### The Role of Municipal Operators In Controlling the Discharge of Pollutants in Storm Water Runoff from Industrial/Commercial Facilities

### A Case for Inspection Activities in the Large and Medium Municipal Separate Storm Sewer System Permits

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# INTRODUCTION

A question that has been frequently asked during the process to renew the Los Angeles NPDES Municipal Stormwater Permit was if the storm water regulations require municipalities to conduct inspections at industrial or commercial facilities. This requirement establishes municipalities' responsibility to verify the effective implementation of best management practices to control the contribution of pollutants to the municipal storm drain system from industrial or commercial sites.

A second issue raised was the extent of responsibility municipalities have to control the contribution of pollutants from industrial or commercial sites and what is the relationship with the responsibilities that the Regional Board has over the same type of facilities.

This document attempts to answer to those specific questions raised by the Permittees and other stakeholders. The author adds emphases in the text.

## I. Federal Mandate

The Federal Water Pollution Control Act Amendments (FWPCA) of 1972 created the framework for addressing critical pollution problems in the Nation's waters. Section 101, "Congressional Declaration of Goals and Policy", concisely summarized the new act. Section 101(a) stated, "The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." This way a strong emphasis was put on the ecological and environmental aspects of protecting water quality. Elaborating on that position, the same section set down two "national goals": (1) eliminating the discharge of pollutants into navigable waters by 1985, and (2) achieving an interim water quality level that would protect fish, shellfish, and wildlife while providing for recreation in and on the water wherever attainable. The 1972 Amendments focused their attention on point sources such as municipal discharges through publicly owned treatment works and direct industrial discharges. The Act also focused the efforts on two categories of pollutants: conventional (BOD, SS, and pH), and what was classified as toxic.

Much of the effort following the enactment of FWPCA was to establish the United States Environmental Protection Agency (U.S. EPA) and the framework of the National **Pollutant Discharge Elimination** System (NPDES) permit program. Many other efforts were initiated in areas of construction of treatment plants, basin planning, treatment technologies development, establishment of effluent standards for toxic pollutants and the creation of appropriate regulations to implement the intent of the Act.

Under the provisions of the Act, the U.S. EPA could delegate NPDES permitting authority to the States. California is a delegated State and has full authority to issue NPDES permits with U.S. EPA's concurrence.

Between 1972 and 1987, the law has been subject to mid-course corrections and a change of name to the Clean Water Act (CWA).

The 1987 amendments, known as the Water Quality Act (WQA) of 1987, were aimed at addressing a number of issues on which progress was deemed to have been unsatisfactory. These issues included toxics, nonpoint sources, storm water, coastal

pollution, and others. States were required to identify waters not meeting designated uses because of toxic pollutants even after the application of technology based controls and to develop strategies for controlling them.

New provisions to permit discharges of storm water from separate storm sewers were also added. Section 402 phases in storm water permits. Originally, the 1972 Act required U.S. EPA to issue a NPDES permit for all point sources of pollution. The Agency interpreted that requirement so that it could issue areawide permits for separate storm sewers, rather than each storm water outfall.

The first phase of the program, commonly referred to as "Phase I", was promulgated on November 16, 1990 (55 FR 47990, 40 CFR 122). Phase I requires NPDES permits for storm water discharge from a large number of priority sources including municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or more and several categories of industrial activity, including construction sites that disturb five or more acres of land.

The second phase of the storm water program, recently promulgated on December 8, 1999 (64 FR 68722) expands the existing program to include discharges of storm water from smaller municipalities in urbanized areas and from construction sites that disturb between one and five acres of land. The new rule allows certain sources to be excluded from the national program based on a demonstrable lack of impact on water quality. The rule also allows other sources not automatically regulated on a national basis to be designated for inclusion based on increased likelihood for localized adverse impact on water quality.

## II. Water Quality Concerns

After FWPCA was adopted in 1972, the implementation of end-of-pipe control methods from traditional point sources started to show improvement in the quality of the effluent discharged from Publicly Owned Treatment Works (POTW) and industrial wastewater treatment plants. However, it also become evident that receiving waters still did not attain designated uses, and water quality standards were frequently exceeded. That focused the attention to the other major component contributing to beneficial use impairments of the receiving water quality: pollution from diffuse sources, such as runoff from urban areas, construction sites, agricultural areas, land disposal and resource extraction. Early on, the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), along with U.S. EPA, conducted a comprehensive study of diffuse pollution sources that resulted in the 1985 report, "America's Clean Water – The States Nonpoint Source Assessment." This report indicated that 38 States reported urban runoff as a major cause of beneficial use impairment. In addition, 21 States reported construction site runoff as a major cause of impairment.

To provide a better understanding of the nature of urban runoff from commercial and residential areas, from 1978 through 1983, U.S. EPA provided funding and guidance to the Nationwide Urban Runoff Program (NURP)<sup>1</sup>. The NURP included 28 projects across the Nation. One focus of the NURP was to characterize the water quality of discharges from separate storm sewers that drain residential, commercial, and light industrial (industrial parks) sites. The majority of samples collected in the study were analyzed for

eight conventional pollutants and three metals. Data collected under the NURP indicated that on an annual loading basis, suspended solids in discharges from separate storm sewers draining runoff from residential, commercial and light industrial areas are around an order of magnitude greater than solids in discharges from municipal secondary sewage treatment plants. In addition the study indicated that the annual loading of chemical oxygen demand (COD) are comparable in magnitude to effluent from secondary sewage treatment plants. When analyzing annual loadings associated with urban runoff, it is important to recognize that discharges of urban runoff are highly intermittent and that the short-term loadings associated with individual events will be high and may have shockloading effects on receiving water, such as low dissolved oxygen levels. NURP data also showed that fecal coliform counts in urban runoff are typically in the tens to hundreds of thousands per 100 ml of runoff during warm weather conditions, (although the study suggested that fecal coliform may not be the most appropriate indicator organism for identifying potential health risks in storm water runoff), with the median for all sites being around 21,000/100 ml. This is generally consistent with studies that found that fecal coliform mean values range from 1,600 coliform fecal units (cfu)/100 ml to 250,000 cfu/100 ml<sup>2</sup>. Makepeace, et al., summarized ranges of contaminants from storm water, including physical contaminants such as total solids (76--36,200 mg/L) and copper (up to 1.41 mg/L); organic chemicals; organic compounds, such as oil and grease (up to 110 mg/L); and microorganisms.

Although NURP did not evaluate oil and grease other studies have demonstrated that urban runoff is an extremely important source of oil pollution to receiving waters, with hydrocarbon levels in urban runoff typically being reported at a range of 2 to 15 mg/l. These hydrocarbons tend to accumulate in bottom sediments where they may persist for long periods of time and exert adverse impacts on benthic organisms.

A portion of the NURP study involved monitoring 120 priority pollutants in storm water discharges from lands used for residential, commercial and light industrial activities. Seventy-seven priority pollutants were detected in samples of storm water discharges, from residential, commercial and light industrial lands taken during the NURP study, including 14 inorganic and 63 organic pollutants. The NURP data also showed a significant number of these samples exceeded various U.S. EPA freshwater water quality criteria. The NURP study provides insight on what can be considered background levels of pollutants for urban runoff, as the study focused primarily on monitoring runoff from residential, commercial and light industrial areas. However, NURP concluded that the quality of urban runoff can be adversely impacted by several sources of pollutants that were not directly evaluated in the study and are generally not reflected in the NURP data, including illicit connections, construction site runoff, **industrial site runoff** and illegal dumping. Other studies showed that storm water from industrial facilities might contain toxics and conventional pollutants when material management practices allow exposure to storm water.

Since the NURP study many other studies and programmatic assessments confirmed the magnitude of the diffuse pollution problem. Data from the NURP study were analyzed further in the U.S. Geological Survey (USGS) Urban Storm Water Data Base for 22 Metropolitan Areas Throughout the United States survey<sup>3</sup>. The USGS report summarized additional monitoring data compiled during the mid-1980s, covering 717 storm events at 99 sites in 22 metropolitan areas and documented problems associated with metals and sediment concentrations in urban storm water runoff. More recent reports have confirmed the pollutant concentration data collected in the NURP study<sup>4</sup>.

Other recent studies have not found significantly different pollutant concentrations in urban runoff when compared to the original NURP data<sup>5</sup>.

Storm water runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations and loadings. Such runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients (phosphorous and nitrogen), heavy metals and other toxic pollutants, pathogens, toxins, oxygen-demanding substances (organic material), and floatables<sup>6</sup>. After a rain, storm water runoff carries these pollutants into nearby streams, rivers, lakes, estuaries, wetlands, and oceans. The highest concentrations of these contaminants often are contained in "first flush" discharges, which occur during the first major storm after an extended dry period<sup>7</sup>. Individually and combined, these pollutants impair water quality, threatening designated beneficial uses and causing habitat alteration or destruction. Uncontrolled storm water discharges from areas of urban development and construction activity negatively impact receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and humans.

Urbanization alters the natural infiltration capability of the land and generates a host of pollutants that are associated with the activities of dense populations, thus causing an increase in storm water runoff volumes and pollutant loadings in storm water discharged to receiving waterbodies<sup>8</sup>. Urban development increases the amount of impervious surface in a watershed as farmland, forests, and meadowlands with natural infiltration characteristics are converted into buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb storm water. Storm water and snowmelt runoff wash over these impervious areas, picking up pollutants along the way while gaining speed and volume because of their inability to disperse and filter into the ground. What results are storm water flows that are higher in volume, pollutants, and temperature than the flows in less impervious areas, which have more natural vegetation and soil to filter the runoff<sup>9</sup>.

Studies reveal that the level of imperviousness in an area strongly correlates with the quality of the nearby receiving waters. For example, a study in the Puget Sound lowland ecoregion found that when the level of basin development exceeded 5 percent of the total impervious area, the biological integrity and physical habitat conditions that are necessary to support natural biological diversity and complexity declined precipitously<sup>10</sup>. Research conducted in numerous geographical areas, concentrating on various variables and employing widely different methods, has revealed a similar conclusion: stream degradation occurs at relatively low levels of imperviousness, such as 10 to 20 percent (even as low as 5 to 10 percent according to the findings of the Washington study referenced above)<sup>11</sup>. Furthermore, research has indicated that few, if any, urban streams can support diverse benthic communities at imperviousness levels of 25 percent or more. An area of medium density single family homes can be anywhere from 25 percent to nearly 60 percent impervious, depending on the design of the streets and parking<sup>12</sup>.

In addition to impervious areas, urban development creates new pollution sources as population density increases, and brings with it proportionately higher levels of car emissions, car maintenance wastes, pet waste, litter, pesticides, and household hazardous wastes, which may be washed into receiving waters by storm water or dumped directly into storm drains designed to discharge to receiving waters. More people in less space results in a greater concentration of pollutants that can be mobilized by, or disposed into, storm water discharges from municipal separate storm sewer systems. A modeling system developed for the Chesapeake Bay indicated that contamination of the Bay and its tributaries from runoff is comparable to, if not greater than, contamination from industrial and sewage sources<sup>13</sup>.

In addition, the 1996 305(b) Report, provides a national assessment of water quality based on biennial reports submitted by the States as required under CWA section 305(b)<sup>14</sup>. In the CWA 305(b) reports, States, Tribes, and Territories assess their individual water quality control programs by examining the attainment or nonattainment of the designated uses assigned to their rivers, lakes, estuaries, wetlands, and ocean shores. A designated use is the legally applicable use specified in a water quality standard for a watershed, waterbody, or segment of a waterbody. The designated use is the desirable use that the water quality should support. Examples of designated uses include drinking water supply, primary contact recreation (swimming), and aquatic life support. Each CWA 305(b) report indicates the assessed fraction of a State's waters that are fully supporting, partially supporting, or not supporting designated beneficial uses. In their reports, States, Tribes, and Territories first identified and then assigned the sources of water quality impairment for each impaired waterbody using the following categories: industrial, municipal sewage, combined sewer overflows, urban runoff/storm sewers, agricultural, silvicultural, construction, resource extraction, land disposal, hydrologic modification, and habitat modification.

The 1996 Inventory, based on a compilation of 60 individual 305(b) reports submitted by States, Tribes, and Territories, assessed the following percentages of total waters nationwide: 19 percent of river and stream miles; 40 percent of lake, pond, and reservoir acres; 72 percent of estuary square miles; and 6 percent of ocean shoreline waters. The 1996 Inventory indicated that approximately 40 percent of the Nation's assessed rivers, lakes, and estuaries are impaired. Waterbodies deemed as "impaired" are either partially supporting designated uses or not supporting designated uses. The 1996 Inventory also found urban runoff/discharges from storm sewers to be a major source of water quality impairment nationwide. Urban runoff/storm sewers were found to be a source of pollution in 13 percent of impaired rivers; 21 percent of impaired lakes, ponds, and reservoirs; and 45 percent of impaired estuaries (second only to industrial discharges). Additionally, urban runoff was found to be the leading cause of ocean impairment for those ocean miles surveyed.

In addition, a recent USGS study of urban watersheds across the United States has revealed a link between urban development and contamination of local waterbodies. The study found the highest levels of organic contaminants, known as polycyclic aromatic hydrocarbons (PAHs) (products of combustion of wood, grass, and fossil fuels), in the reservoirs of urbanized watersheds<sup>15</sup>.

In addition to the large-scale nationwide studies and assessments, a number of local and watershed-based studies from across the country have documented the detrimental effects of urban storm water runoff on water quality. A study of urban streams in Milwaukee County, Wisconsin found local streams to be highly degraded due primarily to urban runoff, while three studies in the Atlanta, Georgia region were characterized as being, "the first documentation in the Southeast of the strong negative relationship

between urbanization and stream quality that has been observed in other ecoregions"<sup>16</sup>. Several other studies, including those performed in Arizona (Maricopa County), California (San Jose's Coyote Creek), Massachusetts (Green River), Virginia (Tuckahoe Creek), and Washington (Puget Sound lowland ecoregion), all had the same finding: runoff from urban areas greatly impair stream ecology and the health of aquatic life; the more heavily developed the area, the more detrimental the effects<sup>17</sup>. Pitt and others also described the receiving water effects on aquatic organisms associated with urban runoff<sup>18</sup>. In Wisconsin runoff samples were collected from streets, parking lots, roofs, driveways, and lawns. Source areas were broken up into residential, commercial, and industrial. Geometric mean concentration data for residential areas included total solids of about 500-800 mg/L from streets and 600 mg/L from lawns. Fecal coliform data from residential areas ranged from 34,000 to 92,000 cfu/100 mL for streets and driveways. Contaminant concentration data from commercial and industrial source areas were lower for total solids and fecal coliform, but higher for total zinc<sup>19,20</sup>. A number of other studies have indicated that urban roadways often contain significant quantities of metal elements and solids<sup>21</sup>.

Automotive service stations have been characterized as potential "hot spots" for hydrocarbon pollutants and heavy metals in urban storm water discharges<sup>22</sup>. In an urban area, **industrial and commercial activities** can also be considered hot spots as sources of pollutants<sup>23</sup>. Urban storm water also can contribute significant amounts of toxicants to receiving waters. Pitt et. al., found heavy metal concentrations in the majority of samples analyzed. Industrial or commercial areas were likely to be the most significant pollutant source areas<sup>24</sup>.

Wet weather flows have been recognized as the primary sources of estuarine pollution in coastal communities. Urban storm water runoff, sanitary sewer overflows, and combined sewer overflows have become the largest causes of beach closings in the United States in the past years. Storm water discharges from urban areas not only pose a threat to the ecological environment, they also can substantially affect human health. A survey of coastal and Great Lakes communities reports that in 1998, more than 1,500 beach closings and advisories were associated with storm water runoff<sup>25</sup>. Other reports also document public health, shellfish bed, and habitat impacts from storm water runoff, including more than 823 beach closings/advisories issued in 1995 and more than 407 beach closing/advisories issued in 1996 due to urban runoff<sup>26</sup>.

The studies and research performed in the Southern California area, including Los Angeles County, show the similar impacts of polluted urban runoff on the local receiving waters, with significant impacts on the health of the environment and local economy. The "Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay", concluded that there is a 57 percent higher rate of illness in swimmers who swim adjacent to storm drains than in swimmers who swim more than 400 yards away from storm drains<sup>27</sup>. This and other studies document a relationship between gastrointestinal illness in swimmers and water quality, the latter of which can be heavily compromised by polluted storm water discharges. Other impacts on the Santa Monica Bay from the discharge of polluted storm water runoff have been documented<sup>28</sup>.

In addition, the situation analysis of the "Los Angeles County Five-Year Public Education Overview" concluded:

Even after a generation of fighting water pollution, studies show the danger of illness to people swimming in waters near urban storm drain outfalls. The urban runoff that drains into the County's storm channels first litters and contaminates neighborhood streets and walks. Litter, fertilizers, pesticides, automobile soot and oil drippings, pet waste, and deteriorating leaves and plant debris not only make our communities unattractive, but also are swept untreated down the storm drains into our waterways...In total, the impacts of stormwater/urban runoff pollution encompass:

- losses to the County's \$2 billion a year tourism economy
- health risks associated with swimming in areas near storm drain outfalls
- loss of recreational resources
- dramatic cost increases for cleaning up contaminated sediments
- impaired function and vitality of our natural resources
- losses to Southern California's commercial and sportfishing industry
- contamination to marine life<sup>29</sup>.

## III. Responsibility of Municipal Operators of Large and Medium Municipal Separate Storm Sewer Systems

The water quality impacts of urban runoff are well documented and identified as a leading cause of receiving water beneficial uses impairments. Many States and Municipalities in cooperation with U.S. EPA moved aggressively to control the sources of pollution within the framework of the NPDES permitting system and through other non-point source programs.

### A. Role of Municipal Operator

As early as the promulgation of the 1990 Phase I storm water regulations, U.S. EPA clearly defined the roles and identified the responsibilities of all parties involved in the permitting process. Early on, the agency envisioned a partnership, a cooperative approach between U.S. EPA, States and Municipalities, recognizing that only through a coordinated effort will the difficult and complex issues of diffuse pollution be addressed appropriately. In the preamble to the 1990 Phase I storm water regulations, the agency stated that the:

...EPA still believes that municipal operators of large and medium municipal systems have an important role in **source identification** and the **development of pollutant controls for industries** that discharge storm water through municipal separate storm sewer systems is appropriate. Under the CWA, large and medium municipalities are responsible for reducing pollutants in discharges from municipal separate storm sewers to the maximum extent practicable. Because **storm water from industrial facilities may be a major contributor of pollutants** to municipal separate storm sewer systems, **municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program... EPA believes that the permitting of municipal storm sewer systems and the industrial discharges through them will act in a complimentary manner to** 

fully control the pollutants in those sewer systems. This will fully implement the intent of Congress to control industrial as well as large and medium municipal storm water discharges as expeditiously and effectively as possible.

#### U.S. EPA continued to clarify its intent for:

"...[t]he permit application requirements for large and medium municipal separate storm sewer systems, discussed in more detail later in today's preamble, address the responsibilities of the municipal operators of these systems to identify and control pollutants in storm water discharges associated with industrial activity. Permit applications for large and medium municipal separate storm sewer systems are to identify the location of facilities which discharge storm water associated with industrial activity to the municipal system... In addition, municipal applicants will provide a description of a proposed management program to reduce, to the maximum extent practicable, pollutants from storm water discharges associated with industrial activity which discharge to the municipal system... Controls developed in management plans for municipal permits may take a variety of forms. Where necessary, municipal permittees can pursue local remedies to develop measures to reduce pollutants or halt storm water discharges with high level of pollutants through municipal storm sewer systems. Some local entities have already implemented ordinances or laws that are designated to reduce the discharge of pollutants to municipal separate storm sewers, while other municipalities have developed a variety of techniques to control pollutants in storm water."

U.S. EPA reconfirmed its position in regard to the role of municipal operators of large and medium MS4s when it issued, in 1993 (58 FR 61146), the notice for the proposed multi-sector stormwater general permit for discharges of storm water associated with industrial activity (multi-sector permit).

In the Fact Sheet for the proposed multi-sector permit, U.S. EPA reiterated its position regarding the complimentary permit approach envisioned to address storm water discharges associated with industrial activity:

"A second permit issued to the operator of the large or medium municipal storm sewer, establishes the **responsibilities** of the municipal operators in controlling pollutants from storm water associated with industrial activity which discharge through their system... The municipal storm water management programs that will be incorporated into NPDES permits for discharges from MS4s will generally address (in addition to other possible requirements) the following three major components:

- Reducing pollutants in storm water discharges from municipal landfills; hazardous waste treatment, storage and disposal facilities; facilities subject to the Emergency Planning and Community Right-to-Know Act (EPCRA), section 313; and other priority industrial facilities through municipal separate storm sewers.
- Reducing pollutants in construction site runoff through municipal separate storm sewers.
- Identifying and controlling non-storm water discharges to municipal separate storm sewers...

Municipal programs to reduce pollutants in industrial site runoff and construction site runoff through MS4s **specifically will address municipal responsibilities in controlling pollutants from industrial facilities**."

Recently, in its Storm Water Phase II Compliance Assistance Guide (Guide)<sup>30</sup>, U.S. EPA restated and further clarified its intention regarding the integration of NPDES programs for storm water discharges: "...[t]he Phase I permits for MS4s mostly cover larger cities, and require them to develop a storm water management program, **track and oversee industrial facilities** regulated under the NPDES storm water program, conduct some monitoring, and submit periodic reports."

Furthermore, when referring to integration of NPDES program for construction (which is one of the eleven industrial categories addressed by the storm water program) with NPDES program for MS4s, the Guide specifies:

- "These are two separate and distinct construction programs.
- A construction operator is subject to requirements under **BOTH** programs if it is located in an NPDES-regulated MS4's jurisdiction."

In addition, the No Exposure Certification Form for Exclusion from NPDES Storm Water Permitting<sup>31</sup>, includes in the certification section the following statements:

"I understand that I am obligated to submit a no exposure certification form once every five years to the NPDES permitting authority and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request."

Once more, U.S. EPA clearly states its standpoint that NPDES permitting authority responsibilities are intertwined with those of the local agency.

It can be reasonably inferred from the regulatory record and actions that U.S. EPA clearly envisioned a dual coverage and a strong role and clear responsibilities for the municipal operator in controlling pollutants from industrial sites as distinct from the activities required by the NPDES permitting agency. However, activities required by both entities should be coordinated and integrated as much as possible to achieve to common goal of effectively controlling and reducing the discharge of pollutants into the storm water runoff.

## B. Legal Authority

**40 CFR §122.26(d)(2)(i)** Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

(A) Control through ordinance, permit, contract, order or similar means, the **contribution of pollutants to the municipal storm sewer by storm water discharges associated** 

with industrial activity and the quality of storm water discharged from sites of industrial activity;

(B) Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

(C) Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;
 (D) Control through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;

(E) Require compliance with conditions in ordinances, permits, contracts or orders; and (F) **Carry out all inspection**, **surveillance** and monitoring procedures necessary to determine compliance and noncompliance with permit conditions **including** the prohibition on illicit discharges to the municipal separate storm sewer.

**40 CFR §122.26(d)(2)(iv)(A)(5)** A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, which shall identify priorities and procedures for **inspections** and establishing and implementing control measures for such discharges (this program can be coordinated with the program developed under paragraph (d)(2)(iv)(C) of this section);

**40 CFR §122.26(d)(2)(iv)(C)** A description of a program to monitor and control pollutants in storm water discharges to municipal systems from 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 municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

(1) Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges;...

In its Guidance Manual<sup>32</sup> U.S. EPA explicitly states on what the municipalities must achieve: "The municipality, as a permittee, is responsible for compliance with its permit and must have the authority to implement the conditions in its permit. To comply with its permit, a municipality must have the authority to **hold dischargers accountable for their contributions** to separate storm sewers."

The Guidance Manual provides more clarification in regard to the extent of facilities that must be addressed and the link that must be made with the potential sources of pollutants: "However, a municipality, to satisfy its permit conditions, **may need to impose additional requirements** on **discharges from permitted industrial facilities**, as well as discharges from industrial facilities and construction sites *not* required to **obtain permits**... [t]he Source Identification component requires the applicant to provide an **inventory of pollutant sources**, organized by watershed. This inventory **identifies** and **describes the products and services** of each industrial facility that may discharge storm water to the MS4. The Source identification component suggests applicants to use standard industrial classification codes (SIC) codes for this description. EPA strongly recommends this information be used to identify priority waste handling sites and industrial facilities. A similar technique could be developed for sites *that do not meet* the *regulatory definition of "storm water discharge associated with industrial activity"* (i.e. not included in the Source Identification and Discharge Characterization components), but **are identified as a high priority** under the proposed management program." It can be concluded that the scheme envisioned by the regulations do not only address industrial sites covered under the definition of storm water discharge associated with industrial activity, but depending on the identified significant sources contributing pollutants to the storm water runoff, other types of industrial facilities, such as commercial, must be addressed in the municipal program to inspect facilities contributing pollutants to the municipal separate storm drain system.

Many existing permits issued by U.S. EPA or authorized States, nationwide, already include these kind of requirements and municipalities are actively implementing them.<sup>33</sup> Regional Boards in California also issued MS4 permits requiring a program for inspections at industrial or commercial facilities.<sup>34</sup> Municipalities used a large spectrum of methods and innovative ways to implement the inspection program, and many local jurisdictions have the adequate required legal authority or have adopted ordinances giving them the necessary legal authority. Even smaller cities, to be covered under Phase II, not required to obtain the legal authorities for inspections as yet, decided to pass ordinances giving them the necessary authority for the implementation of the storm water program, including the authority to inspect industrial or commercial facilities and adopt and impose BMPs.<sup>35</sup>

As early as 1993, U.S. EPA Region 9, clarified the role of municipalities in addressing industrial sources.<sup>36</sup> More recently the same position was restated.<sup>37</sup> Regional Board's position, starting with the 1990 MS4 Permit was that an inspection program was required in the municipal storm water permit and was supported by the legal analysis provided by the State Board's Office of Chief Counsel<sup>38</sup>.

## C. Source Identification

**40 CFR §122.26(d)(2)(ii). Source Identification**... Provide an inventory, organized by watershed of the name and address, and a description (such as SIC Codes) which best reflects the principal products or services provided by each facility which may discharge, to the municipal separate storm sewer, storm water associated with industrial activity.

A very careful consideration was given to the issue of the pollutant sources in storm water discharges through MS4s and the control of those pollutant sources. The Agency continued to discuss and describe its intent of the elements needed to be addressed by a municipality through the application process in regards to the sources that contribute pollutants to the municipal storm sewers. Under the source identification heading in the preamble to the 1990 Phase I storm water regulations, U.S. EPA stated that, "...**the identification of sources which contribute pollutants** to municipal separate storm sewers is a **critical step** in characterizing **the nature and extent of pollutants in discharges** and in **developing appropriate control measures**." The agency expands the scope of the source identification concept leaving it general instead of focusing on any particular area, such as industrial, commercial, residential, roadways, etc., but linking it to the existing water quality problems. It is clear that the intent of the agency was to draw the attention of applicants to addressing, in a flexible way, the real issues and focus their limited resources on controlling the most problematic sources:

"...source identification can be useful for providing an analysis of pollutant source contribution and for identifying the relationship between pollutant

sources and receiving water quality problems. In cases where end-of-pipe controls alone are not practicable, it is essential to identify the source of pollutants into the municipal storm sewer system to support a targeted approach to control pollutant sources."

The agency continues to comment and clarify the provisions under the application requirements of the regulations:

"...Part 1 of the application will also include: [...]the location of industrial facilities, open dumps, landfills or RCRA hazardous waste facilities which discharge storm water to the municipal storm sewer system;...Part 2 of the application will supplement the information reported in part 1 of the application so that,[...]municipal or public entities responsible for and obtaining an NPDES permit will be required to identify the location of an open dump, sanitary landfill, municipal incinerator or hazardous waste treatment, storage, and disposal facility under RCRA which may discharge storm water to the system as well as all facilities which discharge storm water with industrial activity into a large or medium municipal separate storm sewer system. Requiring these source identification measures is supported by the legislative history of section 405 of the WQA, which instructs that '[i]n writing any permit for a municipal separate storm sewer. EPA or the State should pay particular attention to the nature and uses of the drainage area and the location of any industrial facility, open dump, landfill, or hazardous waste treatment, storage, or disposal facility which may contribute pollutants to the discharge.<sup>39</sup>

In answering some of the comments regarding the value of source identification information, the agency responded:

[..]the **source identification** information serves several purposes. It is the first step for **identifying potential sources of pollutants** from which more in depth analysis can be accomplished...The **source identification component** of the municipal application also requires that **municipal applicants identify the industrial activity within the drainage area associated with each major outfall**...[A]pplicants identify the types of industrial facilities operating within the municipality, the municipality is free to use Standard Industrial Classification (SIC) or other systems which identify the principal products or services of the facility.

## D. Los Angeles MS4 Permittees Compliance Efforts

The Permittees covered under the Los Angeles MS4 permit addressed the element of source identification and prioritization through compliance with the requirements of the 1996 permit (Board Order No. 96-054). The Critical Source Selection and Monitoring Report (Critical Source Report), identified 30 categories of industrial and commercial activities that may impact the quality of the stormwater runoff discharged to the MS4<sup>40</sup>. The study also ranked the critical sources on the basis of potential impact and proposed a Critical Source/BMP Monitoring program at the five highest ranked facility types: (i)

wholesale trade (scrap, auto dismantling), (ii) *automotive repair/parking*, (iii) fabricated metal products, (iv) motor freight (including trucking), (v) chemical and allied products.

At the same time, the Permittees, under the coordination of the Los Angeles County Department of Public Works, compiled, in 1997, a facilities database for the MS4 program identifying approximately 58,000 facilities that could have been potentially addressed by the public education site visit program. Out of the total universe of 58,000 facilities identified by their SIC Code, 21,000 were food or food related establishments. The 36,000 remaining facilities were in industrial/commercial sectors. An updated review of the potential number of facilities within the LA MS4 area, identified in the 30 industrial/commercial sectors Critical Source Report (not including food establishments), revealed that the number of facilities can be as high as 26,300 sites as of 2001. The survey was performed with the help of the Los Angeles City Stormwater Management Division staff. A significant portion of the total number of facilities, up to 60%, may be located within the City of Los Angeles boundaries. The SIC Code system proved to be inadequate in identifying the correct type of activity performed on-site, and also a significant number of facilities may not have activities or materials exposed to stormwater, which will make the actual number of sites potentially addressed through the municipal stormwater program much smaller than predicted.

The results of the Critical Source/BMP Monitoring program confirmed that the five highest ranking activities indeed contribute significant quantities of pollutants and source control BMPs alone were not effective in reducing the amount of pollutants into the stormwater runoff. The majority of the sampling results were in excess of the Criteria for Priority Toxic Pollutants for the State of California.<sup>41</sup> However, since the implementation of the source control BMPs was voluntary, the study could not determine with certainty that the apparent failure was due to the inefficacy of the BMPs or the lack of proper implementation.<sup>42</sup>

Furthermore, the Research Report on Issues, Pollutants and Materials<sup>43</sup>(Research Report) accomplishes a comprehensive analysis of sources of pollutants, generation and receiving water impacts. The Research Report puts in a concise form and creates the link between typical pollutant sources, pollutants found in the County's waterbodies, pollutant of concerns for each Watershed Management Area and pollutants of concerns detected through previous monitoring. The Research Report clearly identifies the targeted pollutants: (i) heavy metals, (ii) oil and grease/PAHs, (iii) sediments, (iv) oxygen demanding substances, (v) litter/trash/debris, (vi) nutrients, (vii) other toxic materials, such as pesticides.<sup>43</sup> The Research Report confirms once again that the urban environment in the Los Angeles area is similar to the other urban areas in the nation when it comes to stormwater runoff characterization and receiving water impacts. The Los Angeles area is probably unique due to the highly industrialized and vast area served by an interconnected storm sewer system unlike any other in the nation. But that makes it even more imperative that significant efforts must be allocated in order to control the discharge of pollutants in the urban runoff.

# CONCLUSION

From the record and all the studies referenced in this report it is evident that an inspection program at industrial and commercial facilities is not only required under the storm water

regulations but it is an essential component to control the contribution of pollutants from industrial or commercial facilities into storm water discharges through the municipal storm drain system. This inspection program is separate and in addition to the program administered by the Regional Board, and the municipalities have a clear responsibility to perform them.

The dual coverage is intended in the regulations, in order to maximize the use of limited resources at the State and local level, and assure through active coordination that significant sources of pollutants are not overlooked or missed due to lack of legal authority.

The Permittees under the Los Angeles MS4 Permit have made great strides in preparing the ground work for next phase of implementation: they performed a comprehensive source identification study confirmed by the monitoring results, the Regional Board approved the minimum menu of BMPs presented by the Permittees and they already put facilities on notice and performed the educational part through the site visits effort.

The introduction of the inspection program in the new MS4 permit is not capricious or arbitrary but based on facts. It utilizes tools already developed by Permittees and follows a widespread precedent in MS4 permits nationwide and in California.

### **Selected References**

Requirement	Reference
"Today's rule also requires the municipal storm sewer permittee to	Final Rule (Federal
describe a program to address industrial discharges that are covered	Register, Vol. 55, p. 48056)
under the municipal storm sewer permit. Today's rule requires the	
municipal applicant to identify such discharges, provide a description	
of a program to monitor pollutants in runoff from certain industrial	
facilities that discharge to the municipal storm sewer system, identify	
priorities and procedures for inspections, and establish and	
implement control measures for such discharges."	
Part 2 application requirement:	40 CFR 122.26(d)(2)(i)(A)
[The applicant must demonstrate that it can control through] Adequate	
Legal Authority which authorizes or enables at a minimum to:	
Control through ordinance, permit, contract, order or similar means,	
the <b>contribution of pollutants</b> to the municipal storm sewer by <b>storm</b>	
water discharges associated with industrial activity and the quality	
of storm water discharged from sites of industrial activity;	
Carry out all inspection, surveillance and monitoring procedures	40 CFR 122.26(d)(2)(i)(F)
necessary to determine compliance and noncompliance with permit	
conditions including the prohibition on illicit discharges to the	
municipal separate storm sewer.	
In part 2 of the application, municipal applicants <b>must demonstrate</b> that	Guidance Manual for the
they now possess adequate legal authority to:	Preparation of Part 2 of the
• <b>Control</b> construction site and <b>other industrial discharges</b> to the	NPDES Permit Applications
MS4;	for Discharges from
Control potential sources of pollutants from discharges to or	Municipal Separate Storm
from coapplicants' MS4s, or MS4s that are interconnected or shared	Sewer Systems (Guidance
with other entities;	Manual) USEPA 1992
• Carry out inspection, surveillance, and monitoring procedures.	Pag. 3-1
"Control"[] means not only to require disclosure of information, but	Guidance Manual pag. 3-1
also to limit, discourage, or terminate a storm water discharge to the	
MS4.	
However, a municipality, to satisfy its permit conditions, may need to	Guidance Manual pag. 3-1
impose additional requirements on discharges from permitted	
industrial facilities, as well as discharges from industrial facilities	
and construction sites <i>not</i> required to obtain permits.	
In their part 2 applications, municipalities must propose programs to	Guidance Manual pag. 3-3
control the contributions of pollutants from industrial facilities and	
<b>pronibit</b> illicit discharges. For <b>both</b> of these activities, municipalities	
must have the legal authority to carry out inspection, surveillance,	
and monitoring procedures necessary to determine compliance.	Ouiden en Manuel e av 0.0
In their part 2 applications, municipalities should provide documentation	Guidance Manual pag. 3-3
of their authority to enter, sample, inspect, review, and copy	
records, etc. as well as demonstrate their authority to require regular	
reports.	
A description of a program to monitor and control pollutants in storm	40 CFK 122.26(0)(2)(IV)(C)
water discharges to municipal systems from <b>municipal landfills</b> ,	
nazaruous waste treatment, disposar and recovery facilities,	
muusinal facilities that are subject to section 313 of title III of the	

Requirement	Reference
Superfund Amendments and Reauthorization Act of 1986 (SARA),	
and industrial facilities that the municipal permit applicant	
determines are contributing a substantial pollutant loading to the	
municipal storm sewer system. The program <b>shall</b> :	
<ol><li>Identify priorities and procedures for inspections and</li></ol>	
establishing and implementing control measures for such	
discharges;	
NPDES permits for MS4s will establish responsibilities for	Guidance Manual pag. 6-16
municipal system operators to control pollutants from industrial	
storm water discharged through their system.	
Proposed storm water management programs must address the	Guidance Manual pag. 6-16
reduction of pollutants in storm water discharges from municipal	
landfills, hazardous waste treatment, disposal and recovery	
facilities, facilities subject to SARA Title III; and other priority	
industrial facilities, as determined by the applicant. Municipalities	
should consider the information gathered for [] the part 2 application	
(particularly the Source Identification and Characterization Data	
components) when prioritizing storm water discharges from these sites.	
In part 2 application, the Source Identification component requires the	Guidance Manual pag. 6-16
applicant to provide an inventory of pollutant sources, organized by	[Commercial Sites]
watershed. This inventory identifies and describes the products and	
services of each industrial facility that may discharge storm water to the	
MS4. The Source identification component suggests applicants to use	
standard industrial classification codes (SIC) codes for this description.	
EPA strongly recommends this information be used to identify priority	
waste handling sites and industrial facilities. A similar technique could be	
developed for sites that do not meet the regulatory definition of	
"storm water discharge associated with industrial activity" (i.e. not	
included in the Source Identification and Discharge Characterization	
components), but are identified as a high priority under the proposed	
management program.	
The municipality is <b>ultimately responsible</b> for discharges from their	Guidance Manual pag. 6-17
MS4. Consequently, the proposed storm water management program	
should describe how the municipality will help EPA and authorized	
NPDES States:	
<ul> <li>Identify priority industries discharging to their systems;</li> </ul>	
<ul> <li>Review. and evaluate storm water pollution prevention plans</li> </ul>	
and other procedures that industrial facilities must develop	
under general or individual permits;	
• Establish and implement BMPs to reduce pollutants from these	
industrial facilities (or require industry to implement them); and	
<ul> <li>Inspect and monitor industrial facilities to verify that the</li> </ul>	
industries discharging storm water to the municipal systems	
are in compliance with their NPDES storm water permit, if	
required.	
At a minimum, priority facilities include:	Guidance Manual pag. 6-17
Operating and closed municipal landfills;	
Hazardous waste treatment, disposal or recovery facilities; and	
Facilities subject to SARA Title III.	

Requirement	Reference
Municipalities must identify these and other priority industrial facilities and describe the criteria used to identify them. For example, information from the Toxics Release Inventory is one source a municipality could use to identify industrial facilities subject to SARA Title III. Other sources may include CWA Section 205 or 208 use-attainability studies, other studies that indicate a site-specific beneficial use impairment immediately downstream of a storm water outfall, or records of industrial pretreatment programs or other permit programs that identify facilities that may be the source of a use impairment or a major contribution of pollutants. The program should also describe procedures for modifying the inventory of priority industries based on additional evaluation that occurs throughout the permit term.	
During the term of the permit, as additional information becomes	Guidance Manual pag. 6-18
available, the municipality should target and set phonties for other program elements that emerge	
<ul> <li>As noted above, when identifying priority sites, applicants must consider all the facilities listed in 122.26(d)(2)(iv)(C)(1). When municipalities develop criteria for identifying additional priority industrial facilities, they are advised to consider, at a minimum:</li> <li>The type of industrial activity (SIC codes can help characterize the type of industrial activity);</li> <li>The use and management of chemicals or raw products at the facility and the likelihood that storm water discharge from the site will be contaminated; and</li> <li>The size and location of the facility in relation to sensitive watersheds.</li> </ul>	Guidance Manual pag. 6-18
The proposed management program <b>must include procedures for</b> <b>inspecting priority industrial sites</b> . The results of inspection may be used as a basis for <b>requiring storm water</b> <b>management controls and enhanced pollution prevention</b> <b>measures</b> . It should also establish an <b>inspection schedule</b> for each priority facility at the time it is identified.	Guidance Manual pag. 6-18
Applicants also should describe a procedure for <b>conducting follow-up</b> <b>inspections</b> , where necessary, as part of this program component. For example, follow-up inspections <b>might be needed to verify the</b> <b>installation of a specific control or implementation of a practice</b> <b>specified</b> in a negotiated agreement between the municipality and the industrial site. A system-wide approach to establishing priorities for inspection procedures is recommended. The system-wide approach should begin with the evaluation of existing information, followed by the identification and evaluation of new information during the permit term. Therefore, applicants <b>should link</b> these procedures with information from the Source Identification and Discharge Characterization components. A municipality <b>must consider</b> if it <b>should place more stringent</b>	Guidance Manual pag. 6-19 Guidance Manual pag. 6-19
controls on discharges associated with industrial activity than are required in an industrial facility's existing NPDES storm water	

Requirement	Reference
permit.	
Priority industrial facilities should focus on controlling activities such as the use, storage, and handling of toxic chemicals. Standard methods for implementing control measures at different types of facilities should be described. To facilitate this, municipalities <b>should obtain copies of the</b> <b>pollution prevention plans developed by industrial permittees</b> . <b>Control measures</b> that the municipality <b>may suggest include</b>	Guidance Manual pag. 6-19
preventing exposure of pollutant sources to precipitation, on-site pretreatment, and oil/water separators.	
The proposed management program should describe the inspection procedures that will be followed. Storm water inspections can be coupled with inspections for other purposes (e.g., pretreatment programs, fire and safety). Proposed management programs should address minimum frequency for routine inspections. For example.	Guidance Manual pag. 6-19
how often, how much of the site, and how long an inspection may take are appropriate to explain in this proposed management program component. Applicants should also describe procedures for conducting inspections and provide an inspector's checklist. In	
addition, these inspection procedures should identify the <b>minimum</b> <b>number of inspectors</b> that will be employed and <b>describe the</b> <b>programs to train them</b> .	
discharge monitoring data collected by the industrial facility to ensure that the facility is in compliance with its NPDES storm water permit. Site inspections should include (1) an evaluation of the pollution prevention plan and any other pertinent documents, and (2) an on-site visual inspection of the facility to evaluate the potential for discharges of contaminated storm water from the site and to assess the effectiveness of the pollution prevention plan.	Guidance Manual pag. 6-20
On November 16, 1990 (55 FR 47990), EPA promulgated a permitting scheme where controls for storm water discharges associated with industrial activity through large and medium municipal separate storm sewer systems may be addressed by two permits issued in a coordinated manner. This complementary permit approach envisions cooperative efforts by the permit issuing agency and municipal operators of large and medium municipal separate storm sewer systems to develop programs that will result in controls on pollutants in storm water discharges associated with industrial activity which discharge through municipal systems.	Federal Register, Vol. 58, No. 222 pag. 61158
Under the complementary permit approach, storm water discharges associated with industrial activity which discharge through large and medium municipal separate storm sewer systems are required to obtain permit coverage. Permits for these discharges will establish requirements (such as controls or monitoring) for industrial operators of the discharge into the municipal system. In addition, these permits provide a basis for enforcement actions directly against the owner or operator of storm water discharges associated with industrial activity. A second permit, issued to the operator of the large or medium	Federal Register, Vol. 58, No. 222 pag. 61158 Federal Register, Vol. 58,
municipal separate storm sewer, establishes the responsibilities of the	No. 222 pag. 61158

Requirement	Reference
municipal operators in controlling pollutants from storm water associated	
with industrial activity which discharges through their system. The	
framework for permits for discharges from large and medium municipal	
separate storm sewer systems has been developed to establish the	
responsibilities of the municipals systems.	
At the heart of the permit program for discharges from municipal	Federal Register, Vol. 58,
separate storm sewer systems serving a population of 100,000 or more	No. 222 pag. 61158
are requirements that municipal applicants develop and implement	
municipal storm water management programs.	Fadaval Davistan Mal 50
I ne municipal storm water management programs that will be	Federal Register, Vol. 58,
incorporated into NPDES permits for discharges from municipal separate	NO. 222 pag. 61158
storm sewer systems will generally address (in addition to other possible	
requirements) the following three major components.	
Reducing pollutants in storm water discharges from     municipal landfiller bezerdene weste treatment, storage	
and disposal facilities: facilities subject to the Emergency	
Planning and Community Pight-to-Know Act (EPCPA)	
section 313: and other priority industrial facilities through	
municipal separate storm sewers	
Reducing pollutants in construction site runoff through	
municipal separate storm sewers	
<ul> <li>Identifying and controlling non-storm water discharges to</li> </ul>	
municipal separate storm sewer systems	
These components of a municipal program can initiate the role of the	
municipality in assisting EPA and authorized NPDES States in	
implementing controls to reduce pollutants in storm water discharges	
associated with industrial activity which discharge through large and	
medium municipal separate storm sewer systems.	
Municipal programs to reduce pollutants in industrial site runoff and	Federal Register, Vol. 58,
construction site runoff through municipal separate storm sewer systems	No. 222 pag. 61158
specifically will address municipal responsibilities in controlling pollutants	
from industrial facilities.	
EPA proposed a permitting scheme that would define the requirement to	Federal Register, Vol. 55,
obtain coverage under an NPDES permit for a storm water discharge	No. 222 pag. 47997-98
associated with industrial activity through a municipal separate storm	
sewer in terms of the classification of the municipal separate storm	
sewer. EPA proposed holding municipal operators of large or medium	
municipal separate storm sewer systems primarily responsible for	
applying for and obtaining an NPDES permit covering system	
discharges as well as storm water discharges (including storm water	
discharges associated with industrial activity) through the system.	
Under the proposed approach, operators of storm water discharges	Federal Register, Vol. 55,
associated with industrial activity which discharge through a large or	No. 222 pag. 47998
medium municipal separate storm sewer system would generally not be	
required to obtain permit coverage for their discharge (unless designated	
as a significant contributor of pollution pursuant to section $402(p)(2)(E)$	
facility and a cortification that the discharge has been tested (if facility)	
for non-storm water (including the results of any testing) The	

Requirement	Reference
notification procedure also required the operator of the storm water	
discharge associated with industrial activity to determine that: The	
discharge is composed entirely of storm water, the discharge does not	
contain hazardous substances in excess of reporting quantities; and the	
facility is in compliance with applicable provisions of the NPDES permit	
issued to the municipality for storm water.	
EPA also expressed its belief, based upon an analysis of ordinance	Federal Register, Vol. 55,
controlling construction site runoff in places in certain cities, that	No. 222 pag. 47998
municipalities generally possessed legal authority sufficient to control	
contributions of industrial storm water pollutants to their separate storm	
sewers to the degree necessary to implement the proposed rule.	
Based on consideration of the comments received on the notice, EPA	Federal Register, Vol. 55,
has decided that it is appropriate to revise the approach in its proposed	No. 222 pag. 47998
rule to require direct permit coverage for all storm water discharges	
associated with industrial activity, including those that discharge through	
municipal separate storm sewers.	
In response to all of these concerns, EPA has decided to require storm	Federal Register, Vol. 55,
water discharges associated with industrial activity which discharge	No. 222 pag. 48000
through municipal separate storm sewers to obtain separate individual or	
general NPDES permits.	
Although today's rule will require industrial discharges through municipal	Federal Register, Vol. 55,
storm sewers to be covered by a separate permit, EPA still believes that	No. 222 pag. 48000
municipal operators of large and medium municipal systems have an	
important role in source identification and the development of pollutant	
controls for industries that discharge storm water through municipal	
separate storm sewer systems is appropriate.	
Under the CWA, large and medium municipalities are responsible for	Federal Register, Vol. 55,
reducing pollutants in discharges from municipal separate storm sewers	No. 222 pag. 48000
to the maximum extent practicable. Because storm water from industrial	
facilities may be a major contributor of pollutants to municipal separate	
storm sewer systems, municipalities are obligated to develop controls for	
storm water discharges associated with industrial activity through their	
system in their storm water management program.	
The CWA provides that permits for municipal separate storm sewers	Federal Register, Vol. 55,
shall require municipalities to reduce pollutants to the maximum extent	No. 222 pag. 48000
practicable. Permits issued to municipalities for discharges from	
municipal separate storm sewers will reflect terms, specified controls,	
and programs that achieve that goal.	
As with all NPDES permits, responsibility and liability is determined by	Federal Register, Vol. 55,
the discharger's compliance with the terms of the permit. A	No. 222 pag. 48000
municipality's responsibility for industrial storm water discharged through	
their system is governed by the terms of the permit issued. If an	
industrial source discharges storm water through a municipal separate	
storm sewer in violation of requirements incorporated into a permit for	
the industrial facility's discharge, that industrial operator of the discharge	
may be subject to an enforcement action instituted by the Director of the	
NPDES program.	
Today's rule also requires operators of storm water discharges	Federal Register, Vol. 55,
associated with industrial activity through large and medium municipal	No. 222 pag. 48000

Requirement	Reference
systems to provide municipal entities of the name, location, and type of facility that is discharging to the municipal system. This information will provide municipalities with a base of information from which management plans can be devised and implemented. This requirement is in addition to any requirements contained in the industrial facility's permit. As in the proposal, the notification process will assist cities in development of their industrial control programs.	
EPA intends for the NPDES program, through requirements in permits for storm water discharges associated with industrial activity, to work in concert with municipalities in the industrial component of their storm water management program efforts. EPA believes that permitting of municipal storm sewer systems and the industrial discharges through them will act in a complementary manner to fully control the pollutants in those sewer systems.	Federal Register, Vol. 55, No. 222 pag. 48000
This will fully implement the intent of Congress to control industrial as well as large and medium municipal storm water discharges as expeditiously and effectively as possible. This approach will also address the concerns of municipalities that they lack sufficient authority and resources to control all industrial contributions to their storm sewers and will be liable for discharges outside of their control.	Federal Register, Vol. 55, No. 222 pag. 48000-01
In addition, municipal applicants will provide a description of a proposed management program to reduce, to the maximum extent practicable, pollutants from storm water discharges associated with industrial activity which discharge to the municipal system.	Federal Register, Vol. 55, No. 222 pag. 48001

### Endnotes:

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- <sup>29</sup> County of Los Angeles Five-Year Stormwater Public Education Plan 1996
- <sup>30</sup> EPA 833-R-00-002, March 2000
- <sup>31</sup> NPDES Form 3510-11
- <sup>32</sup> Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems U.S. EPA 1992
- <sup>33</sup> Broward County MS4, Palm Beach County MS4, Sarasota County MS4, issued by U.S. EPA Region 4, City of Tulsa MS4, Oklahoma City MS4, City of Corpus Christi MS4, City of Forth Worth MS4 issued by U.S. EPA Region 6, City of Seattle MS4 issued by Washington State Department of Ecology, City of Portland MS4 issued by the Oregon Department of Environmental Quality
- <sup>34</sup> County of Santa Clara and co-permittees MS4 (issued 2001), San Diego County and co-permittees MS4 (issued 2001)
- <sup>35</sup> City of Monterey Stormwater Ordinance 1997
- <sup>36</sup> Letter from Eugene Bromley, Stormwater Coordinator U.S. EPA Region 9, to Maryann Jones Storm Water Section, California State Water Resources Control Board December 1993
- <sup>37</sup> Letter from Alexis Strauss, Director Water Division, US EPA Region 9 to Dennis A. Dickerson in support of a municipal enforcement program for industrial sites included in the renewed MS4 Permit for LA County - December 2000;

Letter to James DeStefano, Interim City Manager – Diamond Bar, from Alexis Strauss, EPA Region 9 Water Division Director, regarding comments on the letter concerning inspection requirements – May 2001;

Letter from Christine Todd Whitman, U.S. EPA Administrator to The Honorable David Dreier, U.S. House of Representatives - July 2001

<sup>38</sup> Response To Comments Received On The December 18, 1995 Draft NPDES Permit For Municipal Storm Water And Urban Runoff Discharges Within The County Of Los Angeles - March 1996; Memorandum from Jorge A. Leon, Senior Staff Counsel, State Water Resources Control Board to Catheryne Tyrrell, Assistant Executive Officer Regional Board Los Angeles – April 1996 <sup>39</sup> Vol. 133 Cong.Rec. S733-02 (daily ed. Jan. 14, 1987).

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