

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

Sector E - Storm Water Discharges Associated With Industrial Activity From Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities

1. Discharges Covered Under This Section

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

SIC Code	Sector E: Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	Sampling Required?	Table Number
3211	Flat Glass	No	--
3221	Glass Containers	No	--
3229	Pressed and Blown Glass and Glassware, NEC	No	--
3231	Glass Products, Made of Purchased Glass	No	--
3241	Cement, Hydraulic	No	--
3251	Brick and Structural Clay Tile	Yes	E-2
3253	Ceramic Wall and Floor Tile	Yes	E-2
3255	Clay Refractories	Yes	E-2
3259	Structural Clay Products, NEC	Yes	E-2
3261	Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories	Yes	E-2
3262	Vitreous China Table and Kitchen Articles	Yes	E-2
3263	Fine Earthenware (Whiteware) Table and Kitchen Articles	Yes	E-2
3264	Porcelain Electrical Supplies	Yes	E-2
3269	Pottery Products, NEC	Yes	E-2
3271	Concrete Block and Brick	Yes	E-3
3272	Concrete Products, Except Block and Brick	Yes	E-3
3273	Ready-Mixed Concrete	Yes	E-1 & 3
3274	Lime	Yes	E-3
3275	Gypsum Products	Yes	E-3
3281	Cut Stone and Stone Products	No	--
3295	Minerals and Earths, Ground or Otherwise Treated	No	--
3296	Mineral Wool	No	--
3297	Nonclay Refractories	No	--
3299	Nonmetallic Mineral Products, NEC	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-storm Water Discharges. Except for those allowable non-storm water discharges included in Part 3.1.2 (Allowable Non-Storm Water Discharges) of this permit, there are no other non-storm water discharges authorized in this Sector.

3. Storm Water 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 Part 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 storm water Pollution Prevention Team that are responsible for developing the storm water 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 storm water pollution prevention plan.

3.2.2 Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that 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 that 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 storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part E..3.2.3 (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. Facilities shall also identify, on the site map, the location of any: bag house or other dust control device; recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater and the areas that drain to the treatment device. 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 storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water 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 storm water; and history of significant leaks or

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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 storm water between the time of 3 years prior to the date of the submission of a Notice of Intent (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 storm water runoff between the time of 3 years prior to the date of the submission of a Notice of Intent (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 storm water runoff; and a description of any treatment the storm water 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 storm water conveyance at the facility after the date of 3 years prior to the date of the submission of a Notice of Intent (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 storm water 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., Total Suspended Solids (TSS), etc.] of concern shall be identified.
- 3.2.3 Measures and Controls. Each facility covered by this permit shall develop a description of storm water 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 storm water 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 that may contribute pollutants to storm water discharges in a clean, orderly manner.

Facilities shall prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust other significant materials in storm water from paved portions of the site that are exposed to storm water. Measures used to minimize the presence of these materials may include regular sweeping, or other equivalent measures. The plan shall indicate the frequency of sweeping or other measures. The frequency shall be

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determined based upon consideration of the amount of industrial activity occurring in the area and frequency of precipitation, but shall not be less than once per week when cement, aggregate, kiln dust or fly ash are being handled or otherwise processed in the area.

Facilities shall prevent the exposure of fine granular solids such as cement, fly ash, and kiln dust to storm water. Where practicable, these materials shall be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

- 3.2.3.2 Preventive Maintenance—A preventive maintenance program shall involve routine inspection and maintenance of storm water 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 that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. 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—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility specified in the plan. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of once per month while the facility is in operation. The inspection shall take place while the facility is in operation and shall at a minimum include all of the following areas that are exposed to storm water at the site: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. 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.
- 3.2.3.5 Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, truck wash out procedures, equipment wash down procedures 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 storm water 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.

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3.2.3.7 Non-storm Water 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-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water 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 Part 7.7 of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution prevention plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Division of Water Pollution Control in accordance with paragraph “Failure to Certify” (below).

Facilities engaged in production of concrete block, brick or other products shall include in the certification a description of measures that insure that process waste water that results from washing of trucks, mixers, transport buckets, forms or other equipment are discharged in accordance with NPDES requirements or are recycled. Facilities with wash water recycle ponds shall include an estimate of the amount of rainfall (in inches) required to cause the recycle pond to overflow in a 24-hour period.

Sources of non-storm water that are combined with storm water 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-storm water component(s) of the discharge. Any non-storm water 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).

3.2.3.7.2 Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Division of Water Pollution Control 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-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State that are not authorized by an NPDES permit are unlawful, and must be terminated.

3.2.3.8 Sediment and Erosion Control—The plan shall identify areas that, 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.

3.2.3.9 Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those

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that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water 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 storm water discharges associated with industrial activity [see paragraph XI.E.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (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 or other equivalent measures.

- 3.2.4 Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:
 - 3.2.4.1 Areas contributing to a storm water discharge associated with industrial activity including but not limited to: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. 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 storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures such as recycle ponds, 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 E.3.2.2.5 of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph E.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 evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph E.3.2.3.2 (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after 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 storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part 7.7 (Signatory Requirements) of this permit.
 - 3.2.4.4 Where compliance evaluation schedules overlap with inspections required under this permit the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations

In addition to the numeric effluent limitations described by Part 5.2, the following limitations shall be met by existing and new dischargers.

Cement Manufacturing Facility, Material Storage Runoff. Any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement shall not exceed the maximum concentration listed below. Runoff from the storage piles shall not be diluted with other storm water runoff or flows to meet this limitation. Any untreated overflow from facilities designed, constructed and operated to treat the volume of material storage pile runoff that is associated with a 10-year, 24-hour rainfall event shall not be subject to the TSS or pH limitations. Dischargers subject to these numeric effluent limitations must be in compliance with these limits upon commencement of coverage and for the entire term of this permit.

Table E-1. Numeric Effluent Limits for Cement Manufacturing

Pollutants of Concern	Daily Maximum
Total Suspended Solids (TSS)	50 mg/L
pH	6.0-9.0 standard units

5. Monitoring and Reporting Requirements

One (1) signed copy of the Discharge Monitoring Report, DMR, (see Addendum D) for numeric effluent limits results or Annual Storm Water Monitoring Report (see Addendum E) for the benchmark results is required to be submitted to the division.

5.1 Analytical Monitoring Requirements

During the term of this permit, permittees covered under this sector must monitor their storm water discharges associated with industrial activity at least once per calendar year (annually), except as provided in paragraphs 5.1.3 (Sampling Waiver), 5.1.4 (Representative Discharge), and 5.1.5 (Alternative Certification). For SIC-specific breakdown of monitoring requirements and applicable Monitoring Requirements (listed below), see Table in Part 1 of this industrial sector (1. Discharges Covered Under This Section). Facilities must report in accordance with 5.2 (Reporting). In addition to the parameters listed in Tables E-1, E-2 and E-3 below, the permittee shall maintain a record of the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

Table E-2. Benchmark for Clay Product Manufacturers

Pollutants of Concern	Benchmark [mg/L]	Sector Median Value * [mg/L]
Total Recoverable Aluminum	0.75	1.15

Table E-3. Benchmarks for Concrete and Gypsum Product Manufacturers

Pollutants of Concern	Benchmark [mg/L]	Sector Median Value * [mg/L]
Total Suspended Solids (TSS)	150	29
Total Recoverable Iron	5	1.3

* Sector Median Value is a pollutant concentration calculated from all sampling results provided from facilities classified in this sector during the previous permit term. By definition, a median is a statistical term identifying a number that divides numerically ordered data into two equal halves. In easier terms, the median is the middle piece of data when those data are placed in numerical order, or the average of the middle two if there is an even number of items. Therefore, median concentration(s) listed above represent a concentration value typical for and achieved by industries in this sector.

5.1.1 Monitoring Periods. Facilities subject to analytical monitoring requirements described in part 11.5.5.a, shall monitor samples collected during any period of a calendar year, as long as the samples are representative of the quantity and quality of the storm water runoff being discharged from the facility.

5.1.2 Sample Type. A minimum of one grab sample shall be taken. 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. The required 72-hour waived when the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

In addition, the permittee shall evaluate the results obtained from sampling and monitoring following the required annual sampling events to determine whether the facility is below, meets, or exceeds the monitoring benchmarks as shown in the table above. If the results of annual storm water runoff monitoring demonstrate that the facility has exceeded the benchmark(s), the permittee must inform the division's local Environmental Field Office in writing within 30 days from the time storm water monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time storm water monitoring results were received, the facility must review its storm water

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pollution prevention plan, make any modifications or additions to the plan which would assist in reducing effluent concentrations to less than the monitoring benchmarks for that facility, and submit to the division's local Environmental Field Office a brief summary of the proposed SWPPP modifications (including a timetable for implementation).

5.1.3 Sampling Waiver

5.1.3.1 Adverse Conditions—When a discharger is unable to collect samples within a specified sampling period due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate qualifying event in the next period and submit the data along with data for the routine sample in that period. Adverse weather conditions that 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.).

5.1.3.2 Low Concentration Waiver—When the average concentration for a pollutant calculated from monitoring data collected from first 4 calendar years of monitoring is less than the corresponding reporting value for that pollutant (Monitoring Benchmark), a facility may waive monitoring and reporting requirements in the last annual monitoring period. The facility must submit to the Division of Water Pollution Control, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

5.1.3.3 When a discharger is unable to conduct annual chemical storm water sampling at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirements as long as the facility remains inactive and unstaffed. The facility must submit to the Division of Water Pollution Control, in lieu of monitoring data, a certification statement on the TMSP Storm Water Monitoring Report stating that the site is inactive and unstaffed so that collecting a sample during a qualifying event is not possible.

5.1.3.4 Representative Discharge. 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 test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water 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. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the TMSP Storm Water Monitoring Report.

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5.1.3.5 **Alternative Certification.** A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on pollutant by pollutant basis in lieu of monitoring reports required by paragraph (b) below, under penalty of law, signed in accordance with Part 7.7 (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to the Division of Water Pollution Control in accordance with Part 6.2. of this permit. In the case of certifying that a pollutant is not present, the permittee must submit the certification along with the monitoring reports required under paragraph (b) below. If the permittee cannot certify for an entire period, they must submit the date exposure was eliminated and any monitoring required up until that date. This certification option is not applicable to compliance monitoring requirements associated with effluent limitations. The Division of Water Pollution Control does not expect facilities to be able to exercise this certification for indicator parameters, such as TSS and BOD.

5.2 **Reporting**

Permittees with analytical monitoring requirements shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the annual reporting period on TMSP Storm Water Monitoring Report Form(s) postmarked no later than the March 31st of the following calendar year. For each outfall, one signed TMSP Storm Water Monitoring Report form must be submitted to the Division of Water Pollution Control. Signed copies of TMSP Storm Water Monitoring Reports, or said certifications, shall be submitted to the division at the appropriate EFO for the county where the facility is located. A list of EFOs and their addresses are available in subpart 3.3 above.

5.3 **Quarterly Visual Examination of Storm Water Quality.** Glass, clay, cement, concrete, and gypsum manufacturing facilities shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The examination shall be made during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

5.3.1 **Examinations shall be made of grab 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 storm water 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 entire permit term.

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- 5.3.2 Visual examination reports must be maintained onsite in the pollution prevention plan or with other compliance records 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 storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
- 5.3.3 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 evaluation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water 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.
- 5.3.4 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 that 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.).
- 5.3.5 When a discharger is unable to conduct visual storm water 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.
- 5.4 Compliance Monitoring Requirements. Permittees with cement manufacturing facilities must monitor runoff from material storage for the presence of TSS and pH at least annually (one time per year). Facilities must report in accordance with 11.D.5.2 (reporting). In addition to the parameters listed above, the permittee shall maintain a record of the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

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