remains in § 122.33(c) because this section is written in "readable regulation" format, but it is also described in a new § 122.26(e)(9).

Under today's rule, permitting authorities are allowed up to 3 years to issue a general permit and MS4s designated under § 122.32(a)(1) are allowed up to 3 years and 90 days to submit a permit application. Operators of regulated small MS4s that choose to be a co-permittee with an adjoining MS4 with an existing NPDES storm water permit must apply for a modification of that permit within the same time frame. Several commenters stated that 90 days was not adequate time to submit an NOI. This might be true if facilities did not start developing their storm water program until publication of their general permit. In fact, municipalities should start developing their storm water program upon publication of today's final rule, if they have not already done so. Municipalities that are uncertain if they fall within the urbanized area should ask their permitting authority. EPA believes that municipalities should not automatically take three years and 90 days to develop a program and submit their NOI. Three years is the maximum amount of time to issue a general permit. MS4s that are automatically designated under today's rule may have less than 3 years and 90 days if the permitting authority issues a permit that requires submission of NOIs before that time. EPA encourages States to modify their NPDES program to include storm water and issue their permits as soon as possible. It is important for permitting authorities to keep their municipalities informed of their progress in developing or modifying their NPDES storm water requirements.

ÈPA recognizes that MS4s brought into the program due to the 2000 Census calculations do not have as much time to develop a program as those already designated from the 1990 Census. However, the official Bureau of the Census urbanized area calculation for the 2000 Census is expected to be published in the Federal Register in the spring of 2002, which should give the potentially affected MS4s adequate time to prepare for compliance under the applicable permit. However, if the publication of this information is delayed, MS4s in newly designated urbanized areas will have 180 days from the time the new designations are published to submit an NOI, consistent with the time frame for other regulated MS4s that are designated after promulgation of the rule.

The proposed application deadline for MS4s designated under § 122.32(a)(2)

was within 60 days of notice. Many commenters stated that 60 days does not provide adequate time for the preparation of an NOI or permit application. EPA agrees that newly designated MS4s may not be aware that they might be designated since the permitting authority could take several years to develop designation criteria. EPA has decided that the application time frame for these facilities should be consistent with the 180 days allowed for facilities designated under §§ 122.26(a)(9)(i)(C) and (D). Section 122.33(c)(2) of today's final rule contains the modified time frame of 180 days to apply for coverage.

## h. Reevaluation of Rule

The municipal caucus of the Storm Water Phase II FACA Subcommittee asked EPA to demonstrate its commitment to revisit the municipal requirements of today's rule and make changes where necessary after evaluating the storm water program and researching the effectiveness of municipal BMPs. In § 122.37 of today's final rule, EPA commits to revisiting the regulations for the municipal storm water discharge control program after completion of the first two permit terms. EPA intends to use this time to work closely with stakeholders on research efforts. Gathering and analyzing data related to the storm water program, including data regarding the effectiveness of BMPs, is critical to EPA's storm water program evaluation. EPA does not intend to change today's NPDES municipal storm water program until the end of this period, except under the following circumstances: a court decision requires changes; a technical change is necessary for implementation; or the CWA is modified, thereby requiring changes. After careful analysis, EPA might also consider changes from consensus-based stakeholder requests regarding requirements applicable to newly regulated MS4s. EPA will apply the August 1, 1996, Interim Permitting Approach to today's program during this interim period and encourages all permitting authorities to use this approach in municipal storm water permits for newly regulated MS4s and in determining MS4 permit requirements under a TMDL approach. After careful consideration of the data, EPA will make modifications as necessary.

EPA received comments that supported waiting two permit cycles before re-evaluating the rule and other comments that requested re-evaluation much sooner. EPA anticipates two full permit cycles are necessary to obtain enough data to significantly evaluate the rule. The re-evaluation time frame of 13 years from today remains as proposed.

# I. Other Designated Storm Water Discharges

# 1. Discharges Associated with Small Construction Activity

Section 122.26(b)(15) of today's rule designates certain construction activities for regulation as "storm water discharges associated with small construction activity." Specifically, storm water discharges from construction activity equal to or greater than 1 acre and less than 5 acres are automatically designated except in those circumstances where the operator (i.e., person responsible for discharges that might occur) certifies to the permitting authority that one of two specific waiver circumstances (described in section b. below) applies. Sites below one acre may be designated under § 122.26(b)(15)(ii) where necessary to protect water quality.

Today's rule regulates these construction-related storm water sources under CWA section 402(p)(6) to protect water quality rather than under CWA section 402(p)(2). Designation under 402(p)(6) gives States and EPA the flexibility to waive the permit requirement for construction activity that is not likely to impair water quality, and to designate additional sources below one acre that are likely to cause water quality impairment. Thus, the one acre threshold of today's rule is not an absolute threshold like the five acre threshold that applies under the existing storm water rule.

Today's rule regulating certain storm water discharges from construction activity disturbing less than 5 acres is consistent with the 9th Circuit remand in NRDC v. EPA, 966 F.2d 1292 (9th Cir. 1992). In that case, the court remanded portions of the existing storm water regulations related to discharges from construction sites. The existing Phase I regulations define "storm water discharges associated with industrial activity" to include storm water discharges from construction sites disturbing 5 acres or more of total land area (see 40 CFR 122.26(b)(14)(x)). In its decision, the court concluded that the 5acre threshold was improper because the Agency had failed to identify information "to support its perception that construction activities on less than 5 acres are non-industrial in nature' (966 F.2d at 1306). The court remanded the exemption to EPA for further proceedings (966 F.2d at 1310). EPA's objectives in today's action include an effort to (1) address the 9th Circuit

remand to reconsider regulation of storm water discharges from construction activities that disturb less than 5 acres of land, (2) address water quality concerns associated with such activities, and (3) balance conflicting recommendations and concerns of stakeholders in the regulation of additional construction activity.

EPA responded to the Ninth Circuit's decision by designating discharges from construction activities that disturb between 1 and 5 acres as "discharges associated with small construction activity" under CWA section 402(p)(6), rather than as "discharges associated with industrial activity" under CWA section 402(p)(2)(B). Although a size criterion alone may be an indicator of whether runoff from construction sites between 1 and 5 acres is "associated with industrial activity," the Agency is instead relying on a size threshold in tandem with provisions that allow for designations and waivers based on potential for "predicted water quality impairments" to regulate construction sites between 1 and 5 acres under CWA section 402(p)(6). This approach was chosen by the Agency for the sake of simplicity and certainty and, most importantly, to protect water quality consistent with the mandate of CWA section 402(p)(6). Today's rule also includes extended application deadlines for this new category of dischargers under the authority of CWA section 402(p)(6) (see § 122.26(e)(8) of today's rule).

In today's rule, EPA is regulating storm water discharges from additional construction sites to better protect the Nation's waters, while remaining sensitive to a concern that the Agency should not regulate discharges from construction sites that might not or do not have adverse water quality impacts. EPA believes that today's rule will successfully accomplish this objective by establishing a 1-acre threshold nationwide that includes the flexibility to allow the permitting authority to both waive requirements for discharges from sites that are not expected to cause adverse water quality impacts and to designate discharges from sites below 1acre based on adverse water quality impacts.

In addition to the diminishing water quality benefits of regulating all sites below one acre, the Agency relied on practical considerations in establishing a one acre threshold and not setting a lower threshold. Regardless of the threshold established by EPA, a NPDES permit can only be required if a construction site has a point source discharge. A point source discharge means that pollutants are added to

waters of the United States through a discernible, confined, discrete conveyance. "Sheet flow" runoff from a small construction site would not result in a point source discharge unless and until it channelized. As the amount of disturbed land surface decreases, precipitation is less likely to channelize and create a "point source" discharge (assuming the absence of steep slopes or other factors that lead to increased channelization). Categorical designation of very small sites may create confusion about applicability of the NPDES permitting program to those sites. EPA's one acre threshold reflects, in part, the need to recognize that smaller sites are less likely to result in point source discharges. Of course, the NPDES permitting authority could designate smaller sites (below one acre, assuming point source discharges occur from the smaller designated sites) for regulation if a watershed or other local assessment indicated the need to do so. The Phase II rule includes this designation authority at 40 CFR 122.26(a)(9)(i)(D) and (b)(15)(ii).

The one acre threshold also provides an administrative tool for more easily identifying those sites that are identified for coverage by the rule (but may receive a waiver) and those that are not automatically covered (but may be designated for inclusion). Although all construction sites less than five acres could have a significant water quality impact cumulatively, EPA is automatically designating for permit coverage only those storm water discharges from construction sites that disturb land equal to or greater than one acre. Categorical regulation of discharges from construction below this one acre threshold would overwhelm the resources of permitting authorities and might not yield corresponding water quality benefits. Construction activities that disturb less than one acre make up, in total, a very small percentage of the total land disturbance from construction nationwide. The one acre threshold is reasonable for accomplishing the water quality goals of CWA section 402(p)(6) because it results in 97.5% of the total acreage disturbed by construction being designated for coverage by the NPDES storm water program, while excluding from automatic coverage the numerous smaller sites that represent 24.7% of the total number of construction sites.

Some commenters believed that EPA has not adequately identified water quality problems associated with storm water discharges from construction activity disturbing less than five acres. Other commenters believed that storm water discharges from small

construction activity is a significant water quality problem nationwide. Section I.B.3, Construction Site Runoff, provides a detailed discussion of adverse water quality impacts resulting from construction site storm water discharges. EPA is regulating storm water discharges from construction activity disturbing between 1 and 5 acres because the cumulative impact of many sources, and not just a single identified source, is typically the cause for water quality impairments, particularly for sediment-related water quality standards.

Several commenters requested that EPA regulate discharges from small construction activity as "discharges associated with industrial activity' under CWA 402(p)(4) and not, as proposed, as "storm water discharges associated with other activity" under CWA 402(p)(6). EPA is regulating discharges from small construction sites as "small construction activity" under the authority of CWA section 402(p)(6), rather than section 402(p)(4), to ensure that regulation of these sources is water quality-sensitive. CWA section 402(p)(6) affords the opportunity for designations and waivers of sources based on potential for "predicted water quality impairments." Regulation of storm water "associated with industrial activity" does not necessarily focus regulation to protect water quality.

#### a. Scope

The definition of "storm water discharges associated with small construction activity" includes discharges from construction activities, such as clearing, grading, and excavating activities, that result in the disturbance of equal to or greater than 1 acre and less than 5 acres (see § 122.26(b)(15)(i)). Such activities could include: road building; construction of residential houses, office buildings, or industrial buildings; or demolition activity. The definition of "storm water discharges associated with small construction activity" also includes any other construction activity, regardless of size, designated based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States (§ 122.26(b)(15)(ii)). This designation is made by the Director, or in States with approved NPDES programs, either the Director or the EPA Regional Administrator.

For the purposes of today's rule, the definition of "storm water discharges associated with small construction activity" includes discharges from activities disturbing less than 1 acre if that construction activity is part of a

"larger common plan of development or sale" with a planned disturbance of equal to or greater than 1 acre of land. A "larger common plan of development or sale" means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of five ½ acre lots (§ 122.26(b)(15)(i)).

In addition to the regulatory text for smaller construction, the Agency is also revising the existing text of § 122.26(b)(14)(x) to clarify EPA's intention regarding construction projects involving a larger common plan of development or sale ultimately disturbing 5 or more acres. Operators of such sites are required to seek coverage under an NPDES permit regardless of the number of lots in the larger plan because designation for permit coverage is based on the total amount of land area to be disturbed under the common plan. This designation attempts to address the potential cumulative effects of numerous construction activities concentrated in a given area.

Several commenters asked that EPA allow the permitting authority to set the appropriate size threshold based on water quality studies. While EPA agrees that location-specific water quality studies provide an ideal information base from which to make regulatory decisions, today's rule establishes a default standard for regulation in the absence of location-specific studies. The rule does allow for deviation from the default standard through additional designations and waivers, however, when supported by location-specific water quality information. The rule codifies the ability of permitting authorities to provide waivers for sites greater than or equal to one acre (the default standard) and designate additional discharges from small sites below one acre when location-specific information suggests that the default 1 acre standard is either unnecessary (waivers) or too limited (designations) to protect water quality.

Some commenters wanted EPA to base the regulation of storm water discharges from construction sites not only on size, but also on the duration and intensity of activity occurring on the site. EPA believes that a national 1-acre threshold, in combination with waivers and additional designations, is the most effective and simplest way to address adverse water quality impacts from storm water from small construction sites. Moreover, as discussed below, the waiver for rainfall erosivity does account for projects of limited duration. EPA believes,

however, that the intensity of activity occurring on-site would be a very difficult condition to quantify.

Many commenters requested that EPA maintain the 5 acre threshold from the existing regulations, which include opportunities for site-specific designation, as the regulatory scope for regulating storm water from construction sites, *i.e.*, that the Agency not automatically regulate storm water discharges from sites less than 5 acres. Several commenters wanted construction requirements to be applied to sites smaller than 1 acre, while some commenters suggested alternative thresholds of 2 or 3 acres. The rest of the commenters supported the 1 acre threshold. None of the commenters presented any data or rationales to support a specific size threshold.

EPA examined alternative size thresholds, including 0.5 acre, 1 acre, 2 acres and 5 acres. EPA had difficulty evaluating the alternative size thresholds because, while directly proportional to the size of the disturbed site, the water quality threat posed by discharges from construction sites of differing sizes varies nationwide, depending on the local climatological, geological, geographical, and hydrological influences. In order to ensure improvements in water quality nationwide, however, today's rule does not allow various permitting authorities to establish different size thresholds except based on the waiver and designation provisions of the rule. EPA believes that the water quality impact from small construction sites is as high as or higher than the impact from larger sites on a per acre basis. By selecting the 1 acre size threshold and coupling it with waivers and additional designations, EPA is seeking to standardize improvement of water quality on a national basis while providing permitting authorities with the opportunity to designate those unregulated activities causing water quality impairments regardless of site size, as well as to waive requirements when information demonstrates that regulation is unnecessary.

EPA recognizes that the size criterion alone may not be the most ideal predictor of the need for regulation, but effective protection of water quality depends as much on simplicity in implementation as it does on the scientific information underlying the regulatory criteria. The default size criterion of 1 acre will ensure protection against adverse water quality impacts from storm water from small construction sites while not overburdening the resources of permitting authorities and the

construction industry to implement the program to protect water quality in the first place.

One commenter stated a need to clarify whether routine road maintenance is considered construction activity for the purpose of today's rule. The NPDES general permit for discharges from construction sites larger than 5 acres defined "commencement of construction" as the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities (63 FR 7913). For construction sites disturbing less than 5 acres, EPA does not consider construction activity to include routine maintenance performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

Two commenters believed that the Multi-Sector General Permit for storm water discharges from industrial activities (MSGP) (60 FR 50804) already applies to storm water discharges from construction activities at oil and gas exploration and production sites and asked for a clarification on this issue. Commenters also requested a single general permit to authorize both industrial storm water discharges and construction site discharges which occur at the same industrial site.

Currently, when construction activity disturbing more than 5 acres occurs on an industrial site covered by the MSGP, authorization under a separate NPDES construction permit is needed because the MSGP does not include the "construction" industrial sector. While the MSGP does address sediment and erosion control, it is not as specific as the NPDES general permit for storm water discharges from construction activities disturbing more than 5 acres. Though permitting authorities could conceivably develop a single general permit to authorize storm water discharges associated with construction activity at these industrial facilities, the commenter's request is not addressed by today's rulemaking. When today's rule is implemented through general permits (to be issued later), the permitting authority will have discretion whether or not to incorporate the permit requirements for both the industrial storm water discharges and construction site storm water discharges into a single general permit. This type of request should be addressed to the permitting authority.

One commenter suggested that discharges from small construction sites should be regulated through a "self-implementing rule" approach. While today's rule is not a self-implementing rule, it does add § 122.28(b)(2)(v), which

gives the permitting authority the discretion to authorize a construction general permit for sites less than 5 acres without submitting a notice of intent. Such non-registration general permits function similarly to self-implementing rules, but are, in fact, permits. Today's rule will be implemented through NPDES permits rather than self-implementing regulations to capitalize on the compliance, tracking, enforcement, and public participation associated with NPDES permits (see discussion in section II.C).

Other commenters believed that only the permitting authority should regulate construction site storm water discharges (under a NPDES permit) and that a small MS4 operator's regulation of storm water discharges associated with construction (under the small MS4 NPDES storm water program) is redundant. EPA disagrees that control measure implementation by the NPDES authority and the small MS4 operator is redundant. To the extent the two efforts overlap, today's rule provides for consolidation and coordination of substantive requirements via incorporation by reference permitting. Small MS4s operators may choose to impose more prescriptive requirements than an NPDES permitting authority based on localized water quality needs. In those cases, EPA intends that the substantive requirements from the small MS4 program should apply as the NPDES permit requirements for the construction site discharger. In cases where a small MS4 program does not prioritize and focus on storm water from construction sites (beyond the small MS4 minimum control measure in today's rule, which does not require the small MS4 operator to control construction site discharges in a manner as prescriptive as is expected for discharges regulated under NPDES permits), the Agency intends that the NPDES general permit will provide the substantive standards applicable to the construction site discharge. EPA does anticipate, however, that implementation of MS4 programs to address construction site runoff within their jurisdiction will enhance overall NPDES compliance by construction site dischargers. EPA also notes that under § 122.35(b), the permitting authority may recognize its own program to control storm water discharges from construction sites in lieu of requiring such a program in an MS4's NPDES permit, provided that the permitting authority's program satisfies the requirements of  $\S 122.34(b)(4)$ , including, for example, procedures for site plan reviews and consideration of

information submitted by the public on individual construction sites in each jurisdiction required to be covered by the program.

#### b. Waivers

Under § 122.26(b)(15)(i) of today's rule, NPDES permitting authorities may waive today's requirement for construction site operators to obtain a permit in two circumstances. The first waiver is intended to apply where little or no rainfall is expected during the period of construction. The second waiver may be granted when a TMDL or equivalent analysis indicates that controls on construction site discharges are not needed to protect water quality.

The first waiver is based on "low predicted rainfall erosivity" which can be found using tables of rainfall-runoff erosivity (R) values published for each region in the U.S. R factors are published in the U.S. Department of Agriculture (USDA) Agricultural Handbook 703 (Renard, K.G., Foster, G.R., Weesies, G.A., McCool, D.K., and D.C. Yoder. 1997. Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE). U.S. Department of Agriculture Handbook 703). The R factor varies based on the time during the year when construction activity occurs, where in the country it occurs, and how long the construction activity lasts. The permitting authority may determine, using Handbook 703, which times of year, if any, the waiver opportunity is available for construction activity. EPA will provide assistance either through computer programs or the World Wide Web on how to determine whether this waiver applies for a particular geographic area and time period. Application of this waiver for regulatory purposes will be determined by the authorized NPDES authority. This waiver is discussed further in the following section titled Rainfall-Erosivity Waiver.

The second waiver is based on a consideration of ambient water quality. This waiver is available after a State or EPA develops and implements TMDLs for the pollutant(s) of concern from storm water discharges associated with construction activity. This waiver is also available for sites discharging to nonimpaired waters that do not require TMDLs, when an equivalent analysis has determined allocations for small construction sites for the pollutant(s) of concern or determined that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant

contributions from all sources, and a margin of safety. The Agency envisions an equivalent analysis that would demonstrate that water quality is *not* threatened by storm water discharges from small construction activity. This waiver is discussed further below in the sections titled TMDL Waiver and Water Quality Issues.

The proposed rule included a waiver based on "low predicted soil loss." This waiver provision would have been applicable on a case-by-case basis where the annual soil loss rate for the period of construction for a site, using the Revised Universal Soil Loss Equation (RUSLE), would be less than 2 tons/acre/year. The annual soil loss rate of less than 2 tons/acre/year would be calculated through the use of the RUSLE equation, assuming the constants of no ground cover and no runoff controls in place.

Several commenters found the low soil loss waiver too complex and impractical, and stated that expertise is not available at the local level to prepare and evaluate eligibility for the waiver. Another commenter questioned whether two tons/acre/year was an appropriate threshold for predicting adverse water quality impacts. Two other commenters said that RUSLE was never intended to predict off-site impacts and is not an indicator of potential harm to water quality. EPA agrees with the commenters on the difficulty associated with determining and implementing this waiver. Most construction site operators are not familiar with the RUSLE program, and the potential burden on the permitting authority, construction industry, USDA's Natural Resources Conservation Service and conservation districts probably would have been significant. The Agency has not included this waiver in the final rule.

Two commenters asked that EPA allow States the flexibility to develop their own waiver criteria but did not suggest how the Agency (or affected stakeholders) could evaluate the acceptability of alternative State waiver criteria. Therefore, the final rule does not provide for any such alternative waivers. If a State does seek to develop alternate waiver criteria, then EPA procedures afford the opportunity for subsequent actions, for example, under the Project XL Program in EPA's Office of Reinvention, which seeks cleaner, smarter, and cheaper solutions to environmental problems. Many commenters suggested that EPA extend these waivers to existing industrial storm water regulations for construction activity greater than 5 acres. These construction site discharges are

regulated as industrial storm water discharges under CWA 402(p)(2) and are not eligible for such water quality-based waivers.

Two commenters were concerned that waivers would create a potential for significant degradation of small streams. EPA disagrees. If small streams are threatened, the permitting authority would choose not to provide any waivers. In addition, permitting authorities may protect small streams by designating discharges from small construction activity based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the U.S.

Two commenters asked that the waiver options be eliminated. They felt it would create a gross inequity within the construction community if some projects will not be subject to the requirements of today's rule. While the comments may be valid, EPA disagrees that waivers should be disallowed on this basis. Construction site discharges that qualify for a waiver from permitting requirements are not expected to present a threat to water quality, which is the basis for designation and regulation under today's rule.

A number of commenters suggested additional waivers in cases where new development will result in no additional adverse impacts to water quality as compared to the existing development it replaces. EPA believes these waivers are either unworkable or unnecessary. It would be very difficult for most construction operators to determine, as well as for other stakeholders to verify, on a site-by-site basis, that there is no potential for adverse impact to water quality compared to the replaced development.

Other commenters proposed waivers in cases where a local erosion and sediment control program covers the project or a separate waiver for small linear utility projects. Instead of waivers, today's rule addresses the first suggestion through the qualifying program provision described in the section titled Cross-Referencing State/Local Erosion and Sediment Control Programs below. Today's rule provides waivers for small linear projects in so far as they satisfy conditions for low rainfall erosivity. (See § 122.26(b)(15)(i)(A).)

Other commenters suggested waivers based on distance to water body, existence of vegetated buffer around water body, slope of disturbed land, or if discharging to very large bodies of water. As a result of public outreach, EPA believes that these proposed waivers would be generally unworkable

for construction site dischargers and permitting authorities because of the difficulty in applying them to all small sites.

One commenter mentioned that waivers for the R factor (rainfallerosivity) and soil loss are effluent standards that have not been developed in accordance with sections 301 and 304 of the CWA. EPA disagrees that these sections are relevant to the designation of sources in today's rule. The waiver provisions in this section of the rule are jurisdictional because they affect the scope of the universe of entities subject to the NPDES program. Therefore, the waiver provisions are not themselves substantive control standards implemented through NPDES permits, and thus, not subject to the statutory criteria in sections 301 and 304.

Another commenter stated that waivers would allow exemptions to the technology based requirements and would thus be inconsistent with the two-fold approach of the CWA (a technology based minimum and a water quality based overlay). EPA acknowledges that the CWA does not generally provide for waivers for the Act's technology-based requirements. The waiver provisions do not create exemptions from technology-based standards that apply to NPDES dischargers; they provide exemption from the underlying requirement for an NPDES permit in the first place. Protection of water quality is the reason these smaller sites are designated for regulation under NPDES. The Act's two fold approach imposes more stringent water quality based effluent limitations when technology-based limitations applicable to regulated dischargers are insufficient to meet water quality standards. Under today's rule, water quality protection is the basis for determining which of the unregulated sources should be regulated at all. Thus, today's rule is entirely consistent with the Act's two fold approach.

i. Rainfall-Erosivity Waiver. The rainfall-erosivity waiver under § 122.26(b)(15)(i)(A) is intended to exempt the requirements for a permit when and where negligible rainfall/ runoff-erosivity is expected. In the development of the Universal Soil Loss Equation, analysis of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy times the maximum 30 minute intensity. The average annual sum of the storm energy and intensity values for an area comprise the R factor—the rainfall erosivity index. A detailed explanation of the R factor can be found in

Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE) (USDA, 1997).

This waiver is time-sensitive and is dependent on when during the year a construction activity takes place, how long it lasts, and the expected rainfall and intensity during that time. R factors vary based on location. EPA anticipates that this waiver opportunity responds to concerns about the requirement for a permit when it is not expected to rain, especially in the arid areas of the U.S. Under today's rule, the permitting authority could waive the requirements for a permit for time periods when the rainfall-erosivity factor ("R" in RUSLE) is less than five during the period of construction. For the purposes of calculating this waiver, the period of construction activity starts at the time of initial disturbance and ends with the time of final stabilization. The operator must submit a written certification to the Director in order to apply for such a waiver. EPA believes that those areas receiving negligible rainfall during certain times of the year are unlikely to have storm events causing discharges that could adversely impact receiving streams. Consequently, BMPs would not be necessary on those smaller sites. This waiver is most applicable to projects of short duration and to the arid regions of the country where the occurrence of rainfall follows a cyclic patternbetween no rain and extremely heavy rain. EPA review of rainfall records for these areas indicates that, during periods of the year when the number of events and quantity of rain are low, storm water discharges from the smaller construction sites regulated under today's rule should be minimal.

Some commenters supported the use of the R factor as a waiver, while others felt that a waiver based on rainfall statistics ignores the fact that it may rain on any given day and it is the cumulative effect of wet weather discharges which cause water quality impairments. A commenter also asked what happens in "El Nino" years when significantly more rainfall than normal occurs. Another commenter also expressed concern that this waiver was not based on a measured water quality impact, but instead on an indicator of potential impact. In response to the previous comments, EPA notes that, under CWA 402(p)(6), sources are designated on their potential for adverse impact. Designation under the section is prospective, not retrospective or remedial only. For that reason, the waivers under today's rule also operate prospectively. EPA wanted to waive requirements for sites with little

potential to impair water quality, and the R factor is the most straightforward way to do this. The permitting authority, if electing to use waivers, could always suspend the use of waivers in certain areas or during certain times. In addition, the permitting authority may choose to use a lower R factor threshold than the one set by EPA. Application of this waiver is at the discretion of the permitting authority, subject only to the limitation that R factors cannot exceed 5.

One commenter expressed the need for EPA to provide a justification for the threshold value used for the R factor. None of the commenters included any data to show that EPA's proposed R factor of 2 was either too high or too low. EPA is using the R factor as an indicator of the potential to impact water quality. In an effort to determine which R threshold should be used, EPA conducted additional analysis of the rainfall/runoff erosivity factor for 134 sites across the country. For an R factor threshold of 5, approximately 12% of sites would be waived if the project period lasted 6 months, 27% for 3 months, 47% for 1 month, and 60% of sites would be waived if the project lasted for only 15 days. None of the 134 sites would be waived if the project lasted an entire year. For an R factor threshold of 2, approximately 9% of sites would be waived if the project period lasted 6 months, 15% for 3 months, 31% for 1 month, and 43% for 15 days. For an R factor threshold of 10, approximately 22% of sites would be waived if the project period lasted 6 months, 37% for 3 months, 60% for 1 month, and 78% for 15 days. EPA believes that an R factor of 5 is an adequate threshold to waive requirements for sites because they would not reasonably be expected to impair water quality.

ÉPA will develop, as part of the tool box described in section II.A.5, guidance materials and computer or web-accessible programs to assist permitting authorities and construction site discharges in determining if any resulting storm water discharges from specific projects are eligible for this waiver.

ii. Water Quality Waiver. The water quality waiver under § 122.26(b)(15)(i)(B) is available where storm water controls are not needed based on a comprehensive, location-specific evaluation of water quality needs. The waiver is available based on either an EPA-approved "total maximum daily load" (TMDL) under section 303(d) of the CWA that addresses the pollutant(s) of concern or, for sites discharging to non-impaired

waters that do not require TMDLs, an equivalent analysis that has either determined allocations for small construction sites for the pollutant(s) of concern or determined that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. The pollutants of concern that must be addressed include sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the NPDES permitting authority that the construction activity will take place, and storm water discharges will occur, within the applicable drainage area evaluated in the TMDLs or equivalent analyses.

Today's rule modifies the approach in the proposed rule. EPA proposed to allow a waiver of permit requirements for small construction if storm water controls were determined to be unnecessary based on "wasteload allocations that are part of 'total maximum daily loads' (TMDLs) that address the pollutants of concern," or "a comprehensive watershed plan, implemented for the water body, that includes the equivalents of TMDLs, and addresses the pollutants of concern."

Commenters asked for clarification of the terms "comprehensive watershed plans" and "equivalent of TMDLs." EPA intended that both terms would include a comprehensive analysis that determines that controls on small construction sites are not needed based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. Today's rule makes this clarification.

One commenter pointed out that there are no water quality standards for suspended solids, the major pollutant expected in discharges from construction activity. The commenter asserted that no waiver would ever be available. Another commenter noted that there are no sediment criteria developed for streams, also making this waiver useless. EPA notes that a number of States and Tribes have water quality standards that address TSS, which are narrative in form, and that may serve as a basis for water quality-based effluent limits. As efforts to identify impairments and improve water quality progress, some States may yet develop water quality standards for suspended

solids. Although several TMDLs for sediment and related parameters have been established, EPA does recognize that currently it is extremely difficult to develop TMDLs for sediment. EPA is partially addressing this concern by clarifying in today's rule that the waivers may be based on a TMDL or equivalent analyses for sediment or one of the various pollutant parameters that are a proxy for sediment. These include TSS, turbidity and siltation.

Other commenters noted that this waiver was unattainable if a TMDL or equivalent analysis must be available for every pollutant that could possibly be present in any amount in discharges from small construction sites regardless of whether the pollutant is causing water quality impairment. Commenters asked that EPA identify what constitutes the "pollutants of concern" for which a TMDL or its equivalent must be developed. EPA has revised the proposed rule in response to these concerns.

In order for discharges from construction sites under five acres to qualify for the water quality waiver of today's rule, the construction site operator must demonstrate that storm water controls are not necessary for sediment or a parameter that addresses sediment (such as TSS, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Even if the water body is not currently impaired for sediment, today's rule requires an analysis of the potential impacts of sediment because the storm water discharges from the construction activity will be a new source of loading to the water body that could constitute a new impairment. Because the water body will not necessarily have been included on a "303(d) list" and a TMDL will not necessarily be required, the rule continues to allow an analysis that is the equivalent of a TMDL. The designation of storm water discharges from small construction activity for regulation in today's rule is intended to control pollutants other than sediment. This waiver provision requires a TMDL or equivalent analysis for a pollutant other than gross particulates (i.e., sediment and other particulate-focused pollutant parameters) only if the receiving water is currently impaired for that pollutant.

One commenter expressed the concern that construction operators will not know if they are in a watershed covered by a TMDL. To the extent this is an operator's concern, he or she could contact their NPDES permitting

authority before applying for permit coverage to determine if receiving water is subject to a TMDL. Alternatively, the permitting authority could identify the TMDL (or equivalent analysis) areas in the general permit or another operator-accessible information source.

Another commenter expressed the concern that a TMDL waiver is likely to be ineffective because the TMDL list is submitted only once every 2 years. By the time a water is listed, the activity may have been completed and stabilized. The commenter argued that, if a watershed is impaired due to sediment from construction, then storm water controls will still be needed, because small construction can only be waived when it is not identified as a source of impairment. In response, EPA notes that an analysis that is the equivalent of a TMDL (specifically, equivalent to the component of a TMDL that comprehensively analyses existing ambient conditions against the applicable water quality standards) may also provide a basis for waiver from the default 1 acre designation. Also, even if a water has been identified as impaired for sediment, it is possible that a site or category of sites may receive an allocation that is sufficiently high enough to allow discharges without storm water controls.

## c. Permit Process and Administration

The operator of the construction site, as with any operator of a point source discharge, is responsible for obtaining coverage under a NPDES permit as required by § 122.21(b). The "operator" of the construction site, as explained in the current NPDES construction general permit, is typically the party or parties that either individually or collectively meet the following two criteria: (1) Operational control over the site specifications, including the ability to make modifications in the specifications; and (2) day-to-day operational control of those activities at the site necessary to ensure compliance with permit conditions (63 FR 7859). If more than one party meets these criteria, then each party involved would typically be a co-permittee with any other operators. The operator could be the owner, the developer, the general contractor, or individual contractor. When responsibility for operational control is shared, all operators must

In today's rule, EPA is not requiring an NOI for NPDES general permits for storm water discharges from construction activities regulated by § 122.26(b)(15) if the NPDES permitting authority finds that the use of NOIs would be inappropriate (see

 $\S 122.28(b)(2)(v)$ ). Under this approach, the NPDES permitting authority will have the discretion to decide whether or not to require NOIs for discharges from construction activity less than 5 acres. Compared to the existing storm water regulation, the permitting authority thus has increased flexibility in program implementation. EPA does recommend the use of NOIs, however because NOIs track permit coverage and provide a useful information source to prioritize inspections or enforcement. Requiring an NOI allows for greater accountability by, and tracking of, dischargers. This simple permit application and reporting mechanism also allows for better outreach to the regulated community, uses an existing and familiar mechanism, and is consistent with the existing requirements for storm water discharges from larger construction activities. Today's rule does not amend the requirement for NOIs in general permits for storm water discharges from construction activity disturbing 5 acres for more. See § 122.28(b)(2)(v).

EPA expects that the vast majority of discharges of storm water associated with small construction activity identified in § 122.26(b)(15) will be regulated through general permits. In the event that an NPDES permitting authority decides to issue an individual construction permit, however, individual application requirements for these construction site discharges are found at § 122.26(c)(1)(ii). For any discharges of storm water associated with small construction activity identified in § 122.26(b)(15) that are not authorized by a general permit, a permit application made pursuant to § 122.26(c) must be submitted to the Director by 3 years and 90 days after publication of the final rule.

Some commenters expressed concern that linear construction projects (e.g., roads, highways, pipelines) that cross several jurisdictions will have to comply with multiple sets of requirements from various jurisdictions, including multiple local governments and States. EPA is limited in its options to address these concerns because the Agency cannot issue NPDES permits in States authorized to implement the NPDES program nor preempt other more stringent local and State requirements. EPA believes, however, that the option for incorporating by reference the State, Tribal or local requirements (see discussion in Section II.I.2.d., Cross-Referencing State/Local Erosion and Sediment Control Programs) should limit the administrative burden on the operator responsible for discharges from linear construction projects. If the operator were to implement the most

comprehensive of the various requirements for the whole project, it could avoid confusion due to differing requirements for different sections of the project. In addition, linear utility projects, which usually have a shorter project period, are more likely to be eligible for the rainfall erosivity waiver.

One commenter stated there was no reason to delay the application period for regulated storm water discharges from small construction activities. The commenter requested that the newly regulated construction site discharges should be required to seek permit coverage within 90 days, as opposed to 3 years, of the effective date of the rule. The Agency does not accept this request. EPA anticipates that NPDES permitting authorities will need one to two years to develop adequate legal authority to implement a program to address this new category of discharges, as well as to develop and issue general permits. Moreover, to ensure effective implementation to protect water quality, regulatory authorities will need additional time to inform small construction site operators of requirements and provide guidance and training on these requirements.

Finally, EPA received a comment requesting that the three year file retention requirement be deleted for discharges from small construction sites. While EPA recognizes that the three year record retention schedule may be unnecessary for certain construction projects, the Agency has determined it is necessary to retain files after the completion of the project to ensure permit compliance, including applicable construction site stabilization enabling permit termination for such sites

d. Cross-Referencing State, Tribal or Local Erosion and Sediment Control Programs

In developing the NPDES permit requirements for construction sites less than 5 acres, members of the Storm Water Phase II FACA Subcommittee asked EPA to try to minimize redundancy in the construction permit requirements. In response, today's rule at § 122.44(s) provides for incorporation of qualifying State, Tribal or local erosion and sediment control program requirements by reference into the NPDES permit authorizing storm water discharges from construction sites (described under §§ 122.26(b)(15) and (b)(14)(x)). The incorporation by reference approach applies not only to the newly regulated storm water discharges (from construction activity disturbing between 1 and 5 acres, including designated sites, but

excluding waived sites) but also to discharges from construction activity disturbing 5 or more acres already covered by the existing storm water regulations. For this latter category of discharges from construction activity disturbing 5 or more acres, the incorporation by reference approach requires that the pollutant control requirements from the incorporated program also satisfy the statutory standard for limitations representing application of the best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT).

For permits issued for discharges from small construction activity defined under § 122.26(b)(15), a qualifying State, Tribal, or local erosion and sediment control program is one that includes the program elements described under § 122.44(s)(1). These elements include requirements for construction site operators to implement appropriate erosion and sediment control BMPs, requirements to control waste, a requirement to develop a storm water pollution prevention plan, and requirements to submit a site plan for review. A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of nonstorm water discharges. The construction site's permit would require it to follow the requirements of the qualifying local program rather than require it to follow two different sets of requirements. If a partially-qualifying program does not have all of the elements described under § 122.44(s)(1), then the NPDES permitting authority may still incorporate language in the small construction site discharge's permit that requires the construction site operator to follow the program, but the construction site discharge permit also must incorporate the missing required elements in order to satisfy CWA requirements.

The term "local" refers to the geographic area of applicability, not the form of government that develops and administers the program. Thus, a qualifying federal erosion and control program, such as certain programs developed and administered by the federal Bureau of Land Management, could be a qualifying local program.

As a result of this provision, local requirements will, in effect, provide the substantive construction site erosion and sediment control requirements for the NPDES permit authorization.

Therefore, by following one set of

erosion and sediment control requirements, construction site operators satisfy both local and NPDES permit requirements without duplicative effort. At the same time, noncompliance with the referenced local requirements will be considered noncompliance with the NPDES permit which is federally enforceable. The NPDES permitting authority will, of course, retain the discretion to decide whether to include the alternative requirements in the general permit. EPA believes that this approach will best balance the need for consideration of specific local requirements and local implementation with the need for federal and citizen oversight, and will extend supplemental NPDES requirements to control storm water discharges from construction sites.

EPA developed the "incorporation by reference" approach based on implementation efforts designed by the State of Michigan. Michigan relies on localities to develop substantive controls for storm water discharges associated with construction activities on a localized basis. Localities, however, are not required to do so. In areas where the local authority does not choose to participate, the State administers the sedimentation and erosion control requirements. The State agency, as the NPDES permitting authority, receives an NOI (termed "notice of coverage" by Michigan) under the general permit and tracks and exercises oversight, as appropriate, over the activity causing the storm water discharge. Michigan's goal under these procedures is to utilize the existing erosion and sediment control program infrastructure authorized under State law for storm water discharge regulation. (See U.S. Environmental Protection Agency, Office of Water. January 7, 1994. Memo: From Michael B. Cook, Director OWEC, to Water Management Division Directors, Regarding the "Approach Taken by Michigan to Regulate Storm Water Discharges from Construction Activities.")

Most commenters supported the general concept of incorporating by reference qualifying programs. Two commenters expressed concern that different local construction requirements will create an impossible regulatory scheme for builders who work in different localities. EPA believes that allowing States to incorporate qualifying programs by reference will minimize the differences for builders who work in different areas of the State. These differences already exist, however, not only for erosion and sediment controls, but also other aspects

of construction. In any event, the criteria for qualification for localized programs should provide a certain degree of standardization for various localities' requirements. EPA expects that the new rule for construction and post-construction BMPs being developed under CWA section 304(m) will also encourage standardization of local requirements. (See discussion of this new rulemaking in section II.D.1, Federal Role of this preamble).

Two commenters requested that an "incorporation by reference" should include permission, in writing, from the qualifying local program administrator because of a perceived extra burden on the referenced program. Any program requirements incorporated by reference in NPDES permits should already apply to construction site dischargers in the applicable area and therefore should not add any additional burden to the referenced program. EPA has left to the discretion of the permitting authority the decision on whether to seek permission from the qualifying program before cross-referencing it in an NPDES permit.

One commenter stated that a qualifying local program should require a SWPPP. The proposed rule defined the qualifying local program as a program the meets the minimum program requirements established in the proposed construction minimum control measure for small MS4s. To ensure consistency in the controls for storm water discharges between the larger, already regulated construction sites and the discharges from smaller sites that will be regulated as a result of today's rule, EPA has made a change to define a qualifying local program as one that includes the elements described in § 122.44(s)(1). Section 122.44(s)(1) requires the development and implementation of a storm water pollution prevention plan as a criterion for qualification of local programs for incorporation by reference. As noted above, if a qualifying program does not include all the elements in § 122.44(s)(1) then the permitting authority will need to specify the missing elements in order to rely on the incorporation by reference approach.

One commenter asked what happens in regard to the use of qualifying programs when a construction site operator is also the qualifying local program operator. The provision for incorporation by reference applies in this situation also. The local program operator will be required to comply with requirements it has established for others.

## e. Alternative Approaches

EPA received a number of comments on alternative permitting approaches. Several commenters supported regulating discharges only from those construction sites within urbanized areas. Other commenters opposed this approach. EPA chose to address storm water discharges from construction sites located both within and outside urbanized areas because of the potential for adverse water quality impact from storm water discharges from smaller sites in all areas. Regulating only those sites within urbanized areas would have excluded a large number of potential contributors to water quality impairment and would not address large areas of new development occurring on the outer fringes of urbanized areas. In fact, designating only small construction discharges within urbanized areas might create a perverse incentive for building only outside urbanized areas. Such an incentive would be inconsistent with the Agency's intention behind designating to protect water quality. The Agency intends that designation to protect water quality in today's rule should be both remedial and preventive.

A number of commenters encouraged EPA to cover municipal construction activities under the small MS4 general permit, instead of issuing a separate NPDES construction permit to these municipal construction projects. Similarly, a number of commenters supported EPA giving industrial facilities the option of having storm water from construction activities on the site covered by the industrial storm water permit. Several other commenters found that combining multiple permit types under one general permit introduced a degree of complexity which was confusing to permittees. Permitting authorities have the option of combining MS4 and construction permits or industrial and construction permits, however, specific requirements for each would still need to be included in the permit issued. EPA agrees that this would probably result in a more complex and confusing permit compared to the existing component permits.

Several commenters supported an alternative for regulated small MS4s where a local qualified program alone, without an NPDES permit, is sufficient to enforce compliance with construction site discharge requirements. On the other hand, one commenter stated that linking the local construction erosion and sediment control program to the existing NPDES program for storm water from larger construction has driven improvements in many local programs.

Another commenter stated that the potential fines under the NPDES program will encourage compliance and will be much stronger than any fines a local program may have. EPA agrees that the NPDES program is the best approach to address water quality impacts from construction sites and provides benefits such as accountability and federal enforcement.

A number of commenters supported issuing one permit for each construction company, instead of a permit for each individual construction activity (also requested for storm water discharges from the larger, already regulated construction sites). Other commenters found that a 'licensing' program for construction site operators would have many problems, including identifying who to permit and tracking information on active sites. EPA is regulating only the storm water discharges associated with construction activity from small sites, not the construction activity itself. Separate NPDES permits (either individual or general permit coverage) for construction site discharges avoid potential problems in tracking sites and operator accountability. Section 122.28(b)(2)(v) gives permitting authorities the option to issue a general permit without requiring an NOI. If an NOI is not required for each activity, permitting authorities could pursue other options such as a company-wide NOI, license instead of an NOI, or another mechanism.

## 2. Other Sources

In the Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program, Report to Congress, March 1995, ("Report") submitted by EPA pursuant to CWA section 402(p)(5), EPA examined the remaining unregulated point sources of storm water for the potential to adversely affect water quality. Due to very limited national data on which to estimate pollutant loadings on the basis of discharge categories, the discussion of the extent of unregulated storm water discharges is limited to an analysis of the number and geographic distribution of the unregulated storm water discharges. Therefore, EPA is not designating any additional unregulated point sources of storm water on a nationwide, categorical basis. Instead, the remainder of the sources will be regulated based on caseby-case post-promulgation designations by the NPDES permitting authority.

EPA did, however, evaluate a variety of categories of discharges for potential designation in the Report. EPA's efforts to identify sources and categories of

unregulated storm water discharges for potential designation for regulation in today's rule started with an examination of approximately 7.7 million commercial, retail, industrial, and institutional facilities identified as ''unregulated.'' In general, the distribution of these facilities follows the distribution of population, with a large percentage of facilities concentrated within urbanized areas (see page 4-35 of the Report). This examination resulted in identification of two general classes of facilities with the potential for discharging pollutants to waters of the United States through storm water point sources.

The first group (Group A) included sources that are very similar, or identical, to regulated "storm water discharges associated with industrial activity" but that were not included in the existing storm water regulations because EPA used SIC codes in defining the universe of regulated industrial activities. By relying on SIC codes, a classification system created to identify industries rather than environmental impacts from these industries discharges, some types of storm water discharges that might otherwise be considered "industrial" were not included in the existing NPDES storm water program. The second general class of facilities (Group B) was identified on the basis of potential for activities and pollutants that could contribute to storm water contamination.

EPA estimates that Group A has approximately 100,000 facilities. Discharges from facilities in this group, which may be of high priority due to their similarity to regulated storm water discharges from industrial facilities, include, for example, auxiliary facilities or secondary activities (e.g., maintenance of construction equipment and vehicles, local trucking for an unregulated facility such as a grocery store) and facilities intentionally omitted from existing storm water regulations (e.g., publicly owned treatment works with a design flow of less than 1 million gallons per day, landfills that have not received industrial waste).

Group B consists of nearly one million facilities. EPA organized Group B sources into 18 sectors for the purposes of the Report. The automobile service sector (e.g., gas/service stations, general automobile repair, new and used car dealerships, car and truck rental) makes up more than one-third of the total number of facilities identified in all 18 sectors.

EPA conducted a geographical analysis of the industrial and commercial facilities in Groups A and B. The geographical analysis shows that the majority are located in urbanized areas (see Section 4.2.2, Geographic Extent of Facilities, in the Report). In general, about 61 percent of Group A facilities and 56 percent of Group B facilities are located in urbanized areas. The analysis also showed that nearly twice as many industrial facilities are found in all urbanized areas as are found in large and medium municipalities alone. Notable exceptions to this generalization included lawn/garden establishments, small unregulated animal feedlots, wholesale livestock, farm and garden machinery repair, bulk petroleum wholesale, farm supplies, lumber and building materials, agricultural chemical dealers, and petroleum pipelines, which can frequently be located in smaller municipalities or rural areas.

In identifying potential categories of sources for designation in today's notice, EPA considered designation of discharges from Group A and Group B facilities. EPA applied three criteria to each potential category in both groups to determine the need for designation: (1) The likelihood for exposure of pollutant sources included in that category, (2) whether such sources were adequately addressed by other environmental programs, and (3) whether sufficient data were available at this time on which to make a determination of potential adverse water quality impacts for the category of sources. As discussed previously, EPA searched for applicable nationwide data on the water quality impacts of such categories of facilities.

By application of the first criterion, the likelihood for exposure, EPA considered the nature of potential pollutant sources in exposed portions of such sites. As precipitation contacts industrial materials or activities, the resultant runoff is likely to mobilize and become contaminated by pollutants. As the size of these exposed areas increases, EPA expects a proportional increase in the pollutant loadings leaving the site. If EPA concluded that a category of sources has a high potential for exposure of raw materials, intermediate products, final products, waste materials, byproducts, industrial machinery, or industrial activity to rainfall, the Agency rated that category of sources as having "high" potential for adverse water quality impact. EPA's application of the first criterion showed that a number of Group A and B sources have a high likelihood of exposure of pollutants.

Through application of the second criterion, EPA assessed the likelihood

that pollutant sources are regulated in a comprehensive fashion under other environmental protection programs, such as programs under the Resource Conservation and Recovery Act (RCRA) or the Occupational Health and Safety Act (OSHA). If EPA concluded that the category of sources was sufficiently addressed under another program, the Agency rated that source category as having "low" potential for adverse water quality impact. Application of the second criterion showed that some categories were likely to be adequately addressed by other programs.

After application of the third criterion, availability of nationwide data on the various storm water discharge categories, EPA concluded that available data would not support any such nationwide designations. While such data could exist on a regional or local basis, EPA believes that permitting authorities should have flexibility to regulate only those categories of sources contributing to localized water quality impairments.

EPA received comments requesting designation of additional industrial, commercial and retail sources (e.g. industrial activity "look-alikes", roads, commercial facilities and institutions, and vehicle maintenance facilities) in the final rule, because the commenters believe that the data exist to support national designation of some of these sources. Other comments were received opposing designation of any additional sources. Today's rule does not designate any additional industrial or commercial category of sources either because EPA currently lacks information indicating a consistent potential for adverse water quality impact or because of EPA's belief that the likelihood of adverse impacts on water quality is low, with some possible exceptions on a more local basis. Since the time the Agency submitted the Report, EPA has continued to seek additional data and has requested available data from the FACA members. If sufficient regional or nationwide data become available in the future, the permitting authority could at that time designate a category of sources or individual sources on a case-by-case basis. Therefore, today's rule encourages control of storm water discharges from Groups A and B through self-initiated, voluntary BMPs, unless the discharge (or category of discharges) is designated for permitting by the permitting authority. See discussion in section I.D., EPA's Reports to Congress.

#### 3. ISTEA Sources

Provisions within the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991 temporarily exempted storm water discharges associated with industrial activity that are owned or operated by municipalities serving populations less than 100,000 people (except for airports, power plants, and uncontrolled sanitary landfills) from the need to apply for or obtain a storm water discharge permit (section 1068(c) of ISTEA). Congress extended the NPDES permitting moratorium for these facilities to allow small municipalities additional time to comply with NPDES requirements for certain sources of industrial storm water. The August 7, 1995 storm water final rule (60 FR 40230) further extended this moratorium until August 7, 2001. However, today's rule changes this deadline so that previously exempted industrial facilities owned or operated by municipalities serving populations less than 100,000 people, must now submit an application for a permit within 3 years and 90 days from date of publication of today's rule.

EPA received comments recommending that permit requirements for municipally owned or operated industrial storm water discharges, including those previously exempt under ISTEA, be included in a single NPDES permit for all MS4 storm water discharges. The existing NPDES regulations already provide permitting authorities the ability to issue a single "combination" permit for MS4 discharges. However, if the permitting authorities chose to issue this type of permit, they must make sure that in doing so, they are not creating a double standard for industrial facilities covered under the combination permit versus those covered under separate general or individual permits. In order to avoid this double standard, combination permits would have to contain requirements that are the same or very similar to the requirements found in separate MS4 and industrial permits, i.e., the minimum measures and other necessary requirements of an MS4 permit, and the SWPPP, monitoring and reporting requirements, and other necessary requirements of an industrial permit. If such a combined MS4 general permit were issued, the regulations require that each discharger submit NOIs for their respective discharges, except for discharges from small construction activities. Flexibility exists in developing a combination NOI which could reduce the need to submit duplicative information, e.g. owner/ operator name and address. The combination NOI would still need to require specific information for each separate municipally owned or operated industrial location, including

construction projects disturbing 5 or more acres. The regulations at  $\S 122.28(b)(2)(ii)$  list the necessary contents of an NOI, which require: the facility name, facility address, type of facility or discharge and receiving stream for each industrial discharge location. When viewed in its entirety, a combination permit, which by necessity would need to contain all elements of otherwise separate industrial and MS4 permit requirements, and require NOI information for each separate industrial activity, may have few advantages when compared to obtaining separate MS4 and industrial general permit coverage.

In order to allow the permitting authority to issue a single storm water permit for the MS4 and all municipally owned or operated industrial facilities, including those previously exempt under ISTEA, today's rule requires applications for ISTEA sources within 3 yrs and 90 days from date of publication of today's rule. The permitting authority has the ultimate decision to determine whether or not a single allencompassing MS4 permit is appropriate.

## 4. Residual Designation Authority

The NPDES permitting authority's existing designation authority, as well as the petition provisions are being retained. Today's rule contains two provisions related to designation authority at §§ 122.26(a)(9)(i)(C) and (D). Subsection (C) adds designation authority where storm water controls are needed for the discharge based upon wasteload allocations that are part of TMDLs that address the pollutant(s) of concern. EPA intends that the NPDES permitting authority have discretion in the matter of designations based on TMDLs under subsection (C). Subsection (D) carries forward residual designation authority under former § 122.26(g), and has been modified to provide clarification on categorical designation. Under today's rule, EPA and authorized States continue to exercise the authority to designate remaining unregulated discharges composed entirely of storm water for regulation on a case-by-case basis (including § 123.35). Individual sources are subject to regulation if EPA or the State, as the case may be, determines that the storm water discharge from the source contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. This standard is based on the text of section CWA 402(p). In today's rule, EPA believes, as Congress did in drafting section CWA 402(p)(2)(E), that individual instances of storm water discharge might warrant

special regulatory attention, but do not fall neatly into a discrete, predetermined category. Today's rule preserves the regulatory authority to subsequently address a source (or category of sources) of storm water discharges of concern on a localized or regional basis. For example, as States and EPA implement TMDLs, permitting authorities may need to designate some point source discharges of storm water on a categorical basis either locally or regionally in order to assure progress toward compliance with water quality standards in the watershed.

EPA received comments asking that § 122.26(a)(9)(i)(D) as proposed be modified to include specific language clarifying the permitting authority's ability to designate additional sources on a categorical basis as explained in the preamble to the proposed rule. One comment requested that the designation language include "categories of sources on a Statewide basis." EPA agrees that the intent of the language may not have been clear regarding categorical designation. Today's rule modifies subsection (D) to clarify that the designation authority can be applied within different geographic areas to any single discharge (i.e., a specific facility), or category of discharges that are contributing to a violation of a water quality standard or are significant contributors of pollutants to waters of the United States. The added term "within a geographic area" allows "State-wide" or "watershed-wide" designation within the meaning of the

One commenter questioned the Agency's legal authority to provide for such residual designation authority. The stakeholder argued that the lapse of the October 1, 1994, permitting moratorium under CWA section 402(p)(1) eliminated the significance of the CWA section 402(p)(2) exceptions to the moratorium, including the exception for discharges of storm water determined to be contributing to a violation of a water quality standard or a significant contributor of pollutants under CWA section 402(p)(2)(E). The stakeholder further argued that EPA's authority to designate sources for regulation under CWA section 402(p)(6) is limited to storm water discharges other than those described under CWA section 402(p)(2). Because CWA section 402(p)(2)(E)describes individually designated discharges, the stakeholder concluded that regulations under CWA section 402(p)(6) cannot provide for postpromulgation designation of individual sources. EPA disagrees.

First, as explained previously, EPA anticipates that NPDES permitting

authorities may yet determine that individual unregulated point sources of storm water discharges require regulation on a case-by-case basis. This conclusion is consistent with the Congress' recognition of the potential need for such designation under the first phase of storm water regulation as described in CWA section 402(p)(2)(E). Under CWA section 402(p)(2)(E), Congress recognized the need for both EPA and the State to retain authority to regulate unregulated point sources of storm water under the NPDES permit program. Second, to the extent that CWA section 402(p)(6) requires designation of a "category" of sources, the permitting authority may designate such (as yet unidentified) sources as a category that should be regulated to protect water quality. Though such sources may exist and discharge today, if neither EPA nor the State/Tribal NPDES permitting authority has designated the source for regulation under CWA section 402(p)(2)(E) to date, then CWA section 402(p)(6) provides the authority to designate such sources.

The Agency can designate a category of "not yet identified" sources to be regulated, based on local concerns, even if data do not exist to support nationwide regulation of such sources. EPA does not interpret the language in CWA section 402(p) to preclude States from exercising designation authority under these provisions because such designation (and subsequent regulation of designated sources) is within the "scope" of the NPDES program.

EPA also believes that sources regulated pursuant to a State designation are part of (and regulated under) a federally approved State NPDES program, and thus subject to enforcement under CWA sections 309 and 505. Under existing NPDES State program regulations, State programs that are "greater in scope of coverage" are not part of the federally-approved program. By contrast, any such State regulation of sources in this "reserved category" will be within the scope of the federal program because today's rule recognizes the need for such post promulgation designations of unregulated point sources of storm water. Such regulation will be "more stringent" than the federal program rather than "greater in scope of coverage" (40 CFR 123.1(h)).

EPA does not interpret the congressional direction in CWA section 402(p)(6) to preclude regulation of point sources of storm water that should be regulated to protect water quality. Under CWA section 510, Congress expressly recognized and preserved the authority of States to adopt and enforce

more stringent regulation of point sources, as well as any requirement respecting the control or abatement of pollution. Section 510 applies, "except as expressly provided" in the CWA. CWA section 502(14) does expressly provide affirmative limitations on the regulation of certain pollutant sources through the point source control program, the NPDES permitting program. Section 502(14) excludes agricultural storm water and return flows from irrigated agriculture from the definition of point source, and section 402(l) limits applicability of the section 402 permit program for return flows from irrigated agriculture, as well as for storm water runoff from certain oil, gas, and mining operations. Unlike sections 502(14) and 402(l), EPA does not interpret CWA section 402(p)(6) as an express provision limiting the authority to designate point sources of storm water for regulation on a case-by-case basis after the promulgation of final regulations. Any source of storm water discharge is encouraged to assess its potential for storm water contamination and take preventive measures against contamination. Such proactive actions could result in the avoidance of future regulation.

One comment was received requesting clarification of the term "non-municipal" in § 122.26(a)(9)(ii). The commenter is concerned that the term "non-municipal," in this context, implies that municipally owned or operated facilities cannot be designated. The term "non-municipal" in this context refers to the universe of unregulated industrial and commercial facilities that could potentially be designated according to § 122.26(a)(9)(i) authority. There is no exemption for municipally owned or operated facilities under these designation provisions.

Finally, EPA received comments and evaluated the proposal under which operators of regulated small, medium, and large MS4s would be responsible for controlling discharges from industrial and other facilities into their systems in lieu of requiring NPDES permit coverage for such facilities. EPA did not adopt this framework due to concerns with administrative and technical burden on the MS4 operators, as well as concerns about such an intergovernmental mandate.

J. Conditional Exclusion for "No Exposure" of Industrial Activities and Materials to Storm Water

#### 1. Background

In 1992, the Ninth Circuit court remanded to EPA for further

rulemaking, a portion of the definition of "storm water discharge associated with industrial activity" that excluded the category of industrial activity identified as "light industry" when industrial materials and/or activities were not exposed to storm water. See NRDC v. EPA, 966 F.2d 1292, 1305 (9th Cir. 1992). Today's final rule responds to that remand. In the 1990 storm water regulations, EPA excluded the light industry category from the requirement for an NPDES permit if the industrial materials and/or activities were not "exposed" to storm water (see § 122.26(b)(14)). The Agency had reasoned that most of the activity at these types of facilities takes place indoors and that emissions from stacks, use of unhoused manufacturing equipment, outside material storage or disposal, and generation of large amounts of dust or particles would be atypical (55 FR 48008, November 16, 1990).

The Ninth Circuit determined that the exemption was arbitrary and capricious for two reasons. First, the court found that EPA had not established a record to support its assumption that light industry that was not exposed to storm water was not "associated with industrial activity," particularly when other types of industrial activity not exposed to storm water remained "associated with industrial activity." The court specifically found that "[t]o exempt these industries from the normal permitting process based on an unsubstantiated assumption about this group of facilities is arbitrary and capricious." Second, the court concluded that the exemption impermissibly "altered the statutory scheme" for permitting because the exemption relied on the unverified judgment of the light industrial facility operator to determine non-applicability of the permit application requirements. In other words, the court was critical that the operator would determine for itself that there was "no exposure" and then simply not apply for a permit without any further action. Without a basis for ensuring the effective operation of the permitting scheme-either that facilities would self-report actual exposure or that EPA would be required to inspect and monitor such facilitiesthe court vacated and remanded the rule to EPA for further rulemaking.

One of the major concerns expressed by the FACA Committee, was that EPA streamline and reinvent certain troublesome or problematic aspects of the existing permitting program for storm water discharges. One area identified was the mandatory applicability of the permitting program to all industrial facilities, even those "light industrial" activities that are of very low risk or of no risk to storm water contamination. Such dischargers may not have any industrial sources of storm water contamination on the plant site, yet they are still required to apply for an NPDES storm water permit and meet all permitting requirements. Examples of such facilities are a soap manufacturing plant (SIC Code 28) or hazardous waste treatment and disposal facility, where all industrial activities, even loading docks, are inside a building or under a roof.

Although they did not provide a written report, the FACA Committee members advised EPA that the existing storm water program should be revised to allow such facilities to seek an exclusion from the NPDES storm water permitting requirements. The Committee agreed that such an exclusion should also provide a strong incentive for other industrial facilities that conduct industrial activities outdoors to move the activities under cover or into buildings to prevent contamination of rainfall and storm water runoff. The committee believed that such a "no exposure" permit exclusion could be a valuable incentive for storm water pollution prevention.

In today's final rule, the Agency responds to both of the bases for the court's remand. The exclusion from permitting based on "no exposure" applies to all industrial categories listed in the existing storm water regulations except construction. The court's opinion rejected EPA's distinction between light industry and other industry, but it did not preclude an interpretation that treats all "non-exposed" industrial facilities in the same fashion. Presuming that an industrial facility adequately prevents exposure of industrial materials and activities to storm water, today's rule treats discharges from "non-exposed" industrial facilities in a manner similar to the way Congress intended for discharges from administrative buildings and parking lots. Specifically, permits will not be required for storm water discharges from these facilities on a categorical basis.

To assure that discharges from industrial facilities really are similar to discharges from administrative buildings and parking lots, and to respond to the second basis for the court's remand, the permitting exclusion is "conditional". The person responsible for a point source discharge from a "no exposure" industrial source must meet the conditions of the exclusion, and complete, sign and submit the certification to the permitting authority for tracking and

accountability purposes. EPA believes today's rule, therefore, is fully consistent with the direction provided by the court.

EPA relied upon the "no exposure" concept discussed by the FACA Committee in developing the "no exposure" provisions of today's rule. EPA is deleting the sentence regarding "no exposure" for the facilities in \$122.26(b)(14)(xi) and adding a new § 122.26(g) titled "Conditional Exclusion for No Exposure of Industrial Activities to Storm Water." The "no exposure" provision will make storm water discharges from all classes of industrial facilities eligible for exclusion, except storm water discharges from regulated construction activities. Regulated construction activities cannot claim "no exposure" because the main pollutants of concern (e.g., sediment) generally cannot entirely be sheltered from storm water.

Today's rule represents a significant expansion in the scope of the "no exposure" provision originally promulgated in the 1990 rule, which was only for storm water discharges from light industry. The intent of today's "no exposure" provision is to provide a simplified method for complying with the CWA to all industrial facilities that are entirely indoors. This includes facilities that are located within a large office building, or at which the only items permanently exposed to precipitation are roofs, parking lots, vegetated areas, and other non-industrial areas or activities.

EPA received several comments related to storm water runoff from parking lots, roof tops, lawns, and other non-industrial areas of an industrial facility. Storm water discharges from these areas, which may contain pollutants or which may result in additional storm water flows, are not directly regulated under the existing storm water permitting program because they are not "storm water discharges associated with industrial activity" Many comments on this issue supported maintaining the exclusion from the existing regulations for storm water permitting for discharges from administrative buildings, parking lots, and other non-industrial areas. Other comments opposed allowing the continued exclusion for discharges from non-industrial areas of the site because discharges from these areas are potentially a significant cause of receiving water impairment. These comments urged that such discharges should not be excluded from NPDES permit coverage. Today's rule does not require permit coverage for discharges from a facility's exposed areas that are

separate from industrial activities such as runoff from office buildings and accompanying parking lots, lawns and other non-industrial areas. This approach is consistent with the existing storm water rules which were based on Congress's intent to exclude nonindustrial areas such as "parking lots and administrative and employee buildings." 133 Cong. Rec. 985 (1987). EPA also lacks data indicating that discharges from these areas at an industrial facility cause significant receiving water impairments. Therefore, the non-industrial areas at a facility do not need to be assessed as part of the "no exposure" certification.

EPA received comments related to industrial facilities that achieve "no exposure" by constructing large amounts of impervious surfaces, such as roofs, where previously there were pervious or porous surfaces into which storm water could infiltrate. Some commenters made the point that large amounts of impervious area may cause a significant increase in storm water volume flowing off the industrial facility, and thus may cause adverse receiving water impacts simply due to the increased quantity of storm water flow. Some commenters said that storm water discharges from impervious areas at an industrial facility are generally more frequent, and often larger, than discharges from the pre-existing natural surfaces. They believe that these discharges will contain pollutants typical of commercial areas and roads and are an equal threat to direct human uses of the water and can cause equal damage to aquatic life and its habitat. Other commenters believe that if Congress or EPA addresses the issue of flow, it should be addressed on a broader scale than merely through the "no exposure" exclusion, and that EPA has no authority under any existing legal framework to regulate flow directly. Some commenters stated that developing federal parameters for the control of water quantity, i.e. flow, would result in federal intrusion into land use planning, an authority that they claim is solely within the purview of State governments and their political subdivisions.

EPA is not attempting to regulate flow via the "no exposure" provisions. EPA does agree, however, that increases in impervious surfaces can result in increased runoff volumes from the site which in turn may increase pollutant loading. In addition, the Agency notes that in some States water quality standards include water quality criteria for flow or turbidity. Therefore, in order to provide a minimal amount of information on possible impacts from

increased pollutant loading and runoff volume, EPA's "no exposure" certification form (see Appendix 4) asks the discharger to indicate if they have paved or roofed over a formerly exposed, pervious area in order to qualify for the "no exposure" exclusion. If the answer is yes, the discharger must indicate, by choosing from three possible responses, approximately how much impervious area was created to achieve "no exposure". The choices are: (1) less than 1 acre, (2) 1 to 5 acres, and (3) more than 5 acres. This requirement provides additional information that will aid in determining if discharges from the facility are causing adverse receiving water impacts. EPA intends to prevent water quality impacts resulting from increased discharges of pollutants, which may result from increased volume of runoff. In many cases, consideration of the increased flow rate, velocity and energy of storm water discharges, following construction of large amounts of impervious surfaces, must be taken into consideration in order to reduce the discharge of pollutants, to meet water quality standards and to prevent degradation of receiving streams. EPA recommends that dischargers consider these factors when making modifications to their site in order to qualify for the "no exposure" exclusion.

#### 2. Today's Rule

In order to claim relief under the "no exposure" provision, the discharger of an otherwise regulated facility must submit a no exposure certification that incorporates the questions of § 122.26(g)(4)(iii) to the NPDES permitting authority once every 5 years. This provision applies across all categories of industrial activity covered by the existing program, except discharges from construction activities.

In addition to submitting a "no exposure" certification every 5 years, the facility must allow the NPDES permitting authority or operator of an MS4 (where there is a storm water discharge to the MS4) to inspect the facility and to make such inspection reports publicly available upon request. Also, upon request, the facility must submit a copy of the "no exposure" certification to the operator of the MS4 into which the facility discharges (if applicable). All "no exposure certifications must be signed in accordance with the signatory requirements of § 122.22. The "no exposure" certification is nontransferable. In the event that the facility operator changes, the new discharger must submit a new "no exposure" certification.

Members of the FACA Committee urged that EPA not allow dischargers certifying "no exposure" to take actions to qualify for this provision that result in a net environmental detriment. In developing a regulatory implementation mechanism, however, EPA found that the phrase "no net environmental detriment," was too imprecise to use within this context. Therefore, today's rule addresses this issue by requiring information that should help the permitting authority to determine whether actions taken to qualify for the exclusion interfere with the attainment or maintenance of water quality standards, including designated uses. Permitting authorities will be able, where necessary, to make a determination by evaluating the activities that changed at the industrial site to achieve "no exposure", and assess whether these changes cause an adverse impact on, or have the reasonable potential to cause an instream excursion of, water quality standards, including designated uses. EPA anticipates that many efforts to achieve "no exposure" will employ simple good housekeeping and contaminant cleanup activities. Other efforts may involve moving materials and industrial activities indoors into existing buildings or structures.

In very limited cases, industrial operators may make major changes at a site to achieve "no exposure". These efforts may include constructing a new building or cover to eliminate exposure or constructing structures to prevent run-on and storm water contact with industrial materials or activities. Where major changes to achieve "no exposure" increase the impervious area of the site, the facility operator must provide this information on the "no exposure" certification form as discussed above. Using this and other available data and information, permitting authorities should be able to assess whether any major change has resulted in increased pollutant concentrations or loadings, toxicity of the storm water runoff, or a change in natural hydrological patterns that would interfere with the attainment and maintenance of water quality standards, including designated uses or appropriate narrative, chemical, biological, or habitat criteria where such State or Tribal water quality standards exist. In these instances, the facility operator and their NPDES permitting authority should take appropriate actions to ensure that attainment or maintenance of water quality standards can be achieved. The NPDES permitting authority should decide if the facility must obtain coverage under an

individual or general permit to ensure that appropriate actions are taken to address adverse water quality impacts.

While the intent of today's "no exposure" provision is to reduce the regulatory burdens on industrial facilities and government agencies, the FACA Committee suggested that the NPDES permitting authority consider a compliance assessment program to ensure that facilities that have availed themselves of this "no exposure" option meet the applicable requirements. Inspections could be conducted at the discretion of the NPDES authority and be coordinated with other facility inspections. EPA expects, however, that the permitting authority will conduct inspections when it becomes aware of potential water quality impacts possibly caused by the facility's storm water discharges or when requested to do so by adversely affected members of the public. The intent of this provision is that the 5 year "no exposure" certification be fully available to, and enforceable by, appropriate federal and State authorities under the CWA. Private citizens can enforce against facilities for discharges of storm water that are inconsistent with a "no exposure" certification if storm water discharges from such facilities are not otherwise permitted and in compliance with applicable requirements.

EPA received comments from owners, operators and representatives of Phase I facilities classified as "light industry" as defined by the regulations at § 122.26(b)(14)(xi). The comments recommended maintaining the approach of the existing regulations which does not require the discharger to submit any supporting documentation to the permitting authority in order to claim the "no exposure" exclusion from permitting. As discussed previously, the 'no exposure'' concept was developed in response to the Ninth Circuit court's remand of part of the existing rules back to EPA. The court found that EPA cannot rely on the "unverified judgment" of the facility. The comments opposing documentation did not address the "unverified judgment"

Today's rule is a "conditional" exclusion from permitting which requires all categories, including the "light industrial" facilities that have no exposure of materials to storm water, to submit a certification to the permitting authority. Upon receipt of a complete certification, the permitting authority can review the information, or call, or inspect the facility if there are doubts about the facility's "no exposure" claim. Also, if the facility discharges into an MS4, the operator of the MS4 can

request a copy of the certification, and can inspect the facility. The public can request a copy of the certification and/ or inspection reports. In adopting these conditional "no exposure" provisions, the Agency addressed the Ninth Circuit court's ruling regarding the discharger's unverified judgment.

EPA received one comment requesting clarification on whether the anti-backsliding provisions in the regulations at § 122.44(l) apply to industrial facilities that are currently covered under an NPDES storm water permit, and whether such facilities could qualify for the "no exposure" exclusion under today's rule. The antibacksliding provisions will not prevent most industrial facilities that can certify "no exposure" under today's rule from qualifying for an exclusion from permitting. The anti-backsliding provisions contain 5 exceptions that allow permits to be renewed, reissued or modified with less stringent conditions. One exception at  $\S 122.44(l)(2)(A)$ allows less stringent conditions if "material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation." Section 122.44(l)(B)(1) also allows less stringent requirements if "information is available which was not available at the time of permit issuance and which would have justified the application of less stringent effluent limitations at the time of permit issuance." Facility's operators who certify "no exposure" and submit the required information once every 5 years will have provided the permitting authority "information that was not available at the time of permit issuance." Also, some facilities may, in order to achieve "no exposure", make "material and substantial alterations or additions to the permitted facility." Therefore, most facilities covered under existing NPDES general permits for storm water (e.g., EPA's Multi-Sector General Permit) will be eligible for the conditional "no exposure" exclusion from permitting without concern about the antibacksliding provisions. Such dischargers will have met one or both of the anti-backsliding exceptions detailed above. Facilities that are covered under individual permits containing numeric limitations for storm water should consult with their permitting authority to determine whether the antibacksliding provisions will prevent them from qualifying for the exclusion from permitting (for that discharge point) based on a certification of "no exposure".

EPA received several comments regarding the timing of when the "no exposure" certification should be submitted. The proposed rule said that the "no exposure" certification notice must be submitted "at the beginning of each permit term or prior to commencing discharges during a permit term." Some commenters interpreted this statement to mean that existing facilities can only submit the certification at the time a permit is being issued or renewed. EPA intended the phrase "at the beginning of each permit term" to mean "once every 5 years" and today's rule reflects this clarification. EPA envisions that the NPDES storm water program will be implemented primarily through general permits which are issued for a 5 year term. Likewise the "no exposure" certification term is 5 years. The NPDES permitting authority will maintain a simple registration list that should impose only a minor administrative burden on the permitting authority. The registration list will allow for tracking of industrial facilities claiming the exclusion. This change allows a facility to submit a "no exposure" certification at any time during the term of the permit, provided that a new certification is submitted every 5 years from the time it is first submitted (assuming that the facility maintains a "no exposure" status). Once a discharger has established that the facility meets the definition of "no exposure", and submits the necessary "no exposure" certification, the discharger must maintain their "no exposure" status. Failure to maintain "no exposure" at their facility could result in the unauthorized discharge of pollutants to waters of the United States and enforcement for violation of the CWA. Where a discharger believes that exposure could occur in the future due to some anticipated change at the facility, the discharger should submit an application and obtain coverage under an NPDES permit prior to such discharge to avoid penalties.

Where EPA is the permitting authority, dischargers may submit a "no exposure" certification at any time after the effective date of today's rule. Where EPA is not the permitting authority, dischargers may not be able to submit the certification until the non-federal permitting authority completes any necessary statutory or regulatory changes to adopt this "no exposure" provision. EPA recommends that the discharger contact the permitting authority for guidance on when the "no exposure" certification should be submitted.

EPA received comments on the proposed rule requirement that the

discharger "must comply immediately with all the requirements of the storm water program including applying for and obtaining coverage under an NPDES permit," if changes occur at the facility which cause exposure of industrial activities or materials to storm water. The comments expressed the difficultly of immediate compliance. EPA expects that most facility changes can be anticipated, therefore dischargers should apply for and obtain NPDES permit coverage in advance of changes that result in exposure to industrial activities or materials. Permitting authorities may grant additional time, on a case-by-case basis, for preparation and implementation of a storm water

pollution prevention plan.

Finally, today's rule at § 122.26(g)(4) includes the information which must be included on the "no exposure" certification. Authorized States, Tribes or U.S. Territories may develop their own form which includes this required information, at a minimum. EPA adopted the requirements (with modification) from the draft "No Exposure Certification Form" published as an appendix to the proposed rule. Modifications were made to the draft form to address comments received and to streamline the required information. EPA included these certification requirements in today's rule in order to preserve its integrity. Dischargers in areas where EPA is the permitting authority should use the "No Exposure Certification" form included in Appendix 4.

#### 3. Definition of "No Exposure"

For purposes of this section, "no exposure" means that all industrial materials or activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/ or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, byproducts, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. However, storm resistant shelter is not required for: (1) Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak; (2) adequately maintained vehicles used in material handling; and (3) final products, other than products that would be mobilized in storm water discharge (e.g., rock salt). Each of these three exceptions to the no exposure

definition are discussed in more detail below.

EPA intends the term "storm resistant shelter" to include completely roofed and walled buildings or structures, as well as structures with only a top cover but no side coverings, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water. While the Agency intends that this provision promote permanent "no exposure", EPA understands that certain vehicles could pass between buildings and, during passage, be exposed to rain and snow. Adequately maintained vehicles such as trucks, automobiles, forklifts, or other such general purpose vehicles at the industrial site that are not industrial machinery, and that are not leaking contaminants or are not otherwise a source of industrial pollutants, could be exposed to precipitation or runoff. Such activities alone does not prevent a discharger from being able to certify no exposure under this provision. Similarly, trucks or other vehicles awaiting maintenance at vehicle maintenance facilities, as defined at § 122.26(b)(14)(viii), that are not leaking contaminants or are not otherwise a source of industrial pollutants, are not considered exposed.

In addition, EPA recognizes that there are circumstances where permanent "no exposure" of industrial activities or materials is not possible. Under such conditions, materials and activities may be sheltered with temporary covers, such as tarps, between periods of permanent enclosure. The final rule does not specify every such situation. EPA intends that permitting authorities will address this issue on a case-by-case basis. Permitting authorities can determine the circumstances under which temporary structures will or will not meet the requirements of this section. Until permitting authorities specifically determine otherwise, EPA recommends application of the "no exposure" exclusion for temporary sheltering of industrial materials or activities only during facility renovation or construction, provided that the temporary shelter achieves the intent of this section. Moreover, "exposure" that results from a leak in protective covering would only be considered "exposure" if not corrected prior to the next storm water discharge event. EPA received one comment requesting that this allowance for temporary shelter be limited to facility renovation or construction directly related to the industrial activity requiring temporary shelter, and be scheduled to minimize the use of temporary shelter. Another comment suggested placing time limits

on the use of temporary shelter. The commenter did not recommend a specific time period, rather the comment said that renovation in some instances may take years, and that EPA should not allow temporary shelter over prolonged periods. EPA agrees that the use of temporary shelter must be related to the renovation or construction at the site, and be scheduled or designed to minimize the use of temporary shelter. Further, EPA agrees that the use of temporary shelter should be limited in duration, but does not intend to define "temporary" or "prolonged period".

Many final products are intended for outdoor use and pose little risk of storm water contamination, such as new cars. Therefore, final products, except those that can be mobilized in storm water discharge, can be "exposed" and still allow the discharge to certify "no exposure". EPA intends the term "final products" to mean those products that are not used in producing another product. Any product that can be used to make another product is considered an "intermediate product." For example, a facility that makes horse trailers can store the finished trailers outdoors as a final product. The storage of those final products does not prevent eligibility to claim "no exposure". However, any facility that makes parts for the horse trailers (e.g., metal tubing, sheet metal, paint) is not eligible for the "no exposure" exclusion from permitting if those "intermediate products" are stored outdoors (i.e., exposed").

EPA received comments related to materials in drums, barrels, tanks and similar containers. Some comments objected to the language in the preamble to the proposed rule that would have recommended that the "exposure" determination for drums and barrels be based on the "potential to leak." Those comments said that all drums and barrels have the potential to leak, thereby making certification impossible. They recommended allowing outdoor storage of drums and barrels except for those that "are leaking" at the time of certification. Other comments suggested allowing drums and barrels to be stored outside only if the drums and barrels: are empty; have secondary containment; or there is a spill contingency plan in place. Opposing comments suggested that allowing outdoor exposure of drums and barrels, based on existing integrity and condition, is inconsistent with the "however packaged" proposed rule language, and also would not satisfy the Ninth Circuit remand. The comments point out that the former rule was invalidated by the court in part because it relied on the "unverified

judgment" of the light industrial facility operator to determine the non-applicability of the permit requirements, and that allowing the facility operator to determine the condition of their drums and barrels would result in the same flaw.

In response, EPA believes that drums and barrels that are stored outdoors pose little risk of storm water contamination unless they are open, deteriorated or leaking. The Agency has modified today's rule accordingly. EPA intends the term "open" to mean any container that is not tightly sealed and "sealed" to mean banded or otherwise secured and without operational taps or valves. Drums, barrels, tanks, and similar containers may only be stored outdoors under this conditional exclusion. The addition of material to or withdrawing of material from these containers while outside is deemed "exposure". Moving the containers while outside does not create "exposure" provided that the containers are not open, deteriorated or leaking. In order to complete the "no exposure" certification, a facility operator must inspect all drums, barrels, tanks or other containers stored outside to ensure that they are not open, deteriorated, or leaking. EPA recommends that the discharger designate someone at the facility to conduct frequent inspections to verify that the drums, barrels, tanks or other containers remain in a condition such that they are not open, deteriorated or leaking. Drums, barrels, tanks or other containers stored outside that have valves which are used to put material in or take material out of the container, and that have dripped or may drip, are considered to be "leaking" and must be under a storm resistant shelter in order to qualify for the no exposure exclusion. Likewise, leaking pipes containing contaminants exposed to storm water are deemed "exposed." If at any time drums, barrels, tanks or similar containers are opened, deteriorated or leaking, the discharger should take immediate actions to close or replace the container. Any resulting unpermitted discharge would violate the CWA. The Director, the operator of the MS4, or the municipality may inspect the facility to verify that all of the applicable areas meet the "no exposure" conditions as specified in the rule language. In requiring submission of the conditional "no exposure" certification and allowing the permitting authority and the operator of the MS4 to inspect the facility, today's rule does not rely on the unverified judgment of the facility to determine that the no exposure provision is being met.

EPA received several comments related to trash dumpsters that are located outside. The preamble to the proposed rule listed dumpsters in the same grouping as drums and barrels, which based exposure on the "potential to leak". Today's rule distinguishes between dumpsters and drums/barrels. In the Phase I Question and Answer document (volume 1, question 52) the Agency noted that a covered dumpster containing waste material that is kept outside is not considered "exposed" as long as "the container is completely covered and nothing can drain out holes in the bottom, or is lost in loading onto a garbage truck." EPA affirms this approach today. Industrial refuse and industrial trash that is left uncovered is deemed "exposed."

For purposes of this provision, particulate matter emissions from roof stacks/vents that are regulated and in compliance under other environmental protection programs, such as air quality control programs, and that do not cause storm water contamination, are considered "not exposed." EPA received comments on the phrase in the draft "no exposure" certification form that asked whether "particulate emissions from roof stacks/vents not otherwise regulated, and in quantities detectable in the storm water outflow,' are exposed to precipitation. One comment expressed concern that the phrase "in quantities detectable in the storm water outflow" implies that the facility must conduct monitoring prior to completing the checklist, and must continue to monitor after receiving the no exposure exclusion, in order to be able to verify compliance with the no exposure provision. Another comment said that current measurement technology allows detection of pollutants at levels that may not cause environmental harm. EPA does not intend to require monitoring of runoff from facilities with roof stacks/vents prior to or after completing and submitting the no exposure certification. EPA has thus replaced the phrase "in quantities detectable" with "evident" to convey the message that emissions from some roof stacks/vents have the potential to contaminate storm water discharges in quantities that are considered significant or that cause or contribute to a water quality standards violation. In those instances where the permitting authority determines that particulate emissions from facility roof stacks/vents are a significant contributor of pollutants or contributing to water quality violations, the permitting authority may require the discharger to apply for and obtain coverage under a

permit. Visible deposits of residuals (e.g., particulate matter) near roof or side vents are considered "exposed". Likewise, visible "track out" (i.e., pollutants carried on the tires of vehicles) or windblown raw materials are deemed "exposed."

EPA received a comment requesting an allowance under the "no exposure" provision for industrial facilities with several outfalls at a site where some, but not all of the outfalls drain non-exposed areas. The commenter provided an example of an industrial facility that has 5 outfalls draining different areas of the site, where two of those outfalls drain areas where industrial activities or materials are not exposed to storm water. The comment requested that the facility in this example be allowed to submit a "no exposure" certification in order to be relieved of permitting obligations for discharges from those two outfalls.

EPA agrees, but the comment would be implemented on an outfall-by-outfall basis in the permitting process, not through the "no exposure" exclusion. The "no exposure" provision was developed to allow exclusion from permitting of discharges from entire industrial facilities (except construction), based on a claim of "no exposure" for all areas of the facility where industrial materials or activities occur. Where exposure to industrial materials or activities exist at some but not all areas of the facility, the "no exposure" exclusion from permitting is not allowed because permit coverage is still required for storm water discharges from the exposed areas. Relief from permit requirements for outfalls draining non-exposed areas should be addressed through the permit process, in coordination with the permitting authority. Most NPDES general permits for storm water discharge provide enough flexibility to allow minimal or no requirements for non-exposed areas at industrial facilities. If the permitting authority determines that additional flexibility is needed for this scenario, the permits could be modified as necessary.

#### K. Public Involvement/Public Role

The Phase II FACA Subcommittee discussed the appropriate role of the public in successful implementation of a municipal storm water program. EPA believes that an educated and actively involved public is essential to a successful municipal storm water program. An educated public increases program compliance from residents and businesses as they realize their individual and collective responsibility for protecting water resources (e.g., the

residents and businesses could be subject to a local ordinance that prohibits dumping used oil down storm sewers). Finally, the program is also more likely to receive public support and participation when the public is actively involved from the program's inception and allowed to participate in the decision making process.

In a time of limited staff and financial resources, public volunteers offer diverse backgrounds and expertise that may be used to plan, develop, and implement a program that is tailored to local needs (e.g., participate in public meetings and other opportunities for input, perform lawful volunteer monitoring, assist in program coordination with other preexisting and related programs, aid in the development and distribution of educational materials, and provide public training activities). The public's participation is also useful in the areas of information dissemination/education and reporting of violators, where large numbers of community members can be more effective than a few regulators.

The public can also petition the NPDES permitting authority to require an NPDES permit for a discharge composed entirely of storm water that contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. In evaluating such a petition, the NPDES permitting authority is encouraged to consider the set of designation criteria developed for the evaluation of small MS4s located outside of an urbanized area in places with a population of at least 10,000 and a population density of 1,000 or more. Furthermore, any person can protect water bodies by taking civil action under section 505 of the CWA against any person who is alleged to be in violation of an effluent standard or permit condition. If civil action is taken, EPA encourages citizen plaintiffs to resolve any disagreements or concerns directly with the parties involved, either informally or through any available alternative dispute resolution process.

EPA recognizes that public involvement and participation pose challenges. It requires a substantial initial investment of staff and financial resources, which could be very limited. Even with this investment, the public might not be interested in participating. In addition, public participation could slow down the decision making process. However, the benefits are numerous.

EPA encourages members of the public to contact the NPDES permitting authority or local MS4s operator for information on the municipal storm water program and ways to participate.

Such information may also be available from local environmental, nonprofit and industry groups.

Some commenters stressed the need to suggest to the public that they have a responsibility to fund the municipal storm water program. While EPA believes it is important that the program be adequately funded, today's rule does not address appropriate mechanisms or levels for such funding.

EPA received comments expressing concern that considerable public involvement requirements could result in increased litigation. EPA is not convinced there is a correlation between meaningful public education programs and any increased probability of litigation.

Finally, EPA received comments stating that the Agency should not en courage volunteer monitoring unless proper procedures are followed. EPA agrees. EPA encourages only lawful monitoring, *i.e.*, obtaining the necessary approval if there is any question about lawful access to sites. Moreover, as a matter of good practice and to enhance the validity and usefulness of the results, any party, public or private, conducting water quality monitoring is encouraged to use appropriate quality control procedures and approved sampling and analytic methods.

## L. Water Quality Issues

## 1. Water Quality Based Effluent Limits

In addition to technology based requirements, all point source discharges of industrial storm water are subject to more stringent NPDES permitting requirements when necessary to meet water quality standards. CWA sections 402(p)(3)(A) and 301(b)(1)(C). For municipal separate storm sewers, EPA or the State may determine that other permit provisions (e.g. one of the minimum measures) are appropriate to protect water quality and, for discharges to impaired waters, to achieve reasonable further progress toward attainment of water quality standards pending implementation of a TMDL. CWA section 402(p)(3)(B)(iii). See Defenders of Wildlife, et al. Browner, No. 98-71080 (9th cir., August 11, 1999). Discharges of storm water also must comply with applicable antidegradation policies and implementation methods to maintain and protect water quality. 40 CFR 131.12. Section 122.34(a) emphasizes this point by specifically noting that a storm water management program designed to reduce the discharge of pollutants from the storm sewer system "to the maximum extent practicable" is also designed to protect water quality.

Permits issued to non-municipal sources of storm water must include water quality-based effluent limits where necessary to meet water quality standards.

Commenters challenged EPA's interpretation of the CWA as requiring water quality-based effluent limits for MS4s when necessary to protect water quality. Commenters asserted that CWA 402(p)(3)(B), which addresses permit requirements for municipal discharges, limits the scope of municipal program requirements to an effective prohibition on non-storm water discharges to a separate storm sewer and to controls which reduce pollutants to the "maximum extent practicable, including management practices, control techniques and system design and engineering methods." They asserted that the final rule should clarify that neither numeric nor narrative water quality-based limits are appropriate or authorized for MS4s.

EPA disagrees that section 402(p)(3) divests permitting authorities of the tools necessary to issue permits to meet water quality standards. Section 402(p)(3)(B)(iii) specifically preserves the authority for EPA or the State to include other provisions determined appropriate to reduce pollutants in order to protect water quality. Defenders of Wildlife, slip op. at 11688. Small MS4s regulated under today's rule are designated under CWA 402(p)(6) "to protect water quality."

Commenters argued that water quality standards, particularly numeric criteria, were not designed to address storm water discharges. The episodic nature and magnitude of storm water events, they argue, make it impossible to apply the "end of pipe" compliance assessment approach, for example, in the development of water quality based effluent limits.

EPA's disagrees with the commenters arguments about the inability of water quality criteria to address high flow conditions. Today's final rule does, however, address the concern that numeric effluent limits will necessitate end of pipe treatment and the need to provide a workable alternative.

Today's rule was developed under the approach outlined in the Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits, issued on August 1, 1996. 61 FR 43761 (November 26, 1996) (the "Interim Permitting Policy"). EPA intends to issue NPDES permits consistent with the Interim Permitting Policy, which provides as follows:

In response to recent questions regarding the type of water qualitybased effluent limitations that are most appropriate for NPDES storm water permits, EPA is adopting an interim permitting approach for regulating wet weather storm water discharges. Due to the nature of storm water discharges, and the typical lack of information on which to base numeric water quality-based effluent limitations (expressed as concentration and mass), EPA will use an interim permitting approach for NPDES storm water permits.

'The interim permitting approach uses best management practices (BMPs) in first-round storm water permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards. In cases where adequate information exists to develop more specific conditions or limitations to meet water quality standards, these conditions or limitations are to be incorporated into storm water permits, as necessary and appropriate. This interim permitting approach is not intended to affect those storm water permits that already include appropriately derived numeric water quality-based effluent limitations. Since the interim permitting approach only addresses water quality-based effluent limitations, it also does not affect technology-based effluent limitations, such as those based on effluent limitations guidelines or developed using best professional judgment, that are incorporated into storm water

"Each storm water permit should include a coordinated and cost-effective monitoring program to gather necessary information to determine the extent to which the permit provides for attainment of applicable water quality standards and to determine the appropriate conditions or limitations of subsequent permits. Such a monitoring program may include ambient monitoring, receiving water assessment, discharge monitoring (as needed), or a combination of monitoring procedures designed to gather necessary information.

"This interim permitting approach applies only to EPA; however, EPA also encourages authorized States and Tribes to adopt similar policies for storm water permits. This interim permitting approach provides time, where necessary, to more fully assess the range of issues and possible options for the control of storm water discharges for the protection of water quality. This interim permitting approach may be modified as a result of the ongoing Urban Wet Weather Flows Federal Advisory Committee policy dialogue on this subject."

One commenter challenged the Interim Permitting Policy on a procedural basis, arguing that it was published without opportunity for public notice and comment. In response, EPA notes that the Policy was included verbatim and made available for public comment in the proposal to today's final rule. Prior to that proposal, the Agency defended the application of the Policy on a case-by-case basis in individual permit proceedings. Moreover, the essential elements of the Policy—that narrative effluent limitations are the most appropriate form of effluent limitations for storm water dischargers from municipal sources—was inherent in § 122.34(a) of the proposed rule, and was the subject of extensive public comment. In any event, the Policy does not constitute a binding obligation. It is policy, not regulation.

Consistent with the recognition of data needs underlying the Policy, EPA will evaluate the small MS4 storm water regulations after the second round of permit issuance. Section 122.34(e)(2) of today's rule expressly provides that for the interim ten-year period, "EPA strongly recommends that until the evaluation of the storm water program in § 122.37, no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, except where an approved TMDL or equivalent analysis provides adequate information to develop more specific measures to protect water quality." This approach addresses the concern for protecting water resources from the threat posed by storm water discharges with the important qualification that there must be adequate information on the watershed or a specific site as a basis for requiring tailored storm water controls beyond the minimum control measures. As indicated, the Interim Permitting Policy has several important limitations—it does not apply to technology-based controls or to sources that already have numeric end of pipe effluent limitations. EPA encourages authorized States and Tribes to adopt policies similar to the Interim Permitting Policy when developing storm water discharge programs. For a discussion of appropriate monitoring activities, see Section H.3.d., Evaluation and Assessment.

Where a water quality analysis indicates there is a need and basis for deriving water quality-based effluent limits in NPDES permits for storm water discharges regulated under today's rule, EPA believes that most of these cases would be satisfied by narrative effluent

limitations that require the implementation of BMPs. NPDES permit limits will in most cases continue to be based on the specific approach outlined in today's rule for the implementation of BMPs as the most appropriate form of effluent limitation to satisfy technology and water quality-based requirements. See § 122.34(a). For storm water management plans with existing BMPs, this may require further tailoring of BMPs to address the pollutant(s) of concern, the nature of the discharge and the receiving water. If the permitting authority determines that, through implementation of appropriate BMPs required by the NPDES storm water permit, the discharge has the necessary controls to provide for attainment of water quality standards, additional controls are not needed in the permit. Conversely, if a discharger (MS4, industrial or construction) fails to adopt and implement adequate BMPs, the permittee and/or the permitting authority should consider a different mix of BMPs or more specific conditions to ensure water quality protection.

Some commenters observed that there was no evidence from the experience of storm water dischargers regulated under the existing NPDES storm water program, or from studies or reports that allegedly support EPA's position, that implementation of BMPs to satisfy the six minimum control measures would meet applicable water quality standards for a regulated small MS4. In response, EPA acknowledges that the six minimum measures are intended to implement the statutory requirement to control discharges to the maximum extent practicable, and they may not result in the attainment of water quality standards in all cases. The control measures do, however, focus on and address well-documented threats to water quality associated with storm water discharges. Based on the collective expertise of the FACA Subcommittee, EPA believes that implementation of the six minimum measures will, for most regulated small MS4s, be adequate to protect water quality, and for other regulated small MS4s will substantially reduce the adverse impacts of their discharges on water quality.

Some commenters asserted that analyses of existing water quality criteria suggest that numeric criteria for aquatic life may be overprotective if applied to storm water discharges. These comments maintained that an approach that prohibits exceedance of applicable water quality criteria is unworkable. Various commenters recommended wet weather specific

criteria, variances to the criteria during wet weather events, and seasonal designated uses. Other commenters noted that water quality-based effluent limits in NPDES permits have traditionally been developed based on dry weather flow conditions (e.g., assuming critical low-flow conditions in the receiving water to ensure protection of aquatic life and human health). Wet weather discharges, however, typically occur under high-flow conditions in the receiving water. Assumptions regarding mass balance equations and size of mixing zones may also not be pertinent during wet weather.

EPA acknowledges the need to devise a regulatory program that is both flexible enough to accommodate the episodic nature, variability and volume of wet weather discharges and prescriptive enough to ensure protection of the water resource. EPA believes that wet weather discharges can be adequately addressed in the existing regulations through refining designated uses and assigning criteria that are tailored to the level of water quality protection described by the refined designated use.

EPA believes that lack of precision in assigning designated uses and corresponding criteria by States and Tribes, in many cases may result in application of water quality criteria that may not appropriately match the intended condition of the water body. States and Tribes have frequently designated uses without regard to sitespecific wet weather conditions. Because certain uses (swimming, for example) might not exist during highintensity storm events or in the winter, States may factor such climatic conditions and seasonal uses into their use designations with appropriate analyses. This would acknowledge that a lower level of control, at lower compliance cost, would be appropriate to protect that use. Before modifying any designated use, however, States would need to evaluate the effect of less stringent water quality criteria on protecting other uses, including any threatened or endangered species, drinking water supplies and downstream uses. EPA will further evaluate these issues in the context of the Water Quality Standards Regulation, Advance Notice of Proposed Rule Making (ANPRM), 63 FR, 36742, July 7,

One of the major themes presented by EPA in the ANPRM is that refinement in use designations and tailoring of water quality criteria to match refined use designations is an important future direction of the water quality standards program. In assigning criteria to protect

general use classifications, a State or Tribe must ensure that the criteria are sufficiently protective to safeguard the full range of waters of the State, i.e., criteria would be based on the most sensitive use. This approach has been disputed, especially for aquatic life uses, where evidence suggests that the general use criteria will require controls more stringent than needed to protect the existing or potential aquatic life community for a specific water body. EPA recognizes that there is a growing need to more precisely tailor use descriptions and criteria to match sitespecific conditions, ensuring that uses and criteria provide an appropriate level of protection, which, to the extent possible, are not overprotective. EPA is engaged in an ongoing evaluation of its regulations in this area through the ANPRM effort. At the same time, EPA continues to encourage States and Tribes to review the applicability of the designated uses and associated criteria using existing provisions in the water quality standards regulation.

## 2. Total Maximum Daily Loads and Analysis To Determine the Need for Water Quality-Based Limitations

The development and implementation of total maximum daily loads (TMDLs) provide a link between water quality standards and effluent limitations. CWA section 303(d) requires States to develop TMDLs to provide more stringent water quality-based controls when technologybased controls are inadequate to achieve applicable water quality standards. A TMDL is the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources, with consideration for natural background conditions. A TMDL quantifies the maximum allowable loading of a pollutant to a water body and allocates this maximum load to contributing point and nonpoint sources so that water quality criteria will not be exceeded and designated uses will be protected. A TMDL also includes a margin of safety to account for uncertainty about the relationship between pollutant loads and water quality.

Today's final rule refers to TMDLs in several provisions. For the purpose of today's rule, EPA relies on the component of the TMDL that evaluates existing conditions and allocates loads. For discharges to waters that are not impaired and for which a TMDL has not been developed, today's rule also refers to an "equivalent analysis." The discussion that follows uses the term "TMDL" for both.

Under revised § 122.26(a)(9)(i)(C), the permitting authority may designate

NPDES permits based on TMDLs that address the pollutants of concern. For storm water discharges associated with small construction activity, § 122.26(b)(15)(i)(B) provides a waiver provision where it may be determined that storm water controls are not needed based on TMDLs that address sediment and any other pollutants of concern. The NPDES permitting authority may waive requirements under the program for certain small MS4s within urbanized areas serving less than 1,000 persons provided that, if the small MS4 discharges any pollutant that has been identified as a cause of impairment of a water body into which it discharges, the discharge is in compliance with a wasteload allocation in a TMDL for the pollutant of concern. The permitting authority may also waive requirements for MS4s in urbanized areas serving between 1,000 and 10,000 persons, if

storm water discharges that require

§ 122.32(c).

Under CWA section 303(d), States identify which of their water bodies need TMDLs and rank them in order of priority. Generally, once a TMDL has been completed for one or more pollutants in a water body, a wasteload allocation for each point source discharging the pollutant(s) is implemented as an enforceable condition in the NPDES permit. Regulated small MS4s are essentially like other point source discharges for purposes of the TMDL process.

the permitting authority determines that

storm water controls are not needed, as

provided in § 123.35(d)(2). See

A TMDL and the resulting wasteload allocations for pollutant(s) of concern in a water body may not be available because the water body is not on the State's 303(d) list, the TMDL has not yet been completed, or the TMDL did not include specific pollutants of concern. In these cases, the permitting authority must determine whether point sources discharge pollutant(s) in amounts that cause, have the reasonable potential to cause, or contribute to excursions above State water quality standards, including narrative water quality criteria. This socalled "reasonable potential" analysis is intended to determine whether and for what pollutants water quality based effluent limits are required. The analysis is, in effect, a substitute for a similar determination that would be made as part of a TMDL, where necessary. When 'reasonable potential'' exists, regulations at § 122.44(d) require a water quality-based effluent limit for the pollutant(s) of concern in NPDES permits. The water quality-based effluent limits may be narrative requirements to implement BMPs or,

where necessary, may be numeric pollutant effluent limitations.

Commenters, generally from the regulated community, objected that, due to references to the need to develop a program "to protect water quality" and to additional NPDES permit requirements beyond the minimum control measures based on TMDLs or their equivalent, regulated small MS4s will be subject to uncertain permit limitations beyond the six minimum control measures. Commenters also asserted that through the imposition of a wasteload allocation under a TMDL in impaired water bodies, there is a likelihood that unattainable, vet enforceable narrative and numeric standards will be imposed on regulated small MS4s.

As is discussed in the preceding section, NPDES permits must include any more stringent limitations when necessary to meet water quality standards. However, even if a regulated small MS4 is subject to water quality based effluent limits, such limits may be in the form of narrative effluent limitations that require the implementation of BMPs. As discussed earlier, EPA has adopted the Interim Permitting Policy and incorporated it in the development of today's rule to recognize the appropriateness of BMPbased limits developed on a case-bycase basis.

EPA formed a Federal Advisory Committee to provide advice to EPA on identifying water quality-limited water bodies, establishing TMDLs for them as appropriate, and developing appropriate watershed protection programs for these impaired waters in accordance with CWA section 303(d). Operating under the auspices of the National Advisory Council for Environmental Policy and Technology (NACEPT), the committee produced its Report of the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) Program (July 1998). EPA recently published a proposed rule to implement the Report's recommendations (64 FR 46012, August 23, 1999).

# 3. Anti-Backsliding

In general, the term "antibacksliding" refers to statutory provisions at CWA sections 303(d)(4) and 402(o) and regulatory provisions at 40 CFR 122.44(l). These provisions prohibit the renewal, reissuance, or modification of an existing NPDES permit that contain effluent limits, permit terms, limitations and conditions, or standards that are less stringent than those established in the previous permit. There are also

exceptions to this prohibition known as "antibacksliding exceptions."

The issue of backsliding from prior permit limits, standards, or conditions is not expected to initially apply to most storm water dischargers designated under today's proposal because they generally have not been previously authorized by an NPDES permit. However, the backsliding prohibition would apply if a storm water discharge was previously covered under another NPDES permit. Also, the backsliding prohibition could apply when an NPDES storm water permit is reissued, renewed, or modified. In most cases, however, EPA does not believe that these provisions would restrict revisions to storm water NPDES permits.

One commenter questioned whether, if BMPs implemented by a regulated small MS4 operator fail to produce results in removal of pollutants and the permittee attempts to substitute a more effective BMP, the small MS4 operator could be accused of violating the antibacksliding provisions and also be exposed to citizen lawsuits. In response, EPA notes that in such circumstances the MS4's permit has not changed and, therefore, the prohibition against backsliding is not applicable. Further, any change in the mix of BMPs that was intended to be more effective at controlling pollutants would not be considered backsliding, even if it did not include all of the previously implemented BMPs.

# 4. Water Quality-Based Waivers and Designations

Several sections of today's final rule refer to water quality standards in identifying those storm water discharges that are and are not required to be permitted under today's rule. As noted in § 122.30 of today's rule, CWA section 402(p)(6) requires the designation of municipal storm water sources that need to be regulated to protect water quality and the establishment of a comprehensive storm water program to regulate these sources. Requirements applicable to certain municipal sources may be waived based on the absence of demonstrable water quality impacts. Section 122.32(c). The section 402(p)(6)mandate to protect water quality also provides the basis for regulating discharges associated with small construction. See also § 122.26(b)(15)(i). Further, today's rule carries forward the existing authority for the permitting authority to designate sources of storm water discharges based upon water quality considerations. Section 122.26(a)(9)(i)(C) and (D).

As is discussed above in sections II.H.2.e (for small MS4s) and II.I.1.b.ii

(for small construction), the requirements of today's rule may be waived based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutants of concern or, in the case of small construction and municipalities serving between 1,000 and 10,000 persons, the equivalents of TMDLs. One commenter stated that waivers would allow exemptions to the technology based requirements and would thus be inconsistent with the two-fold approach of the CWA (a technology based minimum and a water quality based overlay). EPA acknowledges that waivers are not allowed for other technology-based requirements under the CWA. A more flexible approach is allowed, however, for sources designated for regulation under 402(p)(6) to protect water quality. For such sources EPA may allow a waiver where it is demonstrated that an individual source does not present the

threat to water quality that was the basis for EPA's designation.

#### III. Cost-Benefit Analysis

EPA has determined that the range of the rule's benefits exceeds the range of regulatory costs. The estimated rule costs range from \$847.6 million to \$981.3 million annually with corresponding estimated monetized annual benefits which range from \$671.5 million to \$1.628 billion, expected to exceed costs.

The rule's cost and benefit estimates are based on an annual comparison of costs and benefits for a representative year (1998) in which the rule is implemented. This differs from the approach used for the proposed rule which projected cost and benefits over three permit terms. EPA has chosen to use the current approach because it determined that the ratio of annual benefits and costs would not change significantly over time. Moreover,

because there is not an initial outlay of capital costs with benefits accruing in the future (*i.e.*, benefits and costs are almost immediately at a steady state), it is not necessary to discount costs in order to account for a time differential.

EPA developed detailed estimates of the costs and benefits of complying with each of the incremental requirements imposed by the rule. The Agency used two approaches, a national water quality model and national water quality assessment, to estimate the potential benefits of the rule. Both approaches show that the benefits are likely to exceed costs.

These estimates, including descriptions of the methodology and assumptions used, are described in detail in the *Economic Analysis of the Final Phase II Rule*, which is included in the record of this rule making. Exhibit 3 summarizes costs and benefits associated with the basic elements of today's rule.

EXHIBIT 3.—COMPARISON OF ANNUAL COMPLIANCE COST AND BENEFIT ESTIMATES 1

Monetized benefits	National water quality model (millions of 1998 dollars)	National water quality assess- ment (millions of 1998 dollars)
Municipal Minimum Measures		\$131.0–\$410.2 \$540.5–\$686.0
Total Annual Benefits	\$1,628.5	\$671.5-\$1,096.2
Costs		1998 dollars <sup>2</sup>
Municipal Minimum Measures		
Total Annual Costs	\$847.6–\$981.31	

<sup>&</sup>lt;sup>1</sup> National level benefits are not inclusive of all categories of benefits that can be expected to result from the regulation.

# A. Costs

## 1. Municipal Costs

Initially, to determine municipal costs for the proposed rule, EPA used anticipated expenditure data included in permit applications from a sample of 21 Phase I MS4s. Certain commenters criticized the Agency for using anticipated expenditures because they could be significantly different from the actual expenditures. These commenters suggested that the Agency use the actual cost incurred by the Phase I MS4s. Other comments stated that because the Phase I MS4s, in general, are large municipalities, they may not be representative of the Phase II MS4s for estimating regulatory costs. Finally, one commenter noted that the sample of 21 municipalities used to project cost was relatively small.

To address the concerns of the commenters, EPA utilized a National Association of Flood and Stormwater Management Agencies (NAFSMA) survey of the Phase II community to obtain incremental cost estimates for Phase II municipalities. Using the list of potential Phase II designees published in the **Federal Register** (63 FR 1616), NAFSMA contacted more than 1.600 jurisdictions. The goal of the survey was to solicit information from those communities about the proposed Phase II NPDES storm water program. Several of the survey questions corresponded directly to the minimum measures required by the Phase II rule. One hundred twenty-one surveys were returned to NAFSMA and were used to develop municipal costs.

Using the NAFSMA information, EPA estimated average annual per household

program costs for automatically designated municipalities. EPA also estimated an average annual per household administrative cost for municipalities to address application, record keeping, and reporting requirements of the Rule. The total average per household cost of the rule is expected to \$9.16 per household.

To determine potential national level costs for municipalities, EPA multiplied the number of households (32.5 million) by the per household cost (\$9.16). EPA estimates the annual cost of the Phase II municipal program at \$298 million.

As an alternative method, and point of comparison, to the NAFSMA-based approach, EPA reviewed actual expenditures reported from 35 Phase I MS4s. The Agency targeted these 35 Phase I MS4s because they had participated in the NPDES program for

<sup>&</sup>lt;sup>2</sup> Total may not add due to rounding.

nearly one permit term, were smaller in size and had detailed data reflecting their actual program implementation costs. Of the 35 MS4s, appropriate cost data was only available for 26 of those MS4s. EPA analyzed the expenditure data and identified the relevant expenditures, excluding costs presented in the annual reports unrelated to the requirements of the Rule. The cost range and annual per household program costs of \$9.08 are similar to those found using the NAFSMA survey data.

#### 2. Construction Costs

In order to estimate the rule's construction-related cost on a national level (the soil and erosion controls (SEC) requirements of the rule and the potential impacts of the post-construction municipal measure on construction), EPA estimated a per site cost for sites of one, three, and five acres and multiplied these costs by the total number of estimated Phase II construction starts across these size categories.

To estimate the percentage of starts subject to the soil and erosion control requirements between 1 and 5 acres. with respect to each category of building permits (residential, commercial, etc.), EPA initially used data from Prince George's County (PGC), Maryland, and applied these percentages to national totals. In the proposal, EPA recognized that the PGC data may not be representative of the entire country and requested data that could be used to develop better estimates of the number of construction sites between 1 and 5 acres. EPA did not receive any substantiated national data from commenters.

In view of the unavailability of national data from commenters, EPA made extensive efforts to collect construction site data around the country. The Agency contacted more than 75 municipalities. EPA determined that 14 of the contacted municipalities had useable construction site data. Using data from these 14 municipalities, EPA developed an estimate of the percentage of construction starts on one to five acres. EPA then multiplied this percentage by the number of building permits issued nationwide to determine the total number of construction starts occurring on one to five acres. Finally, to isolate the number of construction starts incrementally regulated by Phase II, EPA subtracted the number of activities regulated under equivalent programs (e.g., areas covered by the Coastal Zone Act Reauthorization Amendments of 1990, and areas covered by equivalent State level soil and erosion control requirements).

Ultimately, EPA estimated that 110,223 construction starts would be incrementally covered by the rule annually.

EPA then used standard cost estimates from Building Construction Cost Data and Site Work Landscape Cost Data (R.S. Means, 1997a and 1997b) to estimate construction BMP costs for 27 model sites in a variety of typical site conditions across the United States. The model sites included three different site sizes (one, three and five acres), three slope variations (3%, 7%, and 12%), and three soil erosivity conditions (low, medium, and high). **EPA** chose BMP combinations appropriate to the model site conditions. Based on the assumption that any combination of site factors is equally likely to occur in a given site, EPA developed average cost of sediment and erosion control for all model sites. EPA estimated that, on average, BMPs for a 1 acre site will cost \$1,206, for a 3 acre site \$4,598 and for a 5 acre site \$8,709.

EPA then estimated administrative costs per construction site for the following elements required under the rule: Submittal of a notice of intent for permit coverage; notification to municipalities; development of a storm water pollution prevention plan; record retention; and submittal of a notice of termination. EPA estimated the average total administrative cost per site to be \$937.

EPA also considered the cost implications of NPDES permit authorities waiving the applicability of requirements to storm water discharges from small construction sites based on two different criteria involving water quality impact and low rainfall. EPA received comments stating that a waiver would require a significant investment in training or acquisition of a consultant. Based on comments received, EPA eliminated one of the waiver conditions involving low soil loss threshold because it necessitated use of the Revised Universal Soil Loss Equation which could require extensive technical expertise.

Based on the opinions of construction industry experts, EPA estimates that 15 percent of the construction sites that would otherwise be covered by today's rule will be eligible to receive waivers. Therefore, the Agency has excluded 15 percent of the construction sites when deriving costs of sediment and erosion control. The average cost for sites to qualify for the waiver is expected to be \$34 per site. The construction cost analysis for the proposed rule did not include any costs for the preparation and submission of waiver applications

because EPA believed those costs would be negligible. However, in response to public comments, EPA has estimated these potential costs.

EPA has also estimated the potential costs for construction site operators to implement the post-construction minimum measure. These are costs that may be incurred by construction site operators if the MS4 chooses to meet the post-construction minimum measure by requiring on-site structural, site-by-site control of post-construction runoff. Municipalities may select from an array of structural and non-structural options in implementing this measure, so the potential costs to construction operators is uncertain. Nonetheless, EPA developed average annual BMP costs for sites of one, three, five and seven acres. EPA's analysis accounted for varying levels of imperviousness that characterize residential, commercial, and institutional land uses. Nationwide, these costs are expected to range from \$44 million to \$178 million annually.

Finally, to establish national incremental annual costs for Phase II construction starts, EPA multiplied the total costs of compliance for the chosen site size categories by the total number of Phase II construction starts and added post-construction costs. EPA estimates the annual compliance cost to range from \$545 million to \$678.7 million.

#### B. Quantitative Benefits

In the Economic Analysis for the proposed rule, a "top-down" approach was used to estimate economic benefits. Under this approach, the combined economic benefits for wet weather programs were estimated first, and then were divided among various water programs on the basis of expert opinion. As a result, the benefits estimates for an individual program were rather uncertain. Moreover, this approach was inconsistent with the approach used to estimate the cost of the proposed storm water rule, which was developed using municipal-based and cost-based data to develop "bottom-up" costs. Therefore, EPA decided to use a "bottom-up" approach for estimating benefits of the Phase II rule. To adequately reflect the quantifiable benefits of the rule, EPA used two different methods: (1) National Water Quality Model and (2) National Water Quality Assessment.

To monetize benefits in both approaches, the Agency applied Carson and Mitchell's (1993) estimates of household willingness-to-pay (WTP) for water quality improvement to estimates of waters impaired by storm water discharges. Carson and Mitchell's 1993 study reports the results of their 1983 national survey of WTP for incremental

improvements in fresh water quality. Carson and Mitchell estimate the WTP for three minimum levels of fresh water quality: boatable, fishable, and sizable. EPA adjusted the WTP amounts to account for inflation, growth in real per capita income, and increased attitudes towards pollution control. The adjusted WTP amounts for improvements in fresh water quality are \$210 for boatable, \$158 for fishable, and \$177 for sizable. A brief summary of the national water quality model and national water quality assessment approaches follow.

## 1. National Water Quality Model

One approach EPA used to estimate the benefits of the Phase II municipal and construction site controls was the National Water Pollution Control Assessment Model (NWPCAM). NWPCAM estimates benefits of the storm water program at the national level, including the impact on small streams. This model estimates water quality and the resultant use support for the 632,000 miles of rivers and streams in the USEPA Reach File Version 1 (RF1), which covers the continental

United States. The model analyzes water quality changes by stream reach. The parameters modeled in the NWPCAM are biological oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and fecal coliforms (FC).

The model projects changes in water quality due to the Phase II municipal and construction site controls. To calculate the economic benefits of change in water quality, the number of households in the proximity of the stream reach are determined, by overlaying the model results on the 1990 Census of Populated Places and Minor Civil Divisions, and updating the population to 1998. Economic benefits are calculated using the Carson and Mitchell WTP values. The benefits are separately estimated for local and nonlocal waters on the basis of WTP values and proximity to water quality changes.

The value of the change in use support for local waters is greater than the value of the non-local waters because of the opportunity to use local waters by the local population. This model assumes that if improvement

occurs in waters that are not close to population centers the economic value is lower. Therefore, benefits are estimated for local and non-local waters separately. This assumption is based on Carson and Mitchell's survey which asked respondents to apportion each of their stated WTP values between achieving the water quality goals in their own State and achieving those goals in the nation as a whole. On average, respondents allocated 67% of their values to achieving in-State water quality goals and the remainder to the nation as a whole. Carson and Mitchell argue that for valuing local water quality changes 67% is a reasonable upper bound for the local multiplier and 33% for the non-local water quality changes. For the purposes of this analysis, the locality is defined as urban sites and associated populations linked into the NWPCAM framework. Using this methodology, the total monetized benefits of Phase II control of urban and construction site runoff is estimated to be \$1.628 billion per year. The local and non-local benefits due to Phase II controls are presented in Exhibit 4.

EXHIBIT 4.—LOCAL AND NON-LOCAL BENEFITS ESTIMATES DUE TO PHASE II CONTROLS NATIONAL WATER QUALITY MODEL ESTIMATE

Use support	Local benefits (\$million/yr)	Non-local bene- fits <sup>1</sup> (\$million/yr)	Total benefits (\$million/yr)
Swimming, Fishing, and Boating	306.20 395.10 700.10	60.60 51.90 114.60	366.80 447.00 814.70
Total	1401.40	227.10	1628.50

<sup>&</sup>lt;sup>1</sup>To estimate non-local willingness to pay per household, the 33% of willingness is multiplied by the fraction of previously impaired national waters (in each use category) that attain the beneficial use as a result of the Phase II rule. To estimate the aggregate non-local benefits, non-local willingness to pay is multiplied with the total number of households in the US.

While the numbers of miles that are estimated to change their use support are small, the benefits estimates are quite significant. This is because urban runoff and, to a large extent, construction activity occurs where the people actually reside and the water quality changes mostly occur close to these population centers. NWPCAM indicates that changes in pollution loads have the most effect immediately downstream of pollution changes. As a result, the aggregate WTP is large because large numbers of households in these population centers are associated with the local waters that reflect improvement in designated use support.

## 2. National Water Quality Assessment

EPA also estimated benefits of the Phase II Storm Water program using the 1998 National Water Quality Inventory (305(b)) Report to Congress, rather than the NWPCAM as a basis for estimating impairment addressed by the rule. The Water Quality Assessment method separately estimates benefits associated with improvements to fresh water, marine water and construction site controls, and then aggregates these separate categories into an estimate of total annual benefits.

## a. Municipal Measures

#### i. Fresh Waters Benefits

In order to develop estimates for the potential value of the municipal measures (except storm water runoff controls for construction sites), EPA applied Carson & Mitchell WTP values to estimated existing and projected future fresh water impairment. Carson & Mitchell did not evaluate marine waters, so only fresh water values were available from their research. Even

though the Carson and Mitchell estimates apply to all fresh water, it is not clear how these values would be apportioned among rivers, lakes, and the Great Lakes. The 305(b) data indicate that lakes are the most impaired by urban runoff/storm sewers, followed closely by the Great Lakes, and then rivers. Therefore, EPA applied the WTP values to the categories separately and assumed that the higher resulting value for lakes represents the high end of the range (i.e., assuming that lake impairment is more indicative of national fresh water impairment) and that the lower resulting value for impaired rivers represents the low end of a value range for all fresh waters (i.e., assuming that river impairment is more indicative of national fresh water impairment). In addition, EPA estimated that the post-construction runoff

requirements of the municipal program might result in benefits of at least \$16.8 million annually from avoided future runoff. The post-construction estimate significantly underestimates potential program benefits because it does not account for avoided hydrologic changes and resulting water quality impairment associated with increases in imperviousness from development and redevelopment. Summing the benefits across the water quality use support levels yields an estimate of benefits ranging from approximately \$121.9 million to \$378.2 million per year.

# ii. Marine Waters Benefits

In addition to the fresh water benefits captured by the Carson and Mitchell study, EPA anticipates benefits as a result of improvements to marine waters. Sufficient methods have not been developed to quantify nationallevel benefits for commercial or recreational fishing. EPA used beach closure data and visitation estimates from its Beach Watch Program to estimate potential reductions in marine swimming visits due to storm water runoff contamination events in 1997. The estimated 86,100 trips that did not occur because of beach closures in coastal Phase II communities is a lower bound because it represents only those beaches that report both closures and visitation data. EPA estimates potential swimming benefits from the rule to be at least \$2.1 million annually.

EPA developed an analysis of potential benefits associated with avoided health impacts from exposure to contaminants in storm sewer effluent. Based on a study of incremental illnesses found among people who swam within one yard of storm drains in Santa Monica Bay, EPA estimated a range of incremental illnesses (Haile et al., 1996). Depending on assumptions made about number of exposures to contaminants and contaminant concentrations, benefits ranged from \$7.0 million to \$29.9 million annually.

### b. Construction Benefits

The major pollutant resulting from construction activities is sediment. However, in addition to sediment, construction activities also yield pollutants such as pesticides, petroleum products, and solvents. Because circumstances will vary considerably from site to site, data is not available with which to develop estimates of benefits for each site and aggregate to obtain a national-level estimate.

In the proposed rule, EPA estimated the combined benefits of all wet weather programs, and then used expert opinions to allocate them to different individual programs. To eliminate the possible overlap between the benefits of the soil and erosion control requirements, municipal measures, and other wet weather storm water programs, EPA chose to use an approach in today's final rule that directly

estimates the benefits of soil and erosion requirements.

A survey of North Carolina residents (Paterson et al., 1993) indicated that households are willing to pay for erosion and sediment controls similar to those in today's rule. Based on income and other indicators, the values derived from the study are expected to be similar to values held in the rest of the country. Using the mean value of the willingness to pay of \$25 per household, EPA projects annual benefits of the soil and erosion requirements to range from \$540.5-\$686 million.

## c. Summary of Benefits From the National Water Quality Assessment

Total benefits from municipal measures and construction site controls are expected to range from \$671.5million to \$1.1 billion per year, including benefits of approximately \$13.7 million per year associated with small stream improvements. A summary of the potential benefits is presented in Exhibit 5.

As shown in Exhibit 5, it was not possible to monetize all categories of benefits using the WTP estimates. In particular, benefits for improving marine water quality such as fishing and passive use benefits are not included in the values used to estimate the potential benefits of the municipal minimum measures (excluding construction sites controls), and they are not estimated separately, because information is not currently available.

EXHIBIT 5.—POTENTIAL ANNUAL BENEFITS OF THE PHASE II STORM WATER RULE NATIONAL WATER QUALITY ASSESSMENT ESTIMATE

Benefit category	Annual WTP
Municipal Minimum Measures <sup>1</sup>	
Fresh Water Use and Passive Use 2  Marine Recreational Swimming  Human Health (Marine Waters)  Other Marine Use and Passive Use  Erosion and Sediment Controls for Construction Sites	\$121.9–\$378.2 \$2.1 \$7.0–\$29.9 (+)
Fresh Water and Marine Use and Passive Use 3	\$540.5–\$686
Total Phase II Program	
Total Use & Passive Use (Fresh Water and Marine)	>\$671.5->\$1,096.2

<sup>+=</sup> positive benefits expected but not monetized.

# C. Qualitative Benefits

There are additional benefits to storm water control that cannot be quantified

or monetized. Thus, the current estimate of monetized benefits may understate the true value of storm water controls

because it omits many ways in which society is likely to benefit from reduced storm water pollution, such as improved

<sup>1</sup> Includes water quality benefit of municipal programs, based on 80% effectiveness of municipal programs.

2 Based on research by Carson and Mitchell (1993). Fresh water value only. Does not include commercial fishery, navigation, or diversionary (e.g. municipal drinking water cost savings or risk reductions) benefits. May not fully capture human health risk reduction or ecological values.

3 Based on research by Paterson et al. (1993). Although the survey's description of the benefits of reducing soil erosion from construction sites included reduced dredging, avoided flooding, and water storage capacity benefits, these benefit categories may not be fully incorporated in the WTP values. Small streams may account for over 2% of total benefits.

aesthetic quality of waters, benefits to wildlife and to threatened and endangered species, cultural values, and biodiversity benefits.

A benefit that EPA did not monetize completely is the flood control benefits attributable to municipal storm water controls reducing downstream flooding, although flood control benefits associated with sediment and erosion control are already reflected to some extent in the construction benefits. Similarly, the Agency could not value the benefits from increased property value due to storm water controls reflected in the rule, even though a commenter suggested inclusion of these benefits in the estimates.

Moreover, while a number of commenters requested that EPA include ecological benefits, the Agency was not able to fully monetize these benefits. Urbanization usually increases the amount of sediment, nutrients, metals and other pollutants associated with land disturbance and development. Development usually not only results in a dramatic increase in the volume of water runoff, but also in a substantial decrease in that water's quality due to stream scour, runoff and dispersion of toxic pollutants, and oversilitation. These kinds of secondary benefits could not be fully reflected in the monetized benefits. EPA was able to only monetize the aquatic life support benefits for waters assumed to be impaired. Thus, only the aquatic life support benefits attributable to municipal controls, reflected through human satisfaction, are taken into account.

Reduced nutrient level is another benefit of the storm water control which is not fully captured by the economic analysis. High nutrient levels often lead to eutrophication of the aquatic system. The quality change in ecological sources as the result of storm water controls to reduce pollutants is not fully reflected in the present benefits.

## D. National Economic Impact

Finally, the Agency determined that the rule will have minimal impacts on

the economy or employment. This is because the final rule regulates small MS4s and construction sites under 5 acres, not the typical industrial plants or other non-construction activities that could directly impact production and thus those sectors of the economy.

Discussions with representatives within the construction industry indicate that construction costs will likely be passed on to buyers, thus not seriously affecting the housing industry directly. One commenter argued that the rule will have a negative employment effect because the builders will build fewer homes requiring less building materials as a result of the declining demand induced by the cost of the soil and erosion controls. EPA disagrees with this argument because the cost of the controls, as the percentage of the price of a median home, is negligible and will be passed on to final buyers.

Flexibility within the rule allows MS4s to tailor the storm water program requirements to their needs and financial position, minimizing impacts. For sedimentation and erosion controls on construction sites, the rule contemplates application of commonly used BMPs to reduce costs for the construction industry. Thus, the rule attempts to use existing practices to prevent pollution, which should minimize impacts on States, Tribes, municipalities and the construction industry.

Thus, EPA concludes that the effect of the rule, if any, on the national economy will be minimal. The benefits of today's rule more than offset any cost impacts on the national economy.

#### IV. Regulatory Requirements

## A. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved some of the information collection requirements contained in this final rule (*i.e.* those found in 40 CFR 122.26(g) and 123.35(b)) under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2040–0211.

The burden and costs described below are for the information collection. reporting, and record keeping requirements for the three year period beginning with the effective date of today's rule. Additional information collection requirements for regulated small MS4s and small construction sites will occur after this initial three year period and will be counted in a subsequent information collection requirement. The total burden of the information collection requirements for the first three years of this rule is estimated at 56,369 hours with a corresponding cost of \$2,151,305 million annually. This burden and cost is for industrial facilities to complete and submit the no exposure certification, for NPDES-authorized States to process and review the no exposure certification, and for the NPDES-authorized States to develop designation criteria and assess additional MS4s outside of urbanized areas. Compliance with the applicable information collection requirements imposed under this rule are mandatory, pursuant to CWA section 402.

Exhibit 6 presents average annual burden and cost estimates for Phase II respondents for the first three years. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust existing ways for complying with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

EXHIBIT 6.—AVERAGE ANNUAL BURDEN AND COST ESTIMATES FOR PHASE II RESPONDENTS

Information collection activity	A Respondents per year (projected) <sup>1</sup>	B Burden hours per respond- ent per year (predicted)	(A)×(B)=C Annual re- spondent bur- den hours (projected)	D Respondent labor cost (\$/ hr) (1998 \$)	(C)×(D)=E Annual Cost (\$) (projected)
Ind. No Expos. Facilities: <sup>2</sup> No Expos. Certification	36,377	1.0	36,377	44.35	1,613,320
Annual Subtotal  NPDES-Authorized States: <sup>3</sup>			36,377		1,613,320
Designation of Addit. MS4s <sup>4</sup>	15	332.8	4,892	26.91	131,644

EXHIBIT 6.—AVERAGE ANNUAL BURDEN AND COST ESTIMATES FOR PHASE II RESPONDENTS—Continued

Information collection activity	A Respondents per year (projected) <sup>1</sup>	B Burden hours per respond- ent per year (predicted)	(A)×(B)=C Annual re- spondent bur- den hours (projected)	D Respondent labor cost (\$/ hr) (1998 \$)	(C)×(D)=E Annual Cost (\$) (projected)
No Exp. Cert. Proc. & Rev	30,200	0.5	15,100	26.91	406,341
Annual Subtotal			19,992		537,985
Annual Totals			56,369		2,151,305

#### Notes:

<sup>1</sup> Source: U.S. EPA, Office of Wastewater Management, Economic Analysis for the Storm Water Phase II Rule.

<sup>2</sup>The total number of potential no exposure respondents was divided by 5 to estimate an annual total. It was assumed that the annual number

of respondents for the no exposure certification would be spread over the five year period the exclusion applies.

3 The number of respondents in each category represents only those respondents located within the 44 NPDES-authorized States and Territories. The burden and cost estimates provided in this section are for the NPDES-authorized States in their role as the permitting authority for municipal designations and industrial no exposure.

<sup>4</sup>The number of respondents for this activity, 15, represents the number of NPDES-authorized States and Territories that must develop designation criteria and assess small MS4s located outside of an urbanized area for possible Phase II coverage divided by the three year ICR pe-

Given the requirements of today's regulation, EPA believes there will be no capital startup and no operation and maintenance costs associated with information collection requirements of

The government burden associated with today's rule will impact State, Tribal, and Territorial governments (NPDES-authorized governmental entities) that have storm water program authority, as well as the federal government (i.e., EPA), where it is the NPDES permitting authority. As of March 1999, 43 States and the Virgin Islands had NPDES authority.

The annual burden imposed upon authorized governmental entities (delegated States and the Virgin Islands) and the federal government for the next three years is estimated to be 19,992 hours (\$537,985) and 4,087 hours (\$115,948) respectively, for a total of 24,079 hours (\$653,933). This estimate is based on the average time that governments will expend to carry out the following activities: designate additional MS4s (332.8 hours) and process and review "no exposure" certificates from industrial dischargers (0.5 hour).

Under the existing rule, storm water discharges from light industrial activities identified under  $\S 122.26(b)(14)(xi)$  were exempted from the permit application requirements if they were not exposed to storm water. Today's rule expands the applicability of the "no exposure" exclusion to include all industrial activity regulated under § 122.26(b)(14) (except category (x), construction). The "no exposure" provision is applied through the use of a written certification process, thus representing a slight reporting burden increase for "light" industries with "no exposure'.

In addition to the information collection, reporting, and record keeping burden for the next three years, today's rule contains information collection requirements that will not begin until three years or more from the effective date of today's rule. These information collection requirements were not included in the information collection request approved by OMB. EPA will submit these burden estimates for OMB approval when it submits ICR 2040-0211 to OMB for renewal in three years. The rule burdens for regulated small MS4s and small construction sites that will be included in the ICR renewal fall into three areas: application for an NPDES permit or submittal of waiver information, record keeping of storm water management activities, and submittal of reports to the permitting authority. There will also be an additional burden for the permitting authority to review this information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15. EPA is amending the table in 40 CFR Part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the first three years of information requirements contained in this final rule.

#### B. Executive Order 12866

Under Executive Order 12866, [58 FR 51,735 (October 4, 1993)] the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant

regulatory action" as one that is likely to result in a rule that may:

(1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities:

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action". As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

#### C. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a

written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most costeffective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

EPA has determined that today's rule contains a Federal mandate that may result in expenditures of \$100 million or more in any one year for both State, local, and tribal governments, in the aggregate, and the private sector. Accordingly, EPA has prepared under section 202 of the UMRA a written statement which is summarized below.

#### 1. Summary of UMRA Section 202 Written Statement

EPA promulgates today's storm water regulation pursuant to the specific mandate of Clean Water Act section 402(p)(6), as well as sections 301, 308, 402, and 501. (33 U.S.C. sections 1342(p)(6), 1311, 1318, 1342, 1361.) Section 402(p)(6) of the CWA requires that EPA designate sources to be regulated to protect water quality and establish a comprehensive program to regulate those sources.

In the  $\it Economic Analysis of the Final$ Phase II Rule (EA), EPA describes the qualitative and monetized benefits associated with today's rule and then compares the monetized benefits with the estimated costs for the rule. EPA developed detailed estimates of the costs and benefits of complying with each of the incremental requirements imposed by the rule. These estimates, including descriptions of the methodology and assumptions used, are described in detail in the EA. The Agency used two approaches, a national water quality model and national water quality assessment, to estimate the potential benefits of the rule. Both approaches show that the benefits are likely to exceed costs. Exhibit 3 in section III of this preamble summarizes the costs and benefits associated with the basic elements of today's rule.

There are additional benefits to storm water control that cannot be quantified or monetized. Thus, the current estimate of monetized benefits may understate the true value of storm water controls because it omits many ways by which society is likely to benefit from reduced storm water pollution, such as improved

aesthetic quality of waters, benefits to wildlife and to threatened and endangered species, cultural values, and biodiversity benefits.

Several commenters asserted that today's rule is an unfunded mandate and that, without funding, the monitoring of the already existing pollution control programs would suffer. In section II.D.3 of the preamble, EPA lists some of the programs that EPA anticipates may provide funds to help develop and, in limited circumstances, implement storm water management programs.

In the EA, EPA reviewed the expected effect of today's rule on the national economy. The Agency determined that the rule will have minimal impacts on the economy or employment. This is because the final rule regulates small MS4s and construction sites under 5 acres, not the typical industrial plants or other non-construction activities that could directly impact production and thus those sectors of the economy.

Discussions with representatives within the construction industry indicate that construction costs will likely be passed on to buyers, thus not seriously affecting the housing industry directly. Flexibility within the rule allows MS4s to tailor the storm water program requirements to their needs and financial position, minimizing impacts. For sedimentation and erosion controls on construction sites, the rule contemplates application of commonly used BMPs to reduce costs for the construction industry. Thus, the rule attempts to use existing practices to prevent pollution, which should minimize impacts on States, Tribes, municipalities and the construction

Thus, EPA concludes that the effect of the rule, if any, on the national economy would be minimal. The benefits of today's rule more than offset any cost impacts on the national economy.

Consistent with the intergovernmental consultation provisions of section 204 of the UMRA and Executive Order 12875, "Enhancing the Intergovernmental Partnership," EPA consulted with the governmental entities affected by this rule

First, EPA provided States, Tribal and local governments with the opportunity to comment on draft alternative approaches for the proposed rule through publishing a notice requesting information and public comment in the **Federal Register** on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24

percent from State or Federal agencies. These comments were the genesis of many of the provisions in the today's rule, including reliance on the NPDES program framework (including general permits), providing State and local governments flexibility in selecting additional sources requiring regulation, and focusing on high priority polluters. These comments helped to focus on pollution prevention, watershed-based concerns and BMPs. They also led to certain exemptions for facilities that do not pollute national waters.

In early 1993, EPA, in conjunction with the Rensselaerville Institute, held public and expert meetings to assist in developing and analyzing options for identifying unregulated storm water sources and possible controls. These meetings provided participants an additional opportunity to provide input into the CWA section 402(p)(6) program development process. The final rule addresses several of the key concerns identified in these groups, including provisions that provide flexibility to the States to select sources to be controlled and types of permits to be issued, and flexibility to MS4s in selecting BMPs.

EPA also conducted outreach with representatives of small entities, including small government representatives, in conjunction with the convening of a Small Business Advocacy Review Panel under SBREFA which is discussed in section IV.E. of the preamble.

In addition, EPA established the Urban Wet Weather Flows Advisory Committee under the Federal Advisory Committee Act (FACA). The Urban Wet Weather Flows Advisory Committee, in turn established the Storm Water Phase II Subcommittee. Consistent with FACA, the membership of the Committee and the Storm Water Phase II Subcommittee was balanced among EPA's various outside stakeholder interests, including representatives from State governments, municipal governments (both elected officials and appointed officials) and Tribal governments, as well as industrial and commercial sectors, agriculture, environmental and public interest groups.

In general, municipal and Tribal government representatives supported the NPDES approach in today's rule for the following reasons: It will be uniformly applied on a nationwide basis; it provides flexibility to allow incorporation of State and local programs; it resolves the problem of donut holes that cause water quality impacts in urbanized areas; and it allows co-permitting of small regulated

MS4s with those regulated under the existing storm water program.

In contrast, State representatives sought alternative approaches for State implementation of the storm water program for Phase II sources. State representatives asserted that a non-NPDES alternative approach best facilitated watershed management and avoided duplication and overlapping regulations. These representatives pointed out that there are a variety of State programs—not based on the CWA—implementing effective storm water controls, and that EPA should provide incentives for their implementation and improvement in performance. EPA continues to believe that an NPDES approach is the best approach in order to adequately protect water quality. However, EPA has worked with States on an alternative approach that provides flexibility within the NPDES framework. The final rule allows States with a watershed permitting approach to phase in permit coverage for MS4s in jurisdictions with a population less than 10,000 and provides two waivers from coverage for small MS4s. This issue is discussed in section II.C of the preamble, Program Framework: NPDES Approach.

Some municipal governments objected that the rule's minimum measures for small MS4s violate the Tenth Amendment insofar as they require the operators of MS4s to regulate third parties according to the "minimum measures" for municipal storm water management programs. EPA disagrees that today's rule is inconsistent with Tenth Amendment principles. Permits issued under today's rule will not compel political subdivisions of States to regulate in their sovereign capacities, but rather to effectively control discharges out of their storm sewer systems in their owner/operator capacities. For MS4s that do not accept this "default" minimum measures-based approach (to control discharges out of the storm sewer system by exercising local powers to control discharges into the storm sewer system), today's rule allows for alternative permits through individual permit applications. EPA made revisions to the rule to allow regulated small MS4s to opt out of the minimum measures approach and instead apply for an individual permit. This issue is discussed in section II.H.3.c.iii of the preamble, Alternative Permit Option/ Tenth Amendment.

2. Selection of the Least Costly, Most Cost-Effective or Least Burdensome Alternative That Achieves the Objectives of the Statute

Today's rule evolved over time and incorporated aspects of alternatives that responded to concerns presented by the various stakeholders. A primary characteristic of today's rule is the flexibility it offers both the permitting authority and the regulated sources (small MS4s and small construction sites), by the use of general permits, implementation of BMPs suited to specific locations, and allowing MS4s to develop their own program goals.

In the administrative record supporting the proposed rule, EPA estimated ranges of costs associated with six different options, including a no action option, the proposed option, and four other options that considered various combinations of the following: Covering all the unregulated construction sites below 5 acres, all small MS4s, certain industrial and commercial activities, and all point sources. EPA developed detailed cost estimates for the incremental requirements imposed under the final regulation, and for each of the alternatives, and applied these estimates to the remaining unregulated point sources of storm water. The Agency compared the estimated annual range of costs imposed under today's rule and other major options considered. The range of values for each option included the costs for compliance, including paperwork requirements for the operators of small construction sites, industrial facilities, and MS4s and administrative costs for State and Federal NPDES permitting authorities.

Today's rule reflects the least costly option that achieves the objectives of the statute, thus meeting the requirements of section 205. EPA did not consider "no regulation" to be an "option" because it would not achieve the objectives of CWA section 402(p)(6). A portion of currently unregulated point sources of storm water need to reduce pollutants to protect water quality.

Today's rule is estimated to range in cost from \$847.6 million to \$981.3 million annually, although the cost estimate for the proposed rule was reported as a range of \$138 to \$869 million annually. That range reflected a unit cost range for the municipal minimum measures and a cost range per construction site for soil erosion control. EPA has since revised its cost analysis to allow it to report the current estimate, which is toward the high end of the original cost range. The four other regulatory options considered at

proposal involved higher regulatory costs and, therefore, were not selected. These four options and their estimated costs are as follows:

(1) An option based on the August 7, 1995 direct final rule was estimated to cost between \$2.2 billion and \$78.9

billion per year. (2) A "Plan B" option was estimated to cost between \$0.6 billion and \$3.2 billion per year.

(3) An option based on the September 30, 1996 draft proposed rule was estimated to cost between \$0.2 billion and \$3.7 billion per year.

(4) An option based on the February 13, 1997 draft proposed rule, was estimated to cost between \$0.2 billion and \$3.5 billion.

There are three reasons why the costs for these four options exceeded the estimated cost range for the proposed rule. The first two options regulated substantially more municipal governments. The first, third, and fourth options required industrial facilities to apply for permits. Finally, the first three options applied permit requirements to construction sites below 1 acre. Consequently, these options would be more costly than today's rule even with the revised analysis methods used to estimate costs.

## 3. Effects on Small Governments

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. Although today's rule expands the NPDES program (with modifications) to certain MS4s serving populations below 100,000 and although many MS4s are owned by small governments, EPA does not believe today's rule significantly or uniquely affects small governments. As explained in section IV.E. of the preamble, EPA today certifies that the rule will not have a significant impact on small governmental jurisdictions. In addition, the rule will not have a unique impact on small governments because the rule will affect small governments in to the same extent as (or to a lesser extent than) larger governments that are already covered by the existing storm water rules. Thus, today's rule is not subject to the requirements of section 203 of UMRA.

Notwithstanding this finding, in developing today's rule, EPA provided notice of the requirements to potentially affected small governments; enabled officials of affected small governments to provide meaningful and timely input in the development of regulatory proposals; and informed, educated and advised small governments on compliance with the requirements.

Concerning notice, EPA provided States, local, and Tribal governments with the opportunity to comment on alternative approaches for an early draft of the proposed rule by publishing a notice requesting information and public comment in the **Federal Register** on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24 percent from State or Federal agencies.

The Agency also provided, through the SBREFA panel process and the FACA process, the opportunity for elected officials of small governments (and their representatives) to meaningfully participate in the development of the rule. Through such participation and exchange, EPA not only notified potentially affected small governments of requirements of the developing rule, but also allowed officials of affected small governments to have meaningful and timely input into the development of regulatory proposals.

In addition to involving municipalities in the development of the rule, EPA also continues to inform, educate, and advise small governments on compliance with the requirements of today's rule. For example, EPA supported 10 workshops, presented by the American Public Works Association from September 1998 through May 1999, designed to educate local governments on the implementation of the rule. The workshop curriculum included information on a variety of key issues such as anticipated regulatory requirements, agency reporting, best management practices, construction site controls, post construction management for new and redeveloped sites, public education and public involvement strategies, detection and control of illicit discharges, and good housekeeping practices. Moreover, EPA has prepared a series of fact sheets, available on the

EPA website at www.epa.gov/owm/sw/toolbox, that explains the rule in detail.

Finally, to assist small governments in implementing the Phase II program, EPA is committed to the following: (1) developing a tool box of implementation strategies; (2) providing written technical assistance, including guidance on developing BMPs and measurable goals; and (3) compiling a comprehensive evaluation of the NPDES municipal storm water Phase II program over the next 13 years.

#### D. Executive Order 13132

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to the Office of Management and Budget (OMB), in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. For final rules subject to Executive Order 13132, EPA also must submit to OMB a statement from the agency's Federalism Official certifying that EPA has fulfilled the Executive Order's requirements.

EPA has concluded that this final rule may have federalism implications. As discussed above in section IV.C., the rule contains a Federal mandate that may result in the expenditure by State, local and tribal governments, in the aggregate, of \$100 million or more in any one year. Accordingly, the rule may have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Moreover, the rule will impose substantial direct compliance costs on State or local governments. Accordingly, EPA provides the following FSIS under section 6(b) of Executive Order 13132.

#### 1. Description of the Extent of the Agency's Prior Consultation with State and Local Governments

Although this rule was proposed long before the November 2, 1999 effective date of Executive Order 13132, EPA consulted extensively with affected State and local governments pursuant to the intergovernmental consultation provisions of Executive Order 12875, "Enhancing the Intergovernmental Partnership" (now revoked by Executive Order 13132) and section 204 of UMRA.

First, EPA provided State and local governments the opportunity to comment on draft alternative approaches for the proposed rule through publishing a notice requesting information and public comment in the Federal Register on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24 percent from State or Federal agencies. These comments were the genesis of many of the provisions in the today's rule, including reliance on the NPDES program framework (including general permits), providing State and local governments flexibility in selecting additional sources requiring regulation, and focusing on high priority polluters. These comments helped to focus on pollution prevention, watershed-based concerns and BMPs. They also led to certain exemptions for facilities that do not pollute national waters.

In early 1993, EPA, in conjunction with the Rensselaerville Institute, held public and expert meetings to assist in developing and analyzing options for identifying unregulated storm water sources and possible controls. These meetings provided participants an additional opportunity to provide input into the CWA section 402(p)(6) program

development process. The final rule addresses several of the key concerns identified in these groups, including provisions that provide flexibility to the States to select sources to be controlled and types of permits to be issued, and flexibility to MS4s in selecting BMPs.

EPA also conducted outreach with representatives of small entities, including small governments, in conjunction with the convening of a Small Business Advocacy Review Panel under SBREFA which is discussed in section III.F. of the preamble.

In addition, EPA established the Urban Wet Weather Flows Advisory Committee (FACA), which in turn established the Storm Water Phase II Subcommittee. Consistent with the Federal Advisory Committee Act, the membership of the Committee and the Storm Water Phase II Subcommittee was balanced among EPA's various outside stakeholder interests, including representatives from State governments, municipal governments (both elected officials and appointed officials) and Tribal governments, as well as industrial and commercial sectors, agriculture, environmental and public interest groups.

2. Summary of Nature of State and Local Government Concerns, and Statement of the Extent to Which Those Concerns Have Been Met

In general, municipal government representatives supported the NPDES approach in today's rule for the following reasons: it will be uniformly applied on a nationwide basis; it provides flexibility to allow incorporation of State and local programs; it resolves the problem of donut holes that cause water quality impacts in urbanized areas; and it allows co-permitting of small regulated MS4s with those regulated under the existing storm water program.

In contrast, State representatives sought alternative approaches for State implementation of the storm water program for Phase II sources. State representatives asserted that a non-NPDES alternative approach best facilitated watershed management and avoided duplication and overlapping regulations. These representatives pointed out that there are a variety of State programs—not based on the CWA—implementing effective storm water controls, and that EPA should provide incentives for their implementation and improvement in performance. EPA continues to believe that an NPDES approach is the best approach in order to adequately protect water quality. However, EPA has worked with States on an alternative

approach that provides flexibility within the NPDES framework. The final rule allows States with a watershed permitting approach to phase in permit coverage for MS4s in jurisdictions with a population less than 10,000 and provides two waivers from coverage for small MS4s. This issue is discussed in section II.C of the preamble, Program Framework: NPDES Approach.

Some municipal governments objected that the rule's minimum measures for small MS4s violate the Tenth Amendment insofar as they require the operators of MS4s to regulate third parties according to the "minimum measures" for municipal storm water management programs. EPA disagrees that today's rule is inconsistent with Tenth Amendment principles. Permits issued under today's rule will not compel political subdivisions of States to regulate in their sovereign capacities, but rather to effectively control discharges out of their storm sewer systems in their owner/operator capacities. For MS4s that do not accept this "default" minimum measures-based approach (to control discharges out of the storm sewer system by exercising local powers to control discharges into the storm sewer system), today's rule allows for alternative permits through individual permit applications. EPA made revisions to the rule to allow regulated small MS4s to opt out of the minimum measures approach and instead apply for an individual permit. This issue is discussed in section II.H.3.c.iii of the preamble, Alternative Permit Option/ Tenth Amendment.

3. Summary of the Agency's Position Supporting the Need To Issue the Regulation

As discussed more fully in section I.B. above, today's rule is needed because uncontrolled storm water discharges from areas of urban development and construction activity have been shown to have negative impacts on receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and people. As discussed in section II.C., the NPDES approach in today's rule is needed to ensure uniform application on a nationwide basis, to provide flexibility to allow incorporation of State and local programs, to resolve the problem of donut holes that cause water quality impacts in urbanized areas, and to allow co-permitting of small regulated MS4s with those regulated under the existing storm water program.

The draft final rule was transmitted to OMB on July 6, 1999. Because transmittal occurred before the November 2, 1999 effective date of Executive Order 13132, certification under section 8 of the Executive Order is not required.

E. Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an Agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impact of today's rule on small entities, small entity is defined as: (1) a building contractor (SIC 15) with up to \$17.0 million in annual revenue; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-forprofit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities.

For purposes of evaluating the economic impact of this rule on small governmental jurisdictions, EPA compared annual compliance costs with annual government revenues obtained from the 1992 Census of Governments, using state-specific estimates of annual revenue per capita for municipalities in three population size categories (fewer than 10,000, 10,000–25,000, and 25,000–50,000).

In order to estimate the annual compliance cost for small governmental jurisdictions, EPA used the mean variable municipal cost of \$8.93 per household as calculated in a 1998 study of 121 municipalities conducted by the national Association of Flood and Stormwater Management Agencies (NAFSMA). In addition, EPA used the estimated fixed administrative costs of \$1,545 per municipality for reporting,

recordkeeping, and application requirements for today's rule.

In evaluating the economic impact of this rule on small governmental jurisdictions, EPA determined that compliance costs represent more than 1 percent of estimated revenues for only 10 percent of small governments and more than 3 percent of the revenue for 0.7 percent of these entities. In both absolute and relative terms, EPA does not consider this a significant economic impact on a substantial number of small entities.

EPA normally uses the "sales test" for determining the economic impact on small businesses. Under a sales test, annual compliance costs are compared with the small business's total annual sales. However, the direct application of the sales test is not suitable in this case, because of the uncertainty associated with estimating the number of units an "average" developer/contractor develops or builds in a typical year. For this rule, EPA has approximated the sales test by estimating compliance costs for three sizes of construction sites and comparing them with a representative sale price for three building categories. Although EPA's analysis is not exactly a "sales test," it is similar to the sales test, producing comparable results.

For small building contractors, EPA estimated administrative compliance costs of \$870 per site for applying for coverage, reporting, record keeping, monitoring and preparing a storm water pollution prevention plan. EPA estimated compliance costs for installing soil and erosion controls as ranging from \$1,206 to \$8,709 per site. EPA compliance cost estimates are based on 27 theoretical model construction sites designed to mimic the mostly likely used best management practices around the country.

In evaluating the economic impact on small building contractors, EPA divided the revised compliance costs per construction start by the appropriate homes-to-site ratio for each of the three sizes of construction sites. The average compliance cost per home ranges from approximately \$450 to \$650. EPA concluded that compliance costs are roughly 0.22 to 0.43 percent of both the mean, \$181,300, and median, \$151,000, sale price of a home.

The absence of data to specifically assess annual compliance costs for building contractors as a percentage of annual sales (i.e., a very direct estimate of the impact on potentially affected small businesses) led EPA to perform additional market analysis to examine the ability of potentially affected firms to pass along regulatory costs to buyers

for single-family homes constructed subject to today's rule. If the small building contractors covered by the rule are able to pass on the costs of compliance, either completely or partially, to their purchasers, then the rule's impact on these small business entities is significantly reduced. The market analysis shows that demand for homes is not overly sensitive to small changes in price, therefore builders should be able to pass on at least a significant fraction of the compliance costs to buyers.

EPA also assessed the effect of the building contractors' costs on average monthly mortgage rates and on the demand for new homes. Based on that screening analysis, EPA concludes that the costs to building contractors, and the potential changes in housing prices and monthly mortgage payments for single-family home buyers, are not expected to have a significant impact on the market for single-family houses. In both absolute and relative terms, EPA does not consider this a significant economic impact on a substantial number of small entities.

EPA also certified this rule at proposal. Even though the Agency was not required to, we convened a Small Business Advocacy Review Panel ("Panel") in June 1997. A number of small entity representatives had already been actively involved with EPA through the FACA process, and were, therefore, broadly knowledgeable about the development of the proposed and final rules. Prior to convening the Panel, EPA consulted with the Small Business Administration to identify a group of small entity representatives to advise the Panel. The Agency distributed a briefing package describing its preliminary analysis under the RFA to the small entity representatives (as well as to representatives from OMB and SBA) and conducted two telephone conference calls and an all-day meeting at EPA Headquarters in May of 1997 with small entity representatives. With this preliminary work complete, in June 1997, EPA formally convened the SBREFA Panel, comprising representatives from OMB, SBA, EPA's Office of Water and EPA's Small Business Advocacy Chair. The Panel received written comments from small entity representatives based on their involvement in the earlier meetings, and invited additional comments.

Consistent with requirements of the RFA, the Panel evaluated the assembled materials and small-entity comments on issues related to: (1) a description and the number of small entities that would be regulated; (2) a description of the projected record keeping, reporting and

other compliance requirements applicable to small entities; (3) identification of other Federal rules that may duplicate, overlap, or conflict with the proposal to the final rule; and (4) regulatory alternatives that would minimize any significant economic impact of the rule on small entities while accomplishing the stated objectives of the CWA section 402(p)(6).

On August 7, 1997, the Panel provided a Final Report (hereinafter, "Report") to the EPA Administrator. A copy of the Report is included in the docket for the rule. The Panel acknowledged and commended EPA's efforts to work with stakeholders, including small entities, through the FACA process. The SBREFA Panel stated that, because of EPA's extensive outreach and responsiveness in addressing stakeholder concerns, commenters during the SBREFA process raised fewer concerns than might otherwise have been expected. Based on the advice and recommendations of the Panel, today's rule includes a number of provisions designed to minimize any significant impact on small entities. (See Appendix 5).

#### F. National Technology Transfer And Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standard bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not mandate the use of any particular technical standards, although in designing appropriate BMPs regulated small MS4s and small construction sites are encouraged to use any voluntary consensus standards that may be applicable and appropriate. Because no specific technical standards are included in the rule, section 12(d) of the NTTAA is not applicable.

## G. Executive Order 13045

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to E.O. 13045 because it does not concern an environmental health or safety risk that may have a disproportionate effect on children. The rule expands the scope of the existing NPDES permitting program to require small municipalities and small construction sites to regulate their storm water discharges. The rule does not itself, however, establish standards or criteria that would be included in permits for those sources. Such standards or criteria will be developed through other actions, for example, in the establishment of water quality standards or subsequently in the issuance of permits themselves. As such, today's action does not concern an environmental health or safety risk that may have a disproportionate effect on children. To the extent it does address a risk that may have a disproportionate effect on children, expanding the scope of the permitting program will have a corresponding disproportionate benefit to children to protect them from such

#### H. Executive Order 13084

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the Tribal

governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected Tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian Tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.'

Today's rule does not significantly or uniquely affect the communities of Indian Tribal governments. Even though the Agency is not required to address Tribes under the Regulatory Flexibility Act, EPA used the same revenue test that was used for municipalities to assess the impact of the rule on communities of Tribal governments and determine that they will not be significantly affected. In addition, the rule will not have a unique impact on the communities of Tribal governments because small municipal governments are also covered by this rule and larger municipal governments are already covered by the existing storm water rules. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

## I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This rule is a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective on February 7, 2000.

## List of Subjects

#### 40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

## 40 CFR Part 122

Administrative practice and procedure, Confidential business information, Environmental protection, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements, Sewage disposal, Waste treatment and disposal, Water pollution control.

#### 40 CFR Part 123

Administrative practice and procedure, Confidential business information, Hazardous materials, Indians—lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Sewage disposal, Waste treatment and disposal, Water pollution control, Penalties.

#### 40 CFR Part 124

Administrative practice and procedure, Air pollution control, Hazardous waste, Indians—lands, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: October 29, 1999.

## Carol M. Browner,

Administrator.

### Appendices to the Preamble

APPENDIX 1 TO PREAMBLE—FEDERALLY-RECOGNIZED AMERICAN INDIAN AREAS LOCATED FULLY OR PARTIALLY IN BUREAU OF THE CENSUS URBANIZED AREAS

[Based on 1990 Census data]

State	American Indian Area	Urbanized Area
AZ	Pascua Yacqui Reservation (pt.): Pascua Yacqui Tribe of Arizona	Tucson, AZ (Phase I).
AZ	Salt River Reservation (pt.): Salt River Pima-Maricopa Indian Community of the Salt River Reservation, California.	Phoenix, AZ (Phase I).
AZ	San Xavier Reservation (pt.): Tohono O'odham Nation of Arizona (formerly known as the Papago Tribe of the Sells, Gila Bend & San Xavier Reservation).	Tucson, AZ (Phase I).
CA	Augustine Reservation: Augustine Band of Cahuilla Mission of Indians of the Augustine Reservation, CA.	Indio-Coachella, CA (Phase I).
CA	Cabazon Reservation: Cabazon Band of Cahuilla Mission Indians of the Cabazon Reservation, CA.	Indio-Coachella, CA (Phase I).

# APPENDIX 1 TO PREAMBLE—FEDERALLY-RECOGNIZED AMERICAN INDIAN AREAS LOCATED FULLY OR PARTIALLY IN BUREAU OF THE CENSUS URBANIZED AREAS—Continued

[Based on 1990 Census data]

State	American Indian Area	Urbanized Area
CA	Fort Yuma (Quechan) (pt.): Quechan Tribe of the Fort Yuma Indian Reservation, California & Arizona.	Yuma, AZ-CA.
CA	Redding Rancheria: Redding Rancheria of California	Redding, CA.
FL	Hollywood Reservation: Seminole Tribe	Fort Lauderdale, FL (Phase I).
FL	Seminole Trust Lands: Seminole Tribe of Florida, Dania, Big Cypress & Brighton Reservations.	Fort Lauderdale, FL (Phase I).
ID	Fort Hall Reservation and Trust Lands: Shosone-Bannock Tribes of the Fort Hall Reservation of Idaho.	Pocatello, ID.
ME	Penobscot Reservation and Trust Lands (pt.): Penobscot Tribe of Maine	Bangor, ME.
MN	Shakopee Community: Shakopee Mdewakanton Sioux Community of Minnesota (Prior Lake).	Minneapolis-St. Paul, MN (Phase I).
NM	Sandia Pueblo (pt.): Pueblo of Sandia, New Mexico	Albuquerque, NM (Phase I).
NV	Las Vegas Colony: Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada.	Las Vegas, NV (Phase I).
NV	Reno-Sparks Colony: Reno-Sparks Indian Colony, Nevada	Reno, NV (Phase I).
OK	Osage Reservation (pt.): Osage Nation of Oklahoma	Tulsa, OK (Phase I).
OK	Absentee Shawnee-Citizens Band of Potawatomi TJSA (pt.): Absentee-Shawnee Tribe of Indians of Oklahoma; Citizen Potawatomi Nation, Oklahoma.	Oklahoma City, OK (Phase I).
OK	Cherokee TJSA 9 (pt.): Cherokee Nation of Oklahoma; United Keetoowah Band of Cherokee Indians of Oklahoma.	Ft. Smith, AR-OK; Tulsa, OK (Phase I).
OK	Cheyenne-Arapaho TJSA (pt.): Cheyenne-Arapaho Tribes of Oklahoma	Oklahoma City, OK (Phase I).
OK	Choctaw TJSA (pt.): Choctaw Nation of Oklahoma	Ft. Smith, AR-OK (Phase I).
OK	Creek TJSA (pt.): Alabama-Quassarte Tribal Town of the Creek Nation of Oklahoma; Kialegee Tribal Town of the Creek Indian Nation of Oklahoma; Muscogee (Creek) Nation of Oklahoma; Thlopthlocco Tribal Town of the Creek Nation of Oklahoma.	Tulsa, OK (Phase I).
OK	Kiowa-Comanche-Apache-Ft. Sill Apache: Apache Tribe of Oklahoma; Comanche Indian Tribe, Oklahoma; Fort Sill Apache Tribe of Oklahoma; Kiowa Indian Tribe of Oklahoma.	Lawton, OK.
TX	Ysleta del Sur Reservation: Ysleta Del Sur Pueblo of Texas	El Paso, TX-NM (Phase I).
WA	Muckleshoot Reservation and Trust Lands (pt.): Muckleshoot Indian Tribe of the Muckleshoot Reservation.	Seattle, WA (Phase I).
WA	Puyallup Reservation and Trust Lands (pt.): Puyallup Tribe of the Puyallup Reservation, WA.	Tacoma, WA (Phase I).
WA	Yakima Reservation (pt.): Confederated Tribes and Bands of the Yakama Indian Nation of the Yakama Reservation, WA.	Yakima, WA.
WI		Green Bay, WI.

### Please Note

"(pt.)" indicates that the American Indian Area (AIA) listed is only partially located within the referenced urbanized area.

The first line under "American Indian Area" is the name of the federally-recognized reservation/colony/rancheria or trust land as it appears in the Bureau of the Census data. After this first line, the names of the tribes included in the AIA are listed as they appear in the Bureau of Indian Affairs' list of Federally Recognized Indian Tribes. [Federal

**Register**: Nov. 13, 1996, Vol. 66, No. 220, pgs. 58211–58216]

"TJSAs" are Tribal Jurisdiction Statistical Areas in Oklahoma that are defined in conjunction with the federally-recognized tribes in Oklahoma who have definite land areas under their jurisdiction, but do not have reservation status.

"(Phase I)" indicates that the referenced urbanized area includes a medium or large MS4 currently regulated under the existing NPDES storm water program (i.e., Phase I). Any Tribally operated MS4 within these such urban areas would not automatically have been covered under Phase I, however.

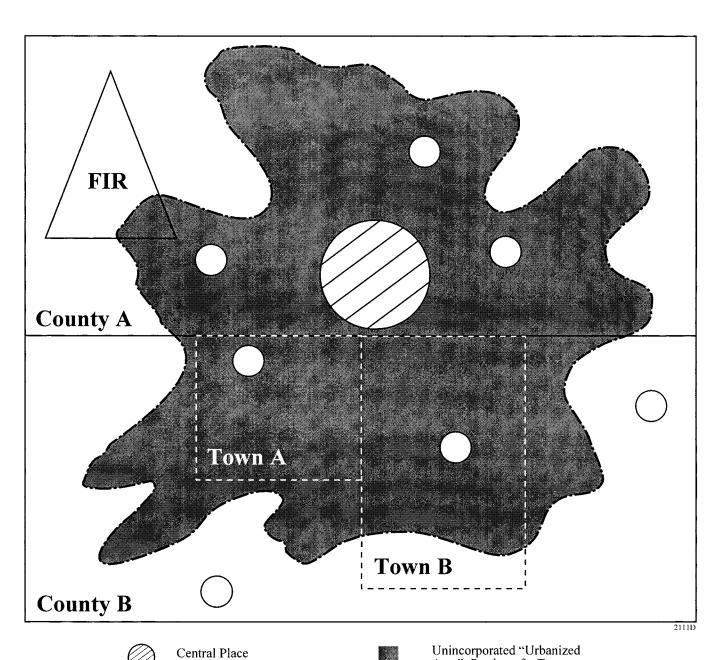
#### Sources

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1990 Census of Population and Housing, Summary Population and Housing Characteristics, United States. Tables 9 & 10. [1990 CPH-1-1]. Bureau of the Census, U.S. Department of Commerce.

BILLING CODE 6560-50-P

# APPENDIX 2 TO PREAMBLE—URBANIZED AREA ILLUSTRATION



Area" Portion of a Town (MCD) or County

Incorporated Place

——— Urbanized Area

Federal Indian Reservation (FIR)

Town or Township as a functioning Minor Civil Division (MCD). An MCD is the primary subdivision of a County.

——— County

## Appendix 3 to the Preamble— Urbanized Areas of the United States and Puerto Rico

(Source: 1990 Census of Population and Housing, U.S. Bureau of the Census— This list is subject to change with the Decennial Census)

## Alabama

Anniston Auburn-Opelika Birmingham Columbus, GA–AL

Decatur
Dothan
Florence
Gadsden
Huntsville
Mobile
Montgomery
Tuscaloosa

## Alaska Anchorage

Arizona Phoenix Tucson Yuma, AZ–CA

#### **Arkansas**

Fayetteville-Springdale Fort Smith, AR–OK Little Rock-North Little Rock Memphis, TN–AR–MS

Pine Bluff

Texarkana, AR-TX

# California

Antioch-Pittsburgh Bakersfield Chico Davis Fairfield Fresno

Hemet-San Jacinto

Hesperia-Apple Valley-Victorville

Indio-Coachella Lancaster-Palmdale

Lodi Lompoc Los Angeles Merced Modesto Napa

Oxnard-Ventura Palm Springs Redding

Riverside-San Bernardino

Sacramento Salinas San Diego

Visalia Watsonville

San Francisco-Oakland

San Francisco-Oakl
San Jose
San Luis Obispo
Santa Barbara
Santa Cruz
Santa Maria
Santa Rosa
Seaside-Monterey
Simi Valley
Stockton
Vacaville

Yuba City Yuma

#### Colorado

Boulder Colorado Springs Denver Fort Collins Grand Junction Greeley Longmont Pueblo

# Connecticut

Bridgeport-Milford Bristol

Danbury, CT–NY Hartford-Middletown New Britain

New Haven-Meriden New London-Norwich

Norwalk

Springfield, MA–CT Stamford, CT–NY Waterbury Worcester, MA–CT

#### **Delaware** Dover

Wilmington, DE–NJ–MD–PA

**District of Columbia**Washington, DC–MD–VA

#### Florida

Daytona Beach Deltona

Fort Lauderdale-Hollywood-Pompano Beach

Fort Myers-Cape Coral

Fort Myers-cape C Fort Walton Beach Gainesville Jacksonville Kissimmee Lakeland

Melbourne-Palm Bay Miami-Hialeah Naples Ocala Orlando Panama City Pensacola Punta Gorda Sarasota-Bradenton Spring Hill Stuart

Tampa-St. Petersburg-Clearwater

Titusville Vero Beach

Tallahassee

West Palm Beach-Boca Raton-Delray Beach

Winter Haven

## **Georgia** Albany

Athens
Atlanta
Augusta
Brunswick
Chattanooga
Columbus
Macon
Rome
Savannah
Warner Robins

# Hawaii

Honolulu

Kailua

#### Idaho

Boise City Idaho Falls Pocatello

## Illinois

Alton
Aurora
Beloit, WI–IL
Bloomington-Normal
Champaign-Urbana
Chicago, IL-Northwestern IN

Crystal Lake
Davenport-Rock Island-Moline, IA–IL

Decatur Dubuque Elgin Joliet Kankakee Peoria Rockford

Round Lake Beach-McHenry, IL-WI

St. Louis, MO–IL Springfield

#### Indiana

Anderson Bloomington

Chicago, IL-Northwestern IN

Elkhart-Goshen Evansville, IN–KY Fort Wayne Indianapolis Kokomo

Lafayette-West Lafayette Louisville, KY–IN

Muncie

South Bend-Mishawaka, IN–MI

Terre Haute

#### Iowa

Cedar Rapids

Davenport-Rock Island-Moline, IA-IL

Des Moines Dubuque, IA–IL–WI Iowa City Omaha, NE–IA Sioux City, IA–NE–SD Waterloo-Cedar Falls

#### Kansas

Kansas City, MO–KS

Lawrence

St. Joseph, MO–KS

Topeka Wichita

# Kentucky

Cincinnati, OH–KY Clarksville, TN–KY Evansville, IN–KY

Huntington-Ashland, WV–KY–OH

Lexington-Fayette Louisville, KY–IN Owensboro

#### Louisiana

Alexandria
Baton Rouge
Houma
Lafayette
Lake Charles
Monroe
New Orleans
Shreveport

68806

Slidell Maine

Bangor Lewiston-Auburn

Portland

Portsmouth-Dover-Rochester, NH-ME

Maryland Annapolis Baltimore

Cumberland Frederick

Hagerstown, MD-PA-WV Washington, DC-MD-VA Wilmington, DE-NJ-MD-PA

Massachusetts

Boston Brockton

Fall River, MA-RI Fitchburg-Leominster

Hvannis

Lawrence-Haverhill, MA-NH

Lowell, MA-NH New Bedford Pittsfield

Providence-Pawtucket, RI-MA

Springfield, MA-CT

Taunton

Worcester, MA-CT

Michigan

Ann Arbor Battle Creek Bay City Benton Harbor Detroit

Flint Grand Rapids Holland Jackson Kalamazoo

Lansing-East Lansing

Muskegon Port Huron Saginaw

South Bend-Mishawaka, IN-MI

Toledo, OH-MI

Minnesota

Duluth, MN-WI Fargo-Moorhead, ND-MN Grand Forks, ND-MN La Crosse, WI-MN Minneapolis-St.Paul

Rochester St. Cloud

Mississippi

Biloxi-Gulfport Hattiesburg Jackson

Memphis, TN-AR-MS Pascagoula

Missouri Columbia Joplin

Kansas City, MO–KS St. Joseph, MO-KS St. Louis, MO-IL Springfield

Montana Billings

Great Falls

Missoula

Nebraska

Lincoln Omaha, NE-IA Sioux City, IA-NE-SD

Las Vegas Reno

**New Hampshire** 

Lawrence-Haverhill, MA-NH

Lowell, MA-NH Manchester Nashua

Portsmouth-Dover-Rochester, NH-ME

New Iersev

Allentown-Bethlehem-Easton, PA-NJ

Atlantic City

New York, NY-Northeastern NJ

Philadelphia, PA-NJ Trenton, NJ-PA Vineland-Millville

Wilmington, DE-NJ-MD-PA

New Mexico

Albuquerque El Paso Las Cruces Santa Fe

**New York** 

Albany-Schenectady-Troy

Binghamton Buffalo-Niagara Falls Danbury, CT-NY

Elmira Glens Falls Ithaca Newburgh

New York, NY-Northeastern NJ

Poughkeepsie Rochester Stamford, CT-NY Svracuse **Utica-Rome** 

North Carolina

Asheville Burlington Charlotte Durham Fayetteville Gastonia Goldsboro Greensboro Greenville Hickory High Point Jacksonville Kannapolis Raleigĥ

Winston-Salem North Dakota

Rocky Mount

Wilmington

Bismark

Fargo-Moorhead, ND-MN Grand Forks, ND-MN

Ohio Akron Canton

Cincinnati, OH-KY

Cleveland Columbus Dayton Hamilton

Huntington-Ashland, WV-KY-OH

Lima Lorain-Elyria Mansfield Middletown Newark

Parkersburg, WV-OH Sharon, PA-OH Springfield

Steubenville-Weirton, OH-WV-PA

Toledo, OH-MI Wheeling, WV-OH Youngstown-Warren

Oklahoma

Fort Smith, AR-OK Lawton Oklahoma Citv Tulsa

Oregon

Eugene-Springfield

Longview Medford

Portland-Vancouver, OR-WA

Salem

Pennsylvania

Allentown-Bethlehem-Easton, PA-NJ

Altoona Erie

Hagerstown, MD-PA-WV

Harrisburg Johnstown Lancaster Monessen

Philadelphia, PA-NJ

Pittsburgh Pottstown Reading

Scranton-Wilkes-Barre Sharon, PA-OH State College

Steubenville-Weirton, OH–WV–PA

Trenton, NJ-PA Williamsport

Wilmington, DE-NJ-MD-PA

**Rhode Island** Fall River, MA-RI

Newport

Providence-Pawtucket, RI-MA

South Carolina

Anderson Augusta, GA-SC Charleston Columbia Florence Greenville Myrtle Beach Rock Hill Spartanburg Sumter

South Dakota

Rapid City

Sioux City, IA-NE-SD Sioux Falls

Tennessee

Bristol, TN-Bristol, VA

Chattanooga, TN–GA Clarksville, TN–KY

Jackson Johnson City Kingsport, TN–VA Knoxville

Memphis, TN-AR-MS

Nashville Texas

Abilene Amarillo Austin Beaumont Brownsville

Bryan-College Station Corpus Christi Dallas-Fort Worth

Denton

El Paso, TX–NM
Galveston
Harlingen
Houston
Killeen
Laredo
Lewisville

Longview Lubbock McAllen-Edinburg-Mission

Midland Odessa Port Arthur San Angelo San Antonio Sherman-Denison

Temple

Texarkana, TX-Texarkana, AR

Texas City Tyler Victoria Waco Wichita Falls

Utah Logan Ogden Provo-Orem

Vermont
Burlington
Virginia

Salt Lake City

Bristol, TN-Bristol, VA

Charlottesville Danville Fredericksburg Kingsport, TN–VA Lynchburg

Norfolk-Virginia Beach-Newport News

Petersburg Richmond Roanoke

Washington, DC-MD-VA

Washington
Bellingham
Bremerton
Longview, WA-OR
Olympia

Portland-Vancouver, OR–WA Richland-Kennewick-Pasco

Seattle Spokane Tacoma Yakima

West Virginia Charleston

Cumberland, MD-WV

Hagerstown, MD–PA–WV Huntington-Ashland, WV–KY–OH Parkersburg, WV–OH Steubenville-Weirton, OH–WV–PA

Wheeling, WV-OH

Wisconsin

Appleton-Neenah Beloit, WI–IL Duluth, MN–WI Eau Claire Green Bay Janesville Kenosha

La Crosse, WI-MN

Madison Milwaukee Oshkosh Racine

Round Lake Beach-McHenry, IL-WI

Sheboygan Wausau **Wyoming** 

Casper Cheyenne

Puerto Rico Aquadilla Arecibo Caguas Cayey Humacao Mayaguez Ponce

San Juan Vega Baja-Manati

BILLING CODE 6560-50-P

# Appendix 4 to the Preamble—No Exposure Certification Form

NPDES FORM 3510-11



United States Environmental Protection Agency Washington, DC 20460 Form Approved OMB No. 2040-0211

# NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Submission of this No Exposure Certification constitutes notice that the entity identified in Section A does not require permit authorization for its storm water discharges associated with industrial activity in the State identified in Section B under EPA's Storm Water Multi-Sector General Permit due to the existence of a condition of no exposure.

A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from NPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity in Section A is certifying that a condition of no exposure exists at its facility or site, and is obligated to comply with the terms and conditions of 40 CFR 122.26(g).

ALL INFORMATION MUST BE PROVIDED ON THIS FORM.

Detailed instructions for completing this form and obtaining the no exposure exclusion are provided on pages 3 and 4.
A. Facility Operator Information
1. Name:
3. Mailing Address: a. Street:
b. City: d. Zip Code:
B. Facility/Site Location Information
1. Facility Name:
2. a. Street Address:
b. City: c. County:
d. State: e. Zip Code:
3. Is the facility located on Indian Lands? Yes No
4. Is this a Federal facility? Yes No
5. a. Latitude: [] <sup>°</sup> [] <sup>"</sup> b. Longitude: [] <sup>°</sup> [] <sup>"</sup>
6. a. Was the facility or site previously covered under an NPDES storm water permit? Yes No
b. If yes, enter NPDES permit number:
7. SIC/Activity Codes: Primary: Secondary (if applicable):
8. Total size of site associated with industrial activity:acres
9. a. Have you paved or roofed over a formerly exposed, pervious area in order to qualify for the no exposure exclusion? Yes No
b. If yes, please indicate approximately how much area was paved or roofed over. Completing this question does not disqualify you for the no exposure exclusion. However, your permitting authority may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.
Less than one acre  One to five acres  More than five acres

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NPDES

# NO EXPOSURE CERTIFICATION for Exclusion from

Form Approved

FORM 3510-11		IPDES Storm Water Permitting	OMB N	No. 2040-0211
C. Expo	osure Checklist			
(Plea	any of the following materials or activities exposed to p ase check either "Yes" or "No" in the appropriate box.) hrough (11), you are not eligible for the no exposure	If you answer "Yes" to any of these questions	Yes	No
	Using, storing or cleaning industrial machinery or equipor cleaning industrial machinery or equipment remain a			
2. 1	Materials or residuals on the ground or in storm water	inlets from spills/leaks		
3. 1	Materials or products from past industrial activity			
4. 1	Material handling equipment (except adequately maint	ained vehicles)		
5. 1	Materials or products during loading/unloading or trans	sporting activities		
	Materials or products stored outdoors (except final pro- exposure to storm water does not result in the discharge			
7. 1	Materials contained in open, deteriorated or leaking sto	orage drums, barrels, tanks, and similar containers		
8. 1	Materials or products handled/stored on roads or railwa	ays owned or maintained by the discharger		
9. 1	Waste material (except waste in covered, non-leaking of	containers [e.g., dumpsters])		
10. /	Application or disposal of process wastewater (unless	otherwise permitted)		
11.	Particulate matter or visible deposits of residuals from (i.e., under an air quality control permit) and evident in	roof stacks and/or vents not otherwise regulated the storm water outflow		
). Cert	tification Statement			
	rtify under penalty of law that I have read and unders usion from NPDES storm water permitting.	tand the eligibility requirements for claiming a condition of "no o	exposure" and	l obtaining ar
	rtify under penalty of law that there are no discharges of ity or site identified in this document (except as allowed	f storm water contaminated by exposure to industrial activities or under 40 CFR 122.26(g)(2)).	materials from	the industria
the c allow expo	operator of the local municipal separate storm sewer s withe NPDES permitting authority, or MS4 operator who	ertification form once every five years to the NPDES permitting at system (MS4) into which the facility discharges (where applicable ere the discharge is into the local MS4, to perform inspections to ilable upon request. I understand that I must obtain coverage ur ty.	e). I understar confirm the c	nd that I mus ondition of no
syste perse know	em designed to assure that qualified personnel proper sons who manage the system, or those persons direct	nt and all attachments were prepared under my direction or supe by gathered and evaluated the information submitted. Based on the tresponsible for gathering the information, the information sul- are that there are significant penalties for submitting false information.	my inquiry of omitted is to t	the person on the best of m
Print	t Name: [			
Print	t Title:			
Sign	nature:			
Date	e:			

NPDES FORM 3510-11



# Instructions for the NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Form Approved OMB No. 2040-0211

## Who May File a No Exposure Certification

Federal law at 40 CFR Part 122.26 prohibits point source discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. However, NPDES permit coverage is not required for discharges of storm water associated with industrial activities identified at 40 CFR 122.26(b)(14)(i)-(ix) and (xi) if the discharger can certify that a condition of "no exposure" exists at the industrial facility or site.

Storm water discharges from construction activities identified in 40 CFR 122.26(b)(14)(x) and (b)(15) are not eligible for the no exposure exclusion.

#### Obtaining and Maintaining the No Exposure Exclusion

This form is used to certify that a condition of no exposure exists at the industrial facility or site described herein. This certification is only applicable in jurisdictions where EPA is the NPDES permitting authority and must be re-submitted at least once every five years.

The industrial facility operator must maintain a condition of no exposure at its facility or site in order for the no exposure exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to storm water, the facility operator must obtain coverage under an NPDES storm water permit immediately.

#### Where to File the No Exposure Certification Form

Mail the completed no exposure certification form to:

Storm Water No Exposure Certification (4203) USEPA 401 M Street, SW Washington, D.C. 20460

## Completing the Form

You <u>must</u> type or print, using uppercase letters, in appropriate areas only. Enter only one character per space (i.e., between the marks). Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words. One form must be completed for each facility or site for which you are seeking to certify a condition of no exposure. Additional guidance on completing this form can be accessed through EPA's web site at www.epa.gov/owm/sw. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the above address.

# Section A. Facility Operator Information

- Provide the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this certification. The name of the operator may or may not be the same as the name of the facility. The operator is the legal entity that controls the facility's operation, rather than the plant or site manager.
- 2. Provide the telephone number of the facility operator.
- Provide the mailing address of the operator (P.O. Box numbers may be used). Include the city, state, and zip code. All correspondence will be sent to this address.

### Section B. Facility/Site Location Information

- 1. Enter the official or legal name of the facility or site.
- Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, county, state, and zip code. Do not use a P.O. Box number.
- 3. Indicate whether the facility is located on Indian Lands.
- Indicate whether the industrial facility is operated by a department or agency of the Federal Government (see also Section 313 of the Clean Water Act).
- 5. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from United States Geological Survey (USGS) quadrangle or topographic maps, by calling 1-(888) ASK-USGS, or by accessing EPA's web site at <a href="http://www.epa.gov/owm/sw/industry/index.htm">http://www.epa.gov/owm/sw/industry/index.htm</a> and selecting Latitude and Longitude Finders under the Resources/Permit section.

Latitude and longitude for a facility in decimal form must be converted to degrees (°), minutes ('), and seconds (") for proper entry on the certification form. To convert decimal latitude or longitude to degrees/minutes/seconds, follow the steps in the following example.

Example: Convert decimal latitude 45.1234567 to degrees (°), minutes ('), and seconds (").

- a) The numbers to the left of the decimal point are the degrees: 45°.
- b) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006: 1234 x 0.006 = 7.404.
- c) The numbers to the left of the decimal point in the result obtained in (b) are the minutes: 7'.
- d) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result obtained in (b) by 0.06: 404 x 0.06 = 24.24. Since the numbers to the right of the decimal point are not used, the result is 24".
- e) The conversion for  $45.1234567 = 45^{\circ} 7' 24''$ .
- Indicate whether the facility was previously covered under an NPDES storm water permit. If so, include the permit number.
- Enter the 4-digit SIC code which identifies the facility's primary activity, and second 4-digit SIC code identifying the facility's secondary activity, if applicable. SIC codes can be obtained from the <u>Standard Industrial</u> Classification Manual, 1987.
- Enter the total size of the site associated with industrial activity in acres. Acreage may be determined by dividing square footage by 43,560, as demonstrated in the following example.

Example: Convert 54,450 ft<sup>2</sup> to acres

Divide  $54,450 \text{ ft}^2$  by  $43,560 \text{ square feet per acre:} 54,450 \text{ ft}^2 + 43,560 \text{ ft}^2/\text{acre} = 1.25 \text{ acres.}$ 

9. Check "Yes" or "No" as appropriate to indicate whether you have paved or roofed over a formerly exposed, pervious area (i.e., lawn, meadow, dirt or gravel road/parking lot) in order to qualify for no exposure. If yes, also indicate approximately how much area was paved or roofed over and is now impervious area.

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**NPDES FORM** 3510-11



# Instructions for the NO EXPOSURE CERTIFICATION for **Exclusion from NPDES Storm Water Permitting**

Form Approved OMB No. 2040-0211

## Section C. Exposure Checklist

Check "Yes" or "No" as appropriate to describe the exposure conditions at your facility. If you answer "Yes" to ANY of the questions (1) through (11) in this section, a potential for exposure exists at your site and you cannot certify to a condition of no exposure. You must obtain (or already have) coverage under an NPDES storm water permit. After obtaining permit coverage, you can institute modifications to eliminate the potential for a discharge of storm water exposed to industrial activity, and then certify to a condition of no exposure.

#### Section D. Certification Statement

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means:

- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where

authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

## Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 1.0 hour per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), USEPA, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number of this form on any correspondence. Do not send the completed No Exposure Certification form to this address.

EPA Form 3510-11 (10-99)

BILLING CODE 6560-50-C

# Appendix 5 to Preamble—Regulatory Flexibility for Small Entities

## A. Regulatory Flexibility for Small **Municipal Storm Sewer Systems (MS4s)**

Different Compliance, Reporting, or Timetables That Are Responsive to Resources of Small Entities

NPDES permitting authorities can issue general permits instead of requiring individual permits. This flexibility avoids the high application costs and administrative burden associated with individual permits.

NPDES permitting authorities can specify a time period of up to five years for small MS4s to fully develop and implement their program

Analytic monitoring is not required.

After the first permit term and subsequent permit terms, submittal of a summary report is only required in years two and four (Phase I municipalities are currently required to submit a detailed report each year).

A brief reporting format is encouraged to facilitate compiling and analyzing data from submitted reports. EPA intends to develop a model form for this purpose.

NPDES Permitting Authorities can phase in permit coverage for small MS4s serving jurisdictions with a population under 10,000

on a schedule consistent with a State watershed permitting approach.

Clarifying, Consolidating, or Simplifying Compliance and Reporting Requirements

The rule avoids duplication in permit requirements by allowing NPDES permitting authorities to include permit conditions that direct an MS4 to follow the requirements of a qualifying local program rather than the requirements of a minimum measure. Compliance with these programs is considered compliance with the NPDES general permit.

The rule allows NPDES permitting authorities to recognize existing responsibilities among different municipal entities to satisfy obligations for the minimum control measures.

A further alternative allows a small MS4 to satisfy its NPDES permit obligations if another governmental entity is already implementing a minimum control measure in the jurisdiction of the small MS4. The following conditions must be met:

- 1. The other entity is implementing the control measure,
- 2. The particular control measure (or component thereof) is at least as stringent as the corrersponding NPDES permit requirement, and
- 3. The other entity agrees to implement the control measure on your behalf.

The rule allows a covered small MS4 to "piggy-back" on to the storm water management program of an adjoining Phase I MS4. A small MS4 is waived from the application requirements of § 122.26(d)(1)(iii), (iv) and (d)(2)(iii) [discharge characterization] and may satisfy the requirements of § 122.26(d)(1)(v) and (d)(2)(iv) [identifying a management plan] by referencing the adjoining Phase I MS4's storm water management plan.

The rule accommodates the use of the watershed approach through NPDES general permits that could be issued on a watershed basis. The small MS4 can develop measures that are tailored to meet their watershed requirements. The small MS4's storm water management program can tie into watershedwide plans.

Performance Rather Than Design Standards for Small Entities

Small governmental jurisdictions whose MS4s are covered by this rule are allowed to choose the best management practices (BMPs) to be implemented and the measurable goals for each of the minimum control measures:

- 1. Public education and outreach on storm water impacts
  - 2. Public Involvement/Participation
- 3. Illicit discharge detection and elimination

Page 4 of 4

- 4. Construction site storm water runoff control
- 5. Post-construction storm water management in new development and redevelopment
- 6. Pollution prevention/good housekeeping for municipal operations

EPA will provide guidance and recommend, but not mandate, certain BMPs for some of the minimum control measures listed above. States can provide guidance to supplement or supplant EPA guidance.

Small MS4s can identify the measurable goals for each of the minimum control measures listed above. In their reports to the NPDES permitting authority, the small MS4s must evaluate their progress towards achievement of their identified measurable

## Waivers for Small Entities From Coverage

The rule allows permitting authorities to waive from coverage MS4s operated by small governmental jurisdictions located within an urbanized area and serving a population less than 1,000 people where the permitting authority has determined the MS4 is not contributing substantially to the pollutant loadings of an interconnected MS4 and, if the MS4 discharges pollutants that have been identified as a cause of impairment in the receiving water of the MS4 then the permitting authority has determined that storm water controls are not needed based on a TMDL that addresses the pollutants of

The rule allows the permitting authority to waive from coverage MS4s serving a population under 10,000 where the permitting authority has evaluated all waters that receive a discharge from the MS4 and the permitting authority has determined that storm water controls are not needed based on a TMDL that addresses the pollutants of concern and future discharges do not have the potential to result in exceedances of water quality standards.

### B. Regulatory Flexibility for Small **Construction Activities**

Different Compliance, Reporting, or Timetables That Are Responsive to Resources of Small Entities

The rule gives NPDES permitting authorities discretion not to require the submittal of a notice of intent (NOI) for coverage under a NPDES general permit, thereby reducing administrative and financial burden. All construction sites disturbing greater than 5 acres must submit

Clarifying, Consolidating, or Simplifying Compliance and Reporting Requirements

The rule avoids duplication by allowing the NPDES permitting authority to incorporate by reference State, Tribal, or local programs under a NPDES general permit. Compliance with these programs is considered compliance with the NPDES general permit.

Performance Rather Than Design Standards for Small Entities

The operator of a covered construction activity selects and implement the BMPs

most appropriate for the construction site based on the operator's storm water pollution prevention plan.

Waivers for Small Entities From Coverage

Waivers could be granted based on the use of a rainfall erosivity factor or a comprehensive analysis of water quality impacts.

(A) Low rainfall waiver: When the rainfall erosivity factor ("R" from Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity, a permit is not required.

(B) Determination based on Water Quality Analysis: The NPDES permitting authority can waive from coverage construction activities disturbing from 1 acre up to 5 acres of land where storm water controls are not needed based on:

- 1. A TMDL approved or established by EPA that addresses the pollutants of concern,
- 2. For non-impaired waters, an equivalent analysis that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety.

### C. Regulatory Flexibility for Industrial/ Commercial Facilities

Waivers for Small Entities From Coverage

The rule provides a "no-exposure" waiver provision for Phase I industrial/commercial facilities. Qualifying facilities seeking this provision simply need to complete a selfcertification form indicating that no industrial materials or activities are exposed to rain, snow, snow melt and/or runoff.

# Appendix 6 of Preamble-**Governmental Entities Located Fully or** Partially Within an Urbanized Area

(This is a reference list only, not a list of all operators of small MS4s subject to §§ 122.32-122.36. For example, a listed governmental entity is only regulated if it operates a small MS4 within an "urbanized area" boundary as determined by the Bureau of the Census. Furthermore, entities such as military bases, large hospitals, prison complexes, universities, sewer districts, and highway departments that operate a small MS4 within an urbanized area are also subject to the permitting regulations but are not individually listed here. See § 122.26(b)(16) for the definition of a small MS4 and § 122.32(a) for the definition of a regulated small MS4.)

(Source: 1990 Census of Population and Housing, U.S. Bureau of the Census. This list is subject to change with the Decennial Census)

- ΑL Anniston city
- ALAttalla city
- ALAuburn city
- ALAutauga County
- Blue Mountain town AL
- Calhoun County AΙ
- ΑL Colbert County
- ALDale County
- ALDecatur city Dothan city AL

- Elmore County
- **Etowah County** AI.
- ΑL Flint City town
- ALFlorence city
- Gadsden city AL
- ALGlencoe city
- Grimes town AL
- AL Hartselle city
- Hobson City town ΑL Hokes Bluff city AI.
- AL**Houston County**
- ALKinsey town
- Lauderdale County AL
- ALLee County
- Limestone County AL
- Madison County AL Midland City town AL
- ΑL Montgomery County
- ΑL Morgan County
- Muscle Shoals city AL
- Napier Field town AL
- Northport city ΑL
- AΙ Opelika city
- ALOxford city
- ALPhenix City city
- ALPrattville city AL
- Priceville town Rainbow City city ΑL
- ALRussell County
- ALSheffield city
- ALSouthside city
- ALSylvan Springs town
- Talladega County AΙ
- ALTuscaloosa city
- Tuscaloosa County ΑL
- ALTuscumbia city
- ALWeaver city Alexander town AR
- AR Barling city
- AR Benton County
- AR Cammack Village city
- AR Crawford County
- Crittenden County AR
- AR Farmington city
- AR Fayetteville city
- AR Fort Smith city
- AR Greenland town
- Jacksonville city AR
- Jefferson County AR
- AR Johnson city
- AR Marion city
- AR Miller County
- North Little Rock city AR
- AR Pine Bluff city
- AR Pulaski County
- AR Saline County
- AR Sebastian County
- AR Shannon Hills city
- Sherwood city AR
- Springdale city AR
- Sunset town AR
- Texarkana city
- AR
- AR Van Buren city
- Washington County AR
- AR West Memphis city
- White Hall city AR
- Apache Junction city AZ.
- ΑZ Chandler city
- AZEl Mirage town
- AZGilbert town
- Guadalupe town ΑZ
- AZ. Maricopa County
- ΑZ Oro Valley town
- AZ. Paradise Valley town
- AZPeoria city
- ΑZ Pinal County

ΑZ	South Tucson city	CA	Victorville city	CT	Farmington town
ΑZ	Surprise town		Villa Park city	CT	Franklin town
ΑZ	Tolleson city	CA	Visalia city	CT	Glastonbury town
ΑZ	Youngtown town		Watsonville city	CT	Greenwich town
ΑZ	Yuma city	CA	West Sacramento city	CT	Groton city
ΑZ	Yuma County	CA	Yolo County	CT	Groton town
CA	Apple Valley town	CA	Yuba City city	CT	Guilford town
CA	Belvedere city	CA	Yuba County	CT	Hamden town
CA	Benicia city	CO	Adams County	CT	Hartford city
CA	Brentwood city	CO	Arvada city	CT	Hartford County
CA	Butte County	CO	Boulder city	CT	Ledyard town
	Capitola city	CO	Boulder County	CT	Lisbon town
CA	Carmel-by-the-Sea city	CO	Bow Mar town	CT	Litchfield County
CA	Carpinteria city	CO	Broomfield city	CT	Manchester town
CA	Ceres city	CO	Cherry Hills Village city	CT	Meriden city
CA	Chico city	CO	Columbine Valley town	CT	Middlebury town
CA	Compton city	CO	Commerce City city	CT	Middlefield town
CA	Corte Madera town	CO	Douglas County	CT	Middlesex County
CA	Cotati city	CO	Edgewater city	CT	Middletown city
		CO	El Paso County	CT	Milford city (remainder)
	Del Rey Oaks city	CO	Englewood city	CT	Monroe town
CA	Fairfax town	CO	Evans city	CT	Montville town
	Hesperial County	CO	Federal Heights city	CT	Naugatuck borough
	Imperial County	CO	Fort Collins city Fountain city	CT CT	New Britain city New Canaan town
	Lakewood city Lancaster city	CO			New Fairfield town
	3	CO	Garden City town Glendale city	CT	New Haven city
	Larkspur city Lodi city	CO	Golden city	CT CT	New Haven County
	Lour City Lompoc city	CO	Grand Junction city	CT	New London city
CA	Marin County	CO	Greeley city	CT	New London County
	Marina city	CO	Greenwood Village city	CT	New Milford town
	Marysville city	CO	Jefferson County	CT	Newington town
	Merced city	CO	La Salle town	CT	Newtown town
	Merced County	CO	Lakeside town	CT	North Branford town
	Mill Valley city		Larimer County	CT	North Haven town
	Monterey city		Littleton city	CT	Norwalk city
	Monterey County	CO	Longmont city	CT	Norwich city
	Morgan Hill city	CO	Manitou Springs city	CT	Orange town
	Napa city	CO	Mesa County	CT	Oxford town
	Napa County	CO	Mountain View town	CT	Plainville town
	Novato city	CO	Northglenn city	CT	Plymouth town
	Pacific Grove city	CO	Pueblo city	CT	Portland town
CA	Palm Desert city	CO	Pueblo County	CT	Preston town
	Palmdale city	CO	Sheridan city	CT	Prospect town
CA	Piedmont city	CO	Thornton city	CT	Rocky Hill town
CA	Placer County	CO	Weld County	CT	Seymour town
	Redding city	CO	Westminster city	CT	Shelton city
	Rocklin city	CO	Wheat Ridge city	CT	Sherman town
	Rohnert Park city	CT	Ansonia city	CT	Somers town
CA	Roseville city	CT	Avon town	CT	South Windsor town
	Ross town	CT	Beacon Falls town	CT	Southington town
CA		CT	Berlin town	CT	Sprague town
	San Buenaventura (Ventura) city	CT	Bethel town	CT	Stonington town
CA	3	CT	Bloomfield town	CT	Stratford town
	San Joaquin County	CT	Bozrah town	CT	Suffield town
CA	San Luis Obispo city	CT	Branford town	CT	Thomaston town
	1 3	CT	Bridgeport city	CT	Thompson town
CA	San Rafael city	CT CT	Bristol city Brookfield town	CT CT	Tolland County Tolland town
CA	Sand City city Santa Barbara city	CT	Burlington town	CT	Trumbull town
	Santa Barbara County	CT	Cheshire town	CT	Vernon town
		CT	Cromwell town	CT	Wallingford town
	Santa Cruz County		Danbury city	CT	Waterbury city
CA	Santa Maria city	CT	Darien town	CT	Waterford town
			Derby city	CT	Watertown town
CA	Scotts Valley city	CT	Durham town	CT	West Hartford town
			East Granby town	CT	West Haven city
CA	Shasta County	CT	East Hartford town	CT	Weston town
			East Haven town	CT	Westport town
	Sonoma County	CT	East Lyme town	CT	Wethersfield town
	Stanislaus County	CT	East Windsor town	CT	Wilton town
	Suisun City city	CT	Easton town	CT	Windham County
	Sutter County	CT	Ellington town	CT	Windsor Locks town
CA	Tiburon town	CT	Enfield town	CT	Windsor town
	Tulare County	CT	Fairfield County	CT	Wolcott town
CA	Vacaville city	CT	Fairfield town	CT	Woodbridge town

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DE	Dover city
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FL	Brevard County
FL	Callaway city
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FL	Collier County
FL	Daytona Beach city
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FL	Destin city
FL	Edgewater city
FL	El Portal village
FL	Florida City city
FL	Fort Pierce city
FL	Fort Walton Beach city
FL	Gainesville city
FL	Gulf Breeze city
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FL	Hillsboro Beach town
FL	Holly Hill city
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FL Indialantic town FL Indian Harbour Beach city Indian River County FL Indian River Shores town FL Indian Shores town FLKissimmee city FL Lazy Lake village FL Lynn Haven city FL Malabar town FLMarion County Martin County FL FLMary Esther city FLMelbourne Beach town FL Melbourne city Melbourne Village town FL Naples city New Smyrna Beach city FL

FLNiceville city FL Ocala city Ocean Breeze Park town Okaloosa County FLOrange Park town FLOrmond Beach city Osceola County FL FL Palm Bay city FL Panama City city Parker city FL Ponce Inlet town FL Port Orange city Port St. Lucie city FL Punta Gorda city Rockledge city FL Santa Rosa County FLSatellite Beach city

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South Daytona city

Shalimar town

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Riverdale city Robins city Scott County IΑ Sergeant Bluff city IΑ Sioux City city University Heights city Urbandale city IΑ Warren County IΑ Waterloo city West Des Moines city ĪΑ IΑ Windsor Heights city Woodbury County IΑ ID Ada County ID Ammon city Bannock County ID Bonneville County Chubbuck city Idaho Falls city ID ID Iona city IDPocatello city ID Power County Addison township Addison village II. II. Algonquin township ILAlgonquin village Alorton village ILAlsip village Alton city 11. ILAntioch township ILAntioch village Arlington Heights village ILAroma Park village Aroma township 11. ILAurora city Aurora township II. ILAvon township II. Ball township Bannockburn village Ш Barrington township Barrington village II. II. Bartlett village II. Bartonville village Ш Batavia city Batavia township Beach Park village II. ILBedford Park village ILBelleville city Bellevue village 11. Bellwood village II. Bensenville village ILBenton township ILBerkeley village ILBerwyn city Bethalto village II. Blackhawk township 11. Bloom township II. Bloomingdale township Bloomingdale village ILBloomington city Bloomington township II.

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Troy city Troy township University Park village II. Urbana city Urbana township 11. Venice city ILVenice township Vernon Hills village П. Vernon township Villa Park village П. II. Warren township ILWarrenville city Washington city 11. Washington Park village П. Washington township Wauconda township П. Waukegan city Waukegan township II. II. Wayne township West Chicago city ILWest Deerfield township Ш West Dundee village West Peoria township Westchester village

II. II. II. Western Springs village Westmont village 11. Wheatland township Wheaton city 11. II. Wheeling township ILWheeling village Whitmore township 11. Will County Willow Springs village 11. ILWillowbrook village Wilmette village II. Winfield township 11. Winfield village Winnebago County II. Winnetka village Winthrop Harbor village II. II. Wood Dale city

Wood River city Wood River township

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Woodford County Woodridge village II. ILWoodside township ILWorth township Worth village 11. York township II. Zion city IN Aboite township ΙN Adams township IN Allen County Anderson city IN Anderson township IN ΙN Baugo township ΙN Beech Grove city ΙN Bloomington city IN Bloomington township IN **Boone County** IN **Buck Creek township** Calumet township ΙN IN Carmel city ΙN Castleton town IN Cedar Creek township Center township IN Centre township IN Chesterfield town IN Chesterton town Clark County IN Clarksville town IN Clay township ΙN Clermont town ΙN Cleveland township

IN Concord township Country Club Heights town

IN	Crown Point city	IN	Osolo township	KS	Leawood city
IN	Crows Nest town	IN	Otter Creek township	KS	Lenexa city
ΙΝ	Cumberland town	ΙΝ	Penn township	KS	Merriam city
	Daleville town	IN	Perry township	KS	Minneha township
	Delaware County	IN			Mission city
			Pigeon township		
	Delaware township	IN	Pike township	KS	Mission Hills city
	Dyer town	IN	Pleasant township	KS	Mission township
	Eagle township	IN	Portage city	KS	Mission Woods city
	East Chicago city	IN	Portage township	KS	Monticello township
	Edgewood town	ΙN	Porter County	KS	Ohio township
IN	Elkhart city	ΙN	Porter town	KS	Olathe city
IN	Elkhart County	ΙN	Richland township	KS	Olathe township
IN	Elkhart township	ΙN	Riley township	KS	Park City city
IN	Evansville city	ΙN	River Forest town	KS	Park township
	Fairfield township	IN	Rocky Ripple town	KS	Prairie Village city
	Fall Creek township	IN	Roseland town	KS	Riverside township
	Fishers town	IN	Ross township	KS	Roeland Park city
		IN	Salem township	KS	Salem township
	Floyd County				
	Fort Wayne city	IN	Schererville town	KS	Sedgwick County
	Franklin township	IN	Seelyville town	KS	Shawnee city
IN	Gary city	ΙN	Sellersburg town	KS	Shawnee County
IN	German township	ΙN	Selma town	KS	Shawnee township
ΙN	Goshen city	ΙN	Silver Creek township	KS	Soldier township
IN	Greenwood city	ΙN	South Bend city	KS	Tecumseh township
IN	Griffith town	IN	Southport city	KS	Topeka township
IN	Hamilton County	IN	Speedway town	KS	Waco township
IN	Hamilton township	IN	Spring Hill town	KS	Wakarusa township
	Hammond city	IN	St. John town	KS	Washington township
	Hancock County				
IN		IN	St. John township	KS	Westwood city
	Hanover township	IN	St. Joseph County	KS	Westwood Hills city
IN	Harris township	IN	St. Joseph township	KS	Williamsport township
IN	Harrison township	ΙN	Sugar Creek township	KS	Wyandotte County
IN	Hendricks County	ΙN	Taylor township	KY	Alexandria city
IN	Highland town	ΙN	Terre Haute city	KY	Ashland city
IN	Hobart city	ΙN	Tippecanoe County	KY	Bellefonte city
IN	Hobart township	IN	Tippecanoe township	KY	
IN	Homecroft town	IN	Union township	KY	
IN	Honey Creek township	IN	Utica township	KY	Boyd County
IN	Howard County	IN	Van Buren township	KY	
	Howard township	IN	Vanderburgh County	KY	Bullitt County
IN	Indian Village town	IN	Vigo County	KY	Campbell County
IN	Jackson township	IN	Wabash township	KY	Catlettsburg city
IN	Jefferson township	ΙN	Warren Park town	ΚY	3
IN	Jeffersonville city	ΙN	Warren township	KY	Covington city
IN	Jeffersonville township	ΙN	Warrick County	KY	Crescent Park city
IN	Johnson County	ΙN	Washington township	KY	Crescent Springs city
IN	Knight township	ΙN	Wayne township	KY	Crestview city
IN	Kokomo city	IN	Wea township	KY	ž-
IN	Lafayette city	IN	West Lafayette city	KY	
	Lafayette township		West Terre Haute town	KY	
	Lake County				
IN		IN	Westchester township	KY	5
IN	Lake Station city	IN	Westfield town	KY	5
IN	Lawrence city	IN	White River township		Erlanger city
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ΙN	Lincoln township	ΙN	Williams Creek town	ΚY	Florence city
IN	Lost Creek township	ΙN	Woodlawn Heights town	KY	Forest Hills city
IN	Madison County	ΙN	Wynnedale town	KY	Fort Mitchell city
IN	Meridian Hills town	ΙN	Yorktown town	KY	Fort Thomas city
IN	Merrillville town	IN	Zionsville town	KY	
IN	Mishawaka city	KS	Attica township	KY	
IN	Monroe County	KS	Bel Aire city	KY	
IN	Mount Pleasant township	KS	Countryside city	KY	
IN	Muncie city	KS	Delano township	KY	5
IN	Munster town	KS	Doniphan County	KY	5
IN	New Albany city	KS	Douglas County	KY	0 0
IN	New Albany township	KS	Eastborough city		Hillview city
IN	New Chicago town	KS	Elwood city	KY	Hunters Hollow city
IN	New Haven city	KS	Fairway city	KY	
IN	New Whiteland town	KS	Gypsum township	KY	Jessamine County
IN	Newburgh town	KS	Haysville city		Kenton County
IN	North Crows Nest town	KS	Johnson County	KY	
IN	North township	KS	Kechi city		Lakeside Park city
IN	Ogden Dunes town	KS	Kechi township	KY	Latonia Lakes city
IN	Ohio township	KS	Lake Quivira city	KY	Ludlow city
IN	Osceola town	KS	Lawrence city	KY	Melbourne city

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KY	Newport city
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MA	Abington town
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MA	Westminster town	ME	Falmouth town		East Detroit city
MA	Weston town	ME	Gorham town		East Grand Rapids city
MA	Westport town	ME	Kittery town	MI	East Lansing city
MA	Westwood town	ME	Lebanon town		Eaton County
MA	Weymouth town	ME	Lewiston city		Ecorse city
MA	Whitman town	ME	Lisbon town		Emmett township
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MA	Williamsburg town	ME	Orono town	ΜI	Essexville city
MA	Wilmington town	ME	Penobscot County	MI	Farmington city
MA	Winchester town	ME	Penobscot Indian Island Reservation	MI	Farmington Hills city
MA	Winthrop town	ME	Portland city		Ferndale city
MA		ME	Sabattus town		Fillmore township
	Woburn city				
MA	Worcester County	ME	Scarborough town		Flat Rock city
MA	Wrentham town	ME	South Berwick town		Flint township
MA	Yarmouth town	ME	South Portland city	ΜI	Flushing city
MD	Allegany County	ME	Veazie town	MI	Flushing township
	Annapolis city	ME	Westbrook city		Fort Gratiot township
	Bel Air town	ME	York County		Frankenlust township
MD	Berwyn Heights town	MI	Ada township		Franklin village
MD	Bladensburg town		Allegan County		Fraser city
MD	Bowie city	ΜI	Allen Park city	ΜI	Fruitport township
MD	Brentwood town	MI	Alpine township	MI	Gaines township
MD	Brookeville town		Ann Arbor township	MI	Garden City city
MD	Capitol Heights town		Auburn Hills city	MI	Genesee County
	Cecil County		Bangor township		Genesee township
	Cheverly town		Bath township	MI	Georgetown township
MD	Chevy Chase Section Five village	ΜI	Battle Creek city	ΜI	Gibraltar city
MD	Chevy Chase Section Three village	MI	Bay City city	MI	Grand Blanc city
MD	Chevy Chase town		Bay County		Grand Blanc township
	Chevy Chase Village town		Bedford township	MI	Grand Rapids Charter township
MD	College Park city		Belleville city	MI	Grandville city
MD	Colmar Manor town		Benton Charter township	MI	Grosse Ile township
MD	Cottage City town	ΜI	Benton Harbor city	ΜI	Grosse Pointe city
MD	Cumberland city	MI	Berkley city	MI	Grosse Pointe Farms city
MD	District Heights city	MI	Berlin township	ΜI	Grosse Pointe Park city
	Edmonston town		Berrien County		Grosse Pointe Shores village
	Elkton town		Beverly Hills village		
	_				Grosse Pointe Woods city
	Fairmount Heights town		Bingham Farms village		Hampton township
	Forest Heights town		Birmingham city		Hamtramck city
MD	Frederick city	ΜI	Blackman township	MI	Harper Woods city
MD	Frostburg city	MI	Bloomfield Hills city	MI	Harrison township
MD	Funkstown town		Bloomfield township		Hazel Park city
	Gaithersburg city		Bridgeport township	MI	Highland Park city
	Garrett Park town		Brownstown township	MI	Highland township
	Glen Echo town		Buena Vista Charter township	MI	Holland city
MD	Glenarden town	ΜI	Burtchville township	ΜI	Holland township
MD	Greenbelt city	MI	Burton city	MI	Howard township
	Hagerstown city		Byron township		Hudsonville city
MD	Highland Beach town		Calhoun County		Huntington Woods city
	Hyattsville city		Canton township		Huron township
	Kensington town		Carrollton township		Independence township
	Landover Hills town		Cascade township	MI	Ingham County
MD	Laurel city	ΜI	Cass County	ΜI	Inkster city
MD	Martin's Additions village	MI	Center Line city	MI	Ira township
	Morningside town		Chesterfield township	MI	Jackson city
	Mount Rainier city		Clarkston village	MI	Jackson County
			Clawson city		
	New Carrollton city		3		James township
	North Brentwood town		Clay township		Kalamazoo city
MD	Riverdale town	MI	Clayton township	ΜI	Kalamazoo County
MD	Rockville city	MI	Clinton County	MI	Kalamazoo township
MD	Seat Pleasant city	MI	Clinton township	MI	Keego Harbor city
MD	Smithsburg town		Clio city		Kent County
MD	Somerset town		Clyde township		Kentwood city
MD	Takoma Park city		Commerce township	MI	Kimball township
MD	University Park town		Comstock township	MI	Kochville township
MD	Walkersville town	MI	Cooper township	MI	Lake Angelus city
MD	Washington Grove town		Dalton township		Laketon township
	Williamsport town		Davison city		Laketown township
	Androscoggin County		Davison township		Lansing city
	Auburn city		De Witt township		Lansing township
	Bangor city		Dearborn city	MI	Lathrup Village city
ME	Berwick town		Dearborn Heights city	MI	Leoni township
ME	Brewer city	MI	Delhi Charter township	MI	Lincoln Park city
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MI	Lincoln township	MI	Spring Arbor township	MN	Falcon Heights city
	Livonia city	MI	Springfield city	MN	Farmington city
MI	Macomb County	MI	Springfield township	MN	Fort Snelling unorg.
MI	Macomb township	MI	St. Clair city	MN	Fridley city
MI	Madison Heights city	MI	St. Clair County	MN	Gem Lake city
	Marysville city	MI	St. Clair Shores city	MN	Golden Valley city
	Melvindale city	MI	St. Clair township	MN	Grant township
	Meridian township		St. Joseph Charter township	MN	Greenwood city
	Milford township		St. Joseph city	MN	Ham Lake city
	Milton township		Stevensville village		Haven township
	Monitor township		Sullivan township	MN	Hennepin County
	Monroe County		Summit township		Hermantown city
	Mount Clemens city	MI	Sumpter township	MN	Hilltop city
	Mount Morris city	MI	Superior township	MN	Hopkins city
	Mount Morris township	MI		MN	Houston County
	Mundy township		Sylvan Lake city	MN	Inver Grove Heights city
	Muskegon city		Taylor city	MN	La Crescent city
	Muskegon County		Texas township		La Crescent township
	Muskegon Heights city	MI	Thereof township		Lake Elmo city
	Muskegon township New Baltimore city	MI	Thomas township Trenton city		Lakeville city Landfall city
	Niles city	MI	Troy city		Lauderdale city
	Niles township		Utica city		Le Sauk township
	North Muskegon city		Van Buren township		Lexington city
	Northville city		Vienna township	MN	Lilydale city
	Northville township		Walker city		Lino Lakes city
	Norton Shores city		Walled Lake city	MN	Little Canada city
	Novi city		Washington township	MN	Long Lake city
	Novi township		Washington township Washtenaw County	MN	Loretto city
	Oak Park city		Waterford township	MN	Mahtomedi city
	Oakland Charter township		Wayne city	MN	Maple Grove city
	Oakland County		West Bloomfield township	MN	Maple Plain city
	Orchard Lake Village city		Westland city	MN	Maplewood city
	Orion township		White Lake township	MN	Marion township
	Oshtemo township		Whiteford township	MN	Medicine Lake city
	Ottawa County		Williamstown township	MN	Medina city
	Parchment city		Wixom city	MN	Mendota city
MI	Park township		Wolverine Lake village	MN	Mendota Heights city
MI	Pavilion township	MI	Woodhaven city	MN	Midway township
MI	Pennfield township	MI	Wyandotte city	MN	Minden township
MI	Pittsfield township	MI	Wyoming city	MN	Minnetonka Beach city
	Plainfield township	MI	Ypsilanti city	MN	Minnetonka city
	Pleasant Ridge city	MI	Ypsilanti township	MN	Minnetrista city
	Plymouth city	MI	Zeeland city	MN	Moorhead city
	Plymouth township	MI	Zilwaukee city	MN	Moorhead township
	Pontiac city	MN	5	MN	Mound city
	Port Huron city	MN	3	MN	Mounds View city
	Port Huron township	MN	5	MN	New Brighton city
	Portage city	MN	11 3 3	MN	1 3
	Portsmouth township	MN			Newport city
	Redford township	MN	<i>y</i>	MN	North Oaks city
	Richfield township	MN	0 5	MN	North St. Paul city
	River Rouge city Riverview city	MN MN	5	MN MN	Oakdale city Oakport township
MI	Rochester city	MN	5	MN	Olmsted County
	Rochester City Rochester Hills city	MN		MN	Orono city
MI	Rockwood city	MN		MN	Osseo city
	Romulus city	MN		MN	Plymouth city
	Roosevelt Park city	MN		MN	Polk County
MI	Roseville city	MN		MN	Prior Lake city
	Ross township	MN		MN	Proctor city
MI	Royal Oak city	MN	<u> </u>	MN	Ramsey city
	3	MN	3	MN	Robbinsdale city
MI	Saginaw city	MN		MN	Rochester city
MI	Saginaw County	MN	1 5	MN	Rochester township
MI	Saginaw township	MN		MN	Rosemount city
MI	Schoolcraft township	MN		MN	Roseville city
MI	Scio township	MN		MN	Sartell city
MI	Shelby township	MN		MN	Sauk Rapids city
MI	Shoreham village	MN		MN	Sauk Rapids township
MI	Sodus township	MN		MN	Savage city
MI	South Rockwood village	MN		MN	Scott County
MI	Southfield city	MN	Eagan city	MN	Sherburne Čounty
MI	Southfield township	MN	East Grand Forks city	MN	Shoreview city
MI	Southgate city	MN		MN	Shorewood city
MI	Spaulding township	MN	Excelsior city	MN	South St. Paul city