

U.S. Environmental Protection Agency – November 2004 Compliance and Enforcement National Priority: Clean Water Act, Wet Weather, Concentrated Animal Feeding Operations

The United States Environmental Protection Agency (EPA) Office of Enforcement and Compliance Assurance (OECA) has established national priorities for federal fiscal years (FY) 2005 through 2007. OECA and the EPA's 10 Regions will make the following issues priorities for monitoring, compliance assistance, enforcement and cleanup actions over the next three years:

- 1. Clean Air Act: Air Toxics
- 2. Clean Air Act: Prevention of Significant Deterioration and New Source Review
- Tribal
- 4. Clean Water Act: Wet Weather, including:
 - Concentrated Animal Feeding Operations
 - Combined Sewer Overflows
 - Sanitary Sewer Overflows
 - Storm Water
- 5. Resource Conservation and Recovery Act: Mineral Processing and Mining

After evaluating the Safe Drinking Water Act (SDWA) Microbial Rules as a national priority, the Agency determined that it was more appropriate to address the microbial non-compliance problems, which occur predominately at very small drinking water systems, through the SDWA core program. The Petroleum Refining national priority is near completion and will be assessed during the coming year to determine if sufficient progress has been made to return this priority to the core program.

Four environmental challenges that are exacerbated by wet weather were chosen as Clean Water Act (CWA) national enforcement and compliance priorities for FY 2005 through FY 2007. They are concentrated animal feeding operations, combined sewer overflows, sanitary sewer overflows and storm water runoff. Like the other national priorities, they were selected because they met the selection criteria: (1) increased national attention could lead to significant environmental benefits; (2) there were patterns of non-compliance; and (3) EPA was well-suited to take action in this strategy area.

The Concentrated Animal Feeding Operations strategy summary that follows provides clear goals to achieve maximum compliance with environmental regulations in order to protect human health and the environment.

Background

Concentrated Animal Feeding Operations (CAFOs) have been regulated under the National Pollutant Discharge Elimination System (NPDES) program since 1976. In February 2003, EPA promulgated new CAFO regulations to update the NPDES program to avoid and manage

environmental harm from these operations' animal manure and waste. The 2003 regulation requires all CAFOs to be covered by NPDES permits and in compliance with the requirements of those permits no later than April 2006, unless they have received a determination that they have "no potential to discharge." Each permit must have clear and enforceable requirements for such things as proper manure storage, land application, containment, record-keeping, dead animal disposal and reporting.

The animal feedlot industry has undergone major changes. These changes include consolidation trends in the industry toward larger-sized operations that have less available land on which to spread manure. Large CAFOs produce large quantities of nutrients that exceed the capacity of available crop land to utilize them.

Compliance with the 2003 CAFO rule has the potential for significant pollution reduction. The new rule is expected to bring about \$166 million to \$298 million in recreational and other benefits annually due to improved water quality in freshwater rivers, streams, and lakes. Reduced fish kills, improved shellfish harvests, reduced nitrate contamination of private wells, reduced livestock mortality from nitrate and pathogen contamination of drinking water and reduced public water treatment costs are also anticipated. The total annualized benefits are projected to be \$204 million to \$355 million.

Building on the regulation, the strategy outlined below supports strong and viable state NPDES programs for CAFOs in the 45 states and territories authorized to implement the program. These activities will be coupled with federal support and oversight as well as implementation of federal NPDES CAFO programs in the remaining unauthorized states, tribes and territories.

The Environmental Problems

The major environmental problem associated with CAFOs is the large volume of animal waste generated in concentrated areas. For example, roughly 700 dairy cows can generate more waste than a city of 10,000 people. Pollutants associated with animal waste primarily include nutrients, mainly nitrogen and phosphorus, but animal waste may also include organic matter, solids, pathogens, pesticides, antibiotics, hormones, salts and various trace elements (including metals). If manure and wastewater are not properly managed, pollutants can be released into the environment through discharges from manure storage areas or land application.

EPA's *National Water Quality Inventory: 2000 Report* indicates that the agricultural sector—including confined animal feeding operations—is a major contributor of pollutants in the nation's rivers and streams. EPA's data show that water quality concerns tend to be greatest in regions where crops are intensively cultivated and livestock operations are concentrated. Other problems associated with animal manure include surface water (e.g., lakes, streams, rivers, and reservoirs) and ground water quality degradation, and adverse effects on estuarine water quality and resources in coastal areas. Water quality degradation can contribute to increased risk to aquatic and wildlife ecosystems, including fish kills.

Nationwide, there are roughly 18,000 concentrated animal feeding operations. Approximately 6,200 or 34 percent of these operations have NPDES permits. Therefore, a major focus of this

strategy is to ensure that all facilities that meet the definition of CAFO obtain permit coverage to comply with the new 2003 CAFO regulation.

Goals

Goal 1: To protect public health and the environment by minimizing the discharge to surface water of pollutants from CAFOs. This goal will be reached by focusing on the priority sectors or on facilities located in priority watersheds.

Priority sectors include those with:

- high concentrations of one animal type in the same geographic area
- Isimilar types of animal confinement
- Ipoor compliance history

Priority watersheds include:

- waters where CAFOs have the potential to impact water quality or public health, such as CAFOs discharging to waters with drinking water intakes;
- waters in environmental justice areas;
- Twaters that are identified through CWA 303(d) lists (indicating impaired and threatened waters) and CWA 305(b) reports (completed CWA quality assessments) as being impacted by CAFOs; and,
- Iwaters with shellfish harvest restrictions, beach advisories, fish or wildlife advisories or fish kills where CAFO discharges may have caused or contributed to the problem.

Goal 2: EPA will assist states in enhancing the capacity of their CAFO programs by developing regional CAFO compliance/enforcement implementation plans and conducting training, compliance assistance and outreach activities. In coordination with the states, EPA will identify, correct, and deter non-compliance with both the 1976 and 2003 CAFO regulations and reduce environmental risks through compliance monitoring, inspections and enforcement activities. The goal will be achieved through the following activities:

- Lensure that all CAFOs comply with the CAFO rule by applying for NPDES CAFO permits; and,
- Luse multiple tools to ensure compliance with the permits, including compliance assistance, compliance incentives, compliance monitoring and enforcement.

Strategy

- Use a variety of tools, including compliance assistance and outreach, capacity-building for state compliance and enforcement programs, compliance incentives, compliance monitoring and targeting and enforcement. For the new CAFO rule, focus on compliance assistance in FY2005 and part of FY2006 and transition to graduated enforcement response as the three year time frame of the strategy evolves;
- Consistent with EPA's NPDES permitting objectives, require all CAFOs to apply for NPDES

permits by April 2006 and develop and implement nutrient management plans by December 31, 2006;

- For FY2005 and 2006, continue to focus on targeting, compliance monitoring, and enforcement activities on large CAFOs, which have been regulated since 1976, that are in non-compliance and causing environmental or human health problems;
- Continue to focus on full implementation of the CAFO rule; and,
- Maintain a field presence through inspections and appropriate follow-up actions to serve as a deterrent to non-compliance.

Performance Measures

CAFOs will likely remain a national compliance and enforcement priority beyond FY 2007. The status of CAFO compliance and enforcement activities should change from a national priority to an element of the core NPDES program when the following benchmarks are met:

- Last 95 percent of the total universe of CAFOs has permit coverage, in accordance with a Statistically Valid Non-Compliance (SVNC) Rate study.
- 🛮 80 percent of permitted CAFOs are in compliance with their permit, in accordance with a SVNC study.
- 🗓 95 percent of CAFOs have been inspected at least once in the past five years, with appropriate compliance assistance and/or enforcement actions taken to address non-compliance.



U.S. Environmental Protection Agency – November 2004 Compliance and Enforcement National Priority: Clean Water Act, Wet Weather, Combined Sewer Overflows

The United States Environmental Protection Agency (EPA) Office of Enforcement and Compliance Assurance (OECA) has established national priorities for federal fiscal years (FY) 2005 through 2007. OECA and the EPA's 10 Regions will make the following issues priorities for monitoring, compliance assistance, enforcement and cleanup actions over the next three years:

- 1. Clean Air Act: Air Toxics
- 2. Clean Air Act: Prevention of Significant Deterioration and New Source Review
- 3. Tribal
- 4. Clean Water Act: Wet Weather, including:
 - Concentrated Animal Feeding Operations
 - Combined Sewer Overflows
 - Sanitary Sewer Overflows
 - Storm Water
- 5. Resource Conservation and Recovery Act: Mineral Processing and Mining

After evaluating the Safe Drinking Water Act (SDWA) Microbial Rules as a national priority, the Agency determined that it was more appropriate to address the non-compliance microbial problems, which occur predominately at very small drinking water systems, through the SDWA core program. The Petroleum Refining national priority is near completion and will be assessed during the coming year to determine if sufficient progress has been made to return this priority to the core program.

Four environmental challenges that are exacerbated by wet weather were chosen as Clean Water Act (CWA) national enforcement and compliance priorities for FY 2005 through FY 2007. They are concentrated animal feeding operations, combined sewer overflows, sanitary sewer overflows and storm water runoff. Like the other national priorities, they were selected because they met the selection criteria: (1) increased national attention could lead to significant environmental benefits; (2) there were patterns of non-compliance; and (3) EPA was well-suited to take action in this strategy area.

The Combined Sewer Overflow strategy summary that follows provides clear goals to achieve maximum compliance with environmental regulations in order to protect human health and the environment.

Background

Combined sewer systems are designed to collect rainwater runoff, domestic sewage and industrial wastewater in the same pipe. During periods of rainfall or snow melt, the wastewater volume in a combined sewer system can exceed the capacity of the system or treatment plant.

When the capacity is exceeded, the excess wastewater flows directly into nearby streams, rivers or other water bodies, typically violating water quality standards. These overflows, called combined sewer overflows (CSOs), contain not only storm water but also untreated human and industrial waste, toxic materials and debris.

The national framework for control of CSOs is found in EPA's "Combined Sewer Overflow (CSO) Control Policy," published on April 19, 1994 (59 FR 18688), and later incorporated into the Wet Weather Water Quality Act of 2000. The CSO Control Policy set a January 1, 1997, deadline for combined sewer systems to meet nine minimum controls (NMCs). Two examples of NMCs are: proper operation and regular maintenance programs for the sewer system and CSOs and control of solid and floatable materials in such overflows. They are also required to develop and implement long-term CSO control plans (LTCPs) that will ultimately result in compliance with the requirements of the CWA.

Environmental Problems

CSOs are a significant cause of water quality impairment as documented in Clean Water Act, Section 305(b) reports (completed water quality assessments); overflows often affect areas frequented by the public, such as parks, beaches, backyards, city streets and playgrounds; and they represent significant threats to public health and the environment. There are approximately 836 permits in the U.S. for combined sewer systems. Affected communities are located in 32 states, including the District of Columbia, and serve approximately 46 million people, primarily in the Northeast and Midwest..

A significant number of communities with CSOs have not implemented the nine minimum controls, do not have a long-term CSO control plan in place or have one with a long implementation schedule. The central federal role in funding state wastewater treatment projects through the Clean Water State Revolving Fund is also compatible with a strong federal interest in addressing the problem. Given the scope and the serious impact of overflows, addressing CSOs as an OECA national priority has the potential to result in significant human health and environmental benefits.

Goals

The following six goals assume an active and effective partnership between EPA and the states' permit and enforcement programs.

Goal 1: By the end of FY 2007, 65 percent of all permitted CSOs will have an approved LTCP with an enforceable schedule that will ultimately result in compliance with the technology-based and water quality-based requirements of the CWA, or an action will have been initiated to achieve that result. This percentage target may require revision once a more accurate baseline is available.

Goal 2: At least 90 percent of EPA CSO actions will be targeted at high-priority CSOs. High priority CSOs are those with discharges that impact sensitive areas, are located in environmental justice areas or have a significant environmental or human health impact. The 1994 CSO Control

Policy defines sensitive areas as Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitats, waters with primary contact recreation, public drinking water intakes or their designated protection areas and shellfish beds.

Goal 3: Evaluate and address discharges at 100 percent of CSO outfalls that are located within one mile upstream of a surface drinking water intake.

Goal 4: Concluded EPA CSO enforcement actions addressing LTCP development will have achieved, on average, a 90 percent reduction in the volume of untreated overflows when the plans are fully implemented.

Goal 5: Provide compliance assistance to all permitted CSOs that will not have an approved LTCP with an enforceable schedule that will ultimately result in compliance with the technology-based and water quality-based requirements of the CWA, or where a formal action has not been planned or initiated to achieve that result.

Goal 6: Through compliance assistance from EPA, increase the understanding of environmental requirements, improve environmental management practices and increase planned or achieved reduction, treatment or elimination of pollutants.

Strategies

Targeting activities:

- Use a wide range of compliance and enforcement tools, including the targeting of violators posing significant risks; compliance monitoring and investigations; administrative and judicial enforcement; and compliance assistance.
- Using baseline information, identify all permitted CSOs that have not yet obtained an approved LTCP with an enforceable schedule.
- Identify environmental justice areas, as defined by applicable EPA guidance, where non-compliance may result in environmental or public health concerns.
- Focus on permitted CSOs that have the potential for significant environmental or public health impacts, which could include those with discharges causing or significantly contributing to 303(d) listed (impaired and threatened) waters or areas that have known impacts such as shellfish harvest restrictions, beach advisories or fish kills.

Coordination and roles:

- Enhance coordination and communication with the permitting offices, which are trying to achieve full implementation of the CSO Policy permitting goals. This includes clearly communicating the expectation that long term control plan implementation schedules may be incorporated in permits if the relevant water quality standards allow for compliance schedules of five years or less, but must otherwise be incorporated in state or federal administrative orders or consent decrees.
- Regions will conduct discussions with their states to review baseline information and clarify

- respective roles and responsibilities for all permitted CSOs requiring enforcement orders.
- Regions develop compliance monitoring, investigation and case development work plans for permitted CSOs needing federal enforcement actions to achieve LTCP schedules during the upcoming year.
- Regions will ensure compliance assistance for facilities without approved LTCPs that will not receive enforcement orders or a revised permit from EPA or a state.
- EPA Headquarters will work with regions and states to provide workshops for CSO permit holders that provide detailed information on development of LTCPs, achieving and maintaining compliance, and financial issues relevant to implementing LTCPs.
- Compliance assistance will most often be delivered by state agencies. However, where appropriate, EPA inspectors will provide guidance on LTCP development to regulated facilities during inspections.
- Regions should develop and implement a plan for capturing outcomes as the result of any planned compliance assistance activity.

Performance Measurement

Although this strategy will result in significant progress in addressing CSOs, by the end of FY 2007, approximately 35 percent of all permitted CSOs (approximately 290) will still lack approved LTCPs with enforceable schedules. As a result, EPA's Office of Enforcement and Compliance Assurance is very likely to continue to feature CSOs as a national priority in the FY 2008 to FY 2010 cycle. An appropriate exit goal would be to confirm that 90 percent or more of permitted CSOs hold an approved LTCP with an enforceable schedule. The specific formulation of this goal will be closely coordinated with the EPA Office of Water.



U.S. Environmental Protection Agency – November 2004 Compliance and Enforcement National Priority: Clean Water Act, Wet Weather, Sanitary Sewer Overflows

The United States Environmental Protection Agency (EPA) Office of Enforcement and Compliance Assurance (OECA) has established national priorities for federal fiscal years (FY) 2005 through 2007. OECA and the EPA's 10 Regions will make the following issues priorities for monitoring, compliance assistance, enforcement and cleanup actions over the next three years:

- 1. Clean Air Act: Air Toxics
- 2. Clean Air Act: Prevention of Significant Deterioration and New Source Review
- 3. Tribal
- 4. Clean Water Act: Wet Weather, including:
 - Concentrated Animal Feeding Operations
 - Combined Sewer Overflows
 - Sanitary Sewer Overflows
 - Storm Water
- 5. Resource Conservation and Recovery Act: Mineral Processing and Mining

After evaluating the Safe Drinking Water Act (SDWA) Microbial Rules as a national priority, the Agency determined that it was more appropriate to address the microbial non-compliance problems, which occur predominately at very small drinking water systems, through the SDWA core program. The Petroleum Refining national priority is near completion and will be assessed during the coming year to determine if sufficient progress has been made to return this priority to the core program.

Four environmental challenges that are exacerbated by wet weather were chosen as Clean Water Act (CWA) national enforcement and compliance priorities for FY 2005 through FY 2007. They are concentrated animal feeding operations, combined sewer overflows, sanitary sewer overflows and storm water runoff. Like the other national priorities, they were selected because they met the selection criteria: (1) increased national attention could lead to significant environmental benefits; (2) there were patterns of non-compliance; and (3) EPA was well-suited to take action in this strategy area.

The Sanitary Sewer Overflow strategy summary that follows provides clear goals to achieve maximum compliance with environmental regulations in order to protect human health and the environment.

Background

Properly designed, operated, and maintained sanitary sewer systems are meant to collect and transport sewage to a publicly owned treatment works (POTW). However, releases of raw sewage from municipal sanitary sewers can occur. Sanitary sewer overflows (SSOs) often pose

a substantial risk to public health and the environment and may be caused by poor management of a sewer collection system.

The main pollutants in raw sewage from SSOs are bacteria, pathogens, nutrients, untreated industrial wastes, toxic pollutants, such as oil and pesticides, and wastewater solids and debris. The untreated sewage from overflows can contaminate waters, causing serious water quality problems. Such overflows may also occur in areas frequented by the public, such as parks, city streets and backyards. In addition, sewers can also back up into homes and commercial and industrial establishments, causing property damage and threatening public health. SSOs, which contain raw sewage, can carry bacteria, viruses, protozoa helminths (intestinal worms) and borroughs (inhaled molds and fungi). The diseases they may cause range in severity from mild gastroenteritis to life-threatening ailments, such as cholera, dysentery, infectious hepatitis and severe gastroenteritis.

SSOs have a variety of causes, including but not limited to severe weather, improper system design, poor management, operation and maintenance and vandalism. Chronic SSOs may be due to:

- *Infiltration and inflow problems* too much rainfall or snow melt infiltrating through the ground into leaky sanitary sewers that were not designed to transport rainfall or to drain property;
- *Inadequate planning for growth* sewers and pumps are too small to carry sewage from newly-developed subdivisions or commercial/industrial areas, or wastewater treatment plants lack sufficient capacity to treat the volume of sewage;
- *Pipe failures* blocked, broken, cracked or collapsed pipes, which can be caused by such things as grease accumulations, tree roots growing into the sewer, sections of pipe that settle or shift so that joints no longer match, sediment and other material build-up;
- **DEquipment failures pump or power failures with inadequate back-up systems; and
- **Deteriorating sewer systems improper installation or improper or deferred maintenance can create widespread problems that can be expensive to fix over time.

Some municipalities have found severe problems necessitating billion-dollar correction programs, while others have had to curtail new development until problems are corrected or system capacity is increased.

Environmental Problems

Reduction of the high number of SSOs each year and the adverse effects they cause on human health and the environment could result in significant public health and environmental benefits. EPA believes this problem can be relieved through proper management and renewal of sewer infrastructure. Empirical data indicate a significant non-compliance problem in sanitary sewer systems with overflows; the SSO strategy is intended to address the problem through the use of compliance assistance, compliance incentives and, in some cases, enforcement actions.

While a large number of SSO investigations and cases originate with the states, the federal role remains significant. In larger cases, the injunctive relief (i.e., the actions a regulated entity is

ordered to undertake to achieve and maintain compliance) may be in the hundreds of thousands of dollars and can be in excess of a billion dollars. Federal involvement is also warranted by the need to protect the public investment, including the significant federal investment, in wastewater infrastructure.

Goals

Goal 1: Protect public health and water quality on lands and in streams located in priority areas or watersheds, which include:

- sensitive areas designated as Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters with primary contact recreation, public drinking water intakes or their designated protection areas, and shellfish beds;
- watersheds or communities with potentially significant environmental or human health impacts due to wet weather non-compliance problems, such as stream segments that are identified on 303(d) lists as being impaired waters, where that impairment may be partially caused by wet weather sources;
- Tareas that have known impacts such as shellfish harvest restrictions, beach advisories or fish kills:
- Lenvironmental justice areas as defined by applicable EPA guidance, where non-compliance may result in environmental or human health concerns; and
- Communities where frequent and recurring SSOs are resulting in human exposure to raw sewage through basement backups or overland spills.

Goal 2: Protect the public investment in wastewater infrastructure by ensuring municipal collection systems have sufficient capacity and use proper asset management, operation and maintenance principles.

Ensuring compliance with all relevant CWA requirements will be achieved by providing compliance assistance and incentives, monitoring compliance and targeting enforcement actions as appropriate.

Strategy

- 1. EPA will target at least 75 percent of federal SSO enforcement actions, compliance assistance and incentive activities toward municipal collection systems located in priority watersheds and communities.
- 2. Complete initial inventory of all municipal collection systems located in priority watersheds and communities.
- 3. All major municipal collection systems with an associated total treatment capacity of greater than 100 million gallons per day (mgd) and their associated satellite municipal collection systems will have or be on an enforcement schedule to have collection systems of adequate capacity. Those that are not will be the subject of formal enforcement action.
- 4. Of the municipal collection systems with an associated total treatment capacity of greater than 10 mgd but less than 100 mgd and their associated satellite municipal collection

systems, 10 percent will have or be on an enforceable schedule to have collection systems of adequate capacity. Mechanisms must be in place to ensure the provision of additional capacity commensurate with the increase in flow. Additional capacity may be provided through preventative maintenance and cleaning programs or the construction of relief sewers, pump stations, etc.

5. EPA Regional Offices will complete annual work plans and reports on their progress. Adjustments to work plans will be based on information form the previous year.

Performance Measures

Treatment works with the largest capacity in priority watersheds will receive concerted Federal and state compliance assistance and enforcement activity. As facilities are addressed and show progress in achieving compliance with the CWA, the need to focus enforcement resources on SSOs will decease. When the following criteria are met, the SSO wet weather priority should be changed to an element of the core program.

- All of the major municipal collection systems with a total treatment capacity of greater than 100 mgd (and their associated satellite municipal collection systems) and 30 percent of the municipal collection systems with a total treatment capacity of greater than 10 mgd but less than 100 mgd have collection systems of adequate capacity with mechanisms in place to ensure that additional capacity is provided or they are on an enforceable schedule to do so.
- All of the other smaller municipal collection systems causing identifiable and significant public health impacts or impairing water quality have been addressed.

It is expected that the core program will provide for continued compliance assistance and enforcement effort in the SSO community. Although state capacity in this area may continue to grow with a subsequent increased reliance on state effort, it is expected that the federal government will maintain an active enforcement program.



U.S. Environmental Protection Agency – November 2004 Compliance and Enforcement National Priority: Clean Water Act, Wet Weather, Storm Water

The United States Environmental Protection Agency (EPA) Office of Enforcement and Compliance Assurance (OECA) has established national priorities for federal fiscal years (FY) 2005 through 2007. OECA and the EPA's 10 Regions will make the following issues priorities for monitoring, compliance assistance, enforcement and cleanup actions over the next three years:

- 1. Clean Air Act: Air Toxics
- 2. Clean Air Act: Prevention of Significant Deterioration and New Source Review
- 3. Tribal
- 4. Clean Water Act: Wet Weather, including:
 - Concentrated Animal Feeding Operations
 - Combined Sewer Overflows
 - Sanitary Sewer Overflows
 - Storm Water
- 5. Resource Conservation and Recovery Act: Mineral Processing and Mining

After evaluating the Safe Drinking Water Act (SDWA) Microbial Rules as a national priority, the Agency determined that it was more appropriate to address the non-compliance microbial problems, which occur predominately at very small drinking water systems, through the SDWA core program. The Petroleum Refining national priority is near completion and will be assessed during the coming year to determine if sufficient progress has been made to return this priority to the core program.

Four environmental challenges that are exacerbated by wet weather were chosen as Clean Water Act (CWA) national enforcement and compliance priorities for FY 2005 through FY 2007. They are concentrated animal feeding operations, combined sewer overflows, sanitary sewer overflows and storm water runoff. Like the other national priorities, they were selected because they met the selection criteria: (1) increased national attention could lead to significant environmental benefits; (2) there were patterns of non-compliance; and (3) EPA was well-suited to take action in this strategy area.

The Storm Water strategy summary that follows provides clear goals to achieve maximum compliance with environmental regulations in order to protect human health and the environment.

Background and Environmental Problems

Discharges of storm water runoff can have a significant impact on water quality. Several studies

FINAL (11/15/04)

reveal that storm water runoff from urban areas can include a variety of pollutants, such as sediment, bacteria, organic nutrients, hydrocarbons, metals, oil and grease. These pollutants can harm the environment and public health.

According to EPA's *National Water Quality Inventory: 2000 Report*, prepared under Section 305(b) of the Clean Water Act, urban storm water runoff and discharges from storm sewers are a primary cause of impaired water quality in the United States. These sources contribute to 13 percent of impaired rivers and streams, 18 percent of impaired lakes, 55 percent of impaired ocean shorelines, and 32 percent of impaired estuaries.

Storm water runoff from construction activities can have a significant impact on water quality. In addition to sediment, as storm water flows over a construction site, it can pick up other pollutants like debris, pesticides, petroleum products, chemicals, solvents, asphalts and acids which also contribute to water quality problems.

Storm water discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas are a concern because of the high concentration of pollutants they carry. Common pollutants include pesticides, fertilizers, oils, salt, litter and sediment. Storm water picks up and transports these pollutants and then discharges them—untreated—to waterways through storm sewer systems.

Goals

Goal 1: Protect public health and the environment by minimizing the discharge of polluted storm water to surface waters. The focus will be on priority sectors with the potential to significantly impact human health or the environment or activities in priority watersheds.

Priority sectors and watersheds include:

- 1. sectors that are in high growth communities where storm water may result in high sediment loadings;
- 2. sectors that are in environmental justice or tribal areas;
- 3. sectors where storm water has the potential to impact water quality and drinking water quality and public health;
- 4. waters that are identified as being impacted by storm water or by pollution likely caused by storm water;
- 5. waters that have shellfish harvest restrictions, beach advisories or fish kills where storm water or pollution likely caused by storm water significantly contributes to the problem; and.
- 6. threatened or endangered species' habitats.

EPA will target at least 70 percent of storm water inspections and compliance assistance toward priority sectors or watersheds. Regions will focus inspection resources in states with low levels of planned inspections or to support national initiatives.

Reduce the environmental impact of storm water by undertaking federal enforcement cases in areas likely to produce the greatest environmental benefit. EPA will undertake adequate inspections, compliance assistance, compliance incentives and enforcement activities to:

- prevent 2.5 million pounds of sediment a year from discharging from construction sites into our nation's waters, and;
- prevent specific pollutants from discharging from industrial (non-construction) sources into our nation's waters.

Goal 2: Assist states, localities and tribes in the development and enhancement of their storm water programs by annually conducting training courses and joint inspections.

Strategies

- Use a mix of compliance assistance tools to increase awareness of storm water pollution control requirements within the regulated community and among state and local regulators.
- Implement more efficient and effective methods to disseminate compliance assistance materials.
- Develop and use several inspection-related tools to streamline inspection procedures and policies and increase inspector efficiency and to increase inspection presence to deter or document noncompliance.
- Will continue to explore ways to streamline the enforcement process to ensure that actions are timely and appropriate. Through effective and appropriate enforcement actions and injunctive relief in settlements, we will protect the environment and human health.

Performance Measurement

As the following thresholds are achieved, storm water compliance and enforcement should change from a priority to an element of the core NPDES Compliance and Enforcement program.

- 1. The inventory of priority watersheds and communities is complete and procedures are in place to maintain the inventory.
- 2. All Phase I MS4s have been audited by either state or federal inspectors at least once in the preceding five years, and appropriate compliance assistance and/or enforcement actions have been taken to address non-compliance; 80 percent of the Phase I MS4s are in compliance or on an enforceable schedule to achieve compliance.
- 3. Phase I construction sites greater than one acre have achieved 75 percent permit coverage and at least six of the remaining nine industrial storm water categories have obtained at least 75 percent permit coverage through the combined efforts of EPA and states.
- 4. EPA has developed a supplemental strategy to determine how to address non-compliance at smaller, Phase II MS4s and construction storm water sites as well as other regulated

FINAL (11/15/04)

- entities not addressed by the FY 2005 FY 2007 strategy through compliance assistance, incentives and/or enforcement actions. Self-audit procedures have been developed.
- 5. EPA has developed a supplemental strategy to determine how to maintain the progress made in addressing noncompliance in the storm water program by: 1) determining the continued training that is required to maintain the program; 2) reviewing inspection and enforcement activity annually, and 3) determining any additional requirements that should be placed in state plans.