives.
- 3.2.2.3 Spills and Leaks A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility after the date of 3 years prior to the date of the submission of an NOI to be covered under this permit. Such list shall be updated as appropriate during the term of the permit.
- 3.2.2.4 Sampling Data A summary of existing discharge sampling data describing pollutants in stormwater discharges from the facility, including a summary of sampling data collected during the term of this permit.

- 3.2.2.5 Risk Identification and Summary of Potential Pollutant Sources A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.
- 3.2.3 Measures and Controls. Each facility covered by this permit shall develop a description of stormwater management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of stormwater management controls shall address the following minimum components, including a schedule for implementing such controls:
- 3.2.3.1 Good Housekeeping Good housekeeping requires the maintenance of areas which may contribute pollutants to stormwater discharges in a clean, orderly manner.
- 3.2.3.2 Preventive Maintenance A preventive maintenance program shall involve timely inspection and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- 3.2.3.3 Spill Prevention and Response Procedures Areas where potential spills which can contribute pollutants to stormwater discharges can occur, and their accompanying drainage points shall be identified clearly in the stormwater pollution prevention plan. The plan should be considered where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean-up should be available to personnel.
- 3.2.3.4 Inspections In addition to or as part of the comprehensive site evaluation required under this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the SWPPP. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained as part of the SWPPP. The use of a checklist developed by the facility is encouraged.

Note that additional Stormwater Pollution Prevention Plan (SWPPP) requirements for discharges into waters with unavailable parameters or Exceptional Tennessee waters, as described in the subpart 4.6 of this permit may be applicable to your facility.

3.2.3.5 Employee Training - Employee training programs shall inform personnel responsible for implementing activities identified in the stormwater pollution prevention plan or otherwise responsible for stormwater management at all levels of responsibility of the components and goals of the stormwater pollution prevention plan. Training should address topics such as

spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.

- 3.2.3.6 Recordkeeping and Internal Reporting Procedures A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of stormwater discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- 3.2.3.7 Non-stormwater Discharges
- 3.2.3.7.1 The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with subpart 7.7 of this permit. Such certification may not be feasible if the facility operating the stormwater discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification required by this part was not feasible, along with the identification of potential significant sources of non-stormwater at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Division of Water Resources in accordance with paragraph "Failure to Certify" (below).
- 3.2.3.7.2 Sources of non-stormwater that are combined with stormwater discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Any non-stormwater discharges that are not authorized under this permit or another NPDES permit should be brought to the attention of the division's local Environmental Field Office (see list of EFOs on page 14).
- 3.2.3.7.3 Failure to Certify Any facility that is unable to provide the certification required (testing for non-stormwater discharges), must notify the Division of Water Resources by not later than 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-stormwater discharges; the results of such test or other relevant observations; potential sources of non-stormwater discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-stormwater discharges to waters of the state which are not authorized by an NPDES permit are unlawful, and must be terminated.
- 3.2.3.7.4 Sediment and Erosion Control The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

- 3.2.3.7.5 Management of Runoff The plan shall contain a narrative consideration of the appropriateness of traditional stormwater management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to stormwater discharges associated with industrial activity [see paragraph 11.AC.3.2.2 of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures or equivalent measures may include: vegetative swales and practices, reuse of collected stormwater (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.
- 3.2.4 Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations once a year. Such evaluations shall provide:
- 3.2.4.1 Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system (and potentially waters of the state). Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- 3.2.4.2 Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with paragraph 11.AC.3.2.2 of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph 11.AC.3.2.3 of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
- 3.2.4.3 A report summarizing the scope of the inspection, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the stormwater pollution prevention plan, and actions taken in accordance with permit shall be made and retained as part of the stormwater pollution prevention plan for at least 3 years from the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the stormwater pollution prevention plan and this permit. The report shall be signed in accordance with subpart 7.7 (Signatory Requirements) of this permit.
- 3.2.4.4 Where compliance evaluation schedules overlap with inspections required under 11.AC.3.2.3.4, the compliance evaluation may be conducted in place of one such inspection.

#### 4. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those described in subpart 5.2 (Coal Pile Runoff) of the TMSP.

#### 5. Monitoring and Reporting Requirements

Permittees subject to Numeric Effluent Limitations described in subpart 5.2 above (Coal Pile Runoff) must submit to the division monitoring results annually on a signed copy of the Discharge Monitoring Report (DMR, see Addendum E).

Quarterly Visual Examination of Stormwater Quality. Facilities shall perform and document a visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination must be made at least once in each designated period [described in paragraph (1) below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

- 5.1 Examinations shall be conducted in each of the following periods for the purposes of visually inspecting stormwater quality associated with stormwater runoff or snowmelt: January through March; April through June; July through September; and October through December.
- 5.2 Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.
- 5.3 Visual examination reports must be maintained onsite in the pollution prevention plan or with other compliance records. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.
- 5.4 When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the stormwater pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for Each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff

coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

- 5.5 When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
- 5.6 When a discharger is unable to conduct visual stormwater examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible