



U.S. Environmental Protection Agency – November 2004
Compliance and Enforcement National Priority:
Safe Drinking Water Act Microbial Rules
Returned to Core Program, FY 2005

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.

The Microbial Rule strategy summary that follows provides clear goals to achieve continued compliance with environmental regulations in order to protect human health and the environment as the priority activities return to the core program.

Background

Since 1998, EPA has focused attention and resources by designating the Safe Drinking Water Act (SDWA) microbial rules an enforcement and compliance assistance national priority. In October 2004, EPA moved activities related to compliance and enforcement of the rules back to its core program.

EPA regions were asked to address systems that were in significant violation of a microbial standard. Data related to the two rules—the Surface Water Treatment Rule (SWTR) and the Total Coliform Rule (TCR)—indicate that in 1997, there were 4,904 public water systems in significant non-compliance (SNC) with one or both rules. In 2003, there were 2,471 public water systems in SNC with one or both rules—nearly a 50 percent decrease.

Compliance assistance was focused on small systems that served 3,300 or fewer users, and on helping public water systems comply with new microbial standards that were becoming effective. Data in EPA's Reporting Compliance Assistance Tracking System (RCATS) show that during FY 2000 – FY 2003 the Regions conducted 1,570 compliance assistance activities related to the drinking water microbial rules, and that these actions reached almost 35,000 entities.

Environmental Problems

Microbial pathogens in drinking water can produce immediate, severe health effects, especially in children, the elderly and persons with compromised immune systems. Adverse health effects of microbiological contamination can include fever, jaundice, pneumonia, vomiting, diarrhea, dehydration, severe illness and death. Microbial pathogens can be present in source water, can enter drinking water as a result of a sanitary breach during treatment or storage, and can infiltrate the distribution system that carries drinking water to the user.

EPA's regulations protect the public from microbial pathogens in drinking water by guarding against contamination of source water, treating raw water to remove and inactivate microbial pathogens, maintaining sanitary conditions during treatment and storage, and regularly monitoring for the presence of microbial pathogens in the distribution system. Regulations concerning protection of source water, treatment of raw water, and maintenance of sanitary conditions apply to approximately 14,700 public water systems that together serve more than 200 million users. Five EPA regulations protect the public from microbial contamination in drinking water specifically drawn from surface water sources. All 160,000 public water systems in America are required to monitor for microbial pathogens in their distribution systems and take action to address any contamination. The TCR protects more than 300 million users.

Since 1996, the Office of Enforcement and Compliance Assurance (OECA) has issued annual national public water system compliance reports. They indicate that the most frequently violated rule is the one that requires monitoring of drinking water for microbial pathogens in distribution systems. According to the reports, most violations are monitoring and reporting violations. When a system fails to report, EPA does not know whether the system is meeting treatment technique standards or if microbial contaminants are present in it.

More specifically, 95 percent of all public water systems, and essentially all public water systems on Tribal lands, serve fewer than 3,300 users. Microbial violations at small public water systems can often be linked to the system's lack of technical, managerial or financial capacity. OECA believes compliance with the drinking water microbial rules can best be assured by consistent efforts to help small public water systems (serving fewer than 3,300 users) understand the microbial requirements and build the capacity to achieve and sustain compliance. OECA has instituted long-term vigilance, initiating enforcement responses when appropriate.

Goals

Goal 1: Ensure that compliance with SDWA microbial rules remains the first priority for states, regions, and tribes with primary authority. To maintain the downward trend in the number of microbial significant non-compliers, states, regions, and tribes with primacy have a goal of

addressing 100 percent of significant non-compliance at public water systems before they become exceptions. Exceptions are public water systems with unaddressed significant noncompliance for microbial rules. Regions, states, and tribes with primacy must monitor the exceptions in greater detail to ensure that timely and appropriate actions are taken to remedy microbial noncompliance.

Goal 2: Regions will make commitments in their core drinking water program to assure compliance with standards that provide protection from nitrates, lead and copper, and almost 80 other contaminants.

Goal 3: Regions will track their compliance assistance activities and report 100 percent of the four specific drinking water compliance assistance performance measures, which are identified in the Data Quality and Reporting section of the FY 2005 – FY 2007 annual work plan guidance, including:

- ☐ the number of public water system SNCs returned to compliance after a compliance assistance visit;
- ☐ the number of small and tribal public water systems that returned to compliance after receiving direct compliance assistance and without being addressed by enforcement;
- ☐ the number of public water systems that received compliance assistance related to a microbial rule or the lead and copper rule; and
- ☐ the number of public water systems that received compliance assistance during a sanitary survey.

Strategy

- ☐ Regions will continue targeting compliance assistance toward small drinking water systems, which serve 3,300 or fewer users.
- ☐ Compliance assistance efforts will include outreach and education programs to ensure that sources understand both the requirements and the assistance available to them.
- A region will provide an explanation (in work plan commitments) if it does not anticipate addressing 100 percent microbial SNCs that serve more than 3,300 users and at least 90 percent of SNCs that serve 3,300 or fewer users before they become exceptions.
- A region will provide, on a quarterly basis, an explanation for each microbial SNC serving more than 3,300 users that became an exception during the preceding three months.

Performance Measurement

EPA recognizes the importance of a long-term commitment to assuring compliance with the drinking water microbial rules. EPA recently moved activities related to compliance and enforcement of these rules to its core Safe Drinking Water Act (SDWA) program for the following reasons:

- Microbial contamination is a serious, recurring problem and preventing and deterring microbial rule violations requires a long-term, on-going commitment of compliance assistance and enforcement resources.
- EPA is directly responsible for SDWA compliance assistance and SDWA enforcement only

in Wyoming and the District of Columbia, on tribal lands where the Tribe does not have primary enforcement authority, and for those states that do not yet have primary enforcement authority for particular regulations. In areas where a state, territory, or Tribe is responsible for most drinking water compliance and enforcement activity, the appropriate federal role is oversight. However, EPA will maintain an enforcement presence to deter violations of the microbial rules.

- EPA has targeted compliance with drinking water microbial rules and the nitrates standards within the Tribal national priority during the FY 2005 - FY 2007 period in recognition of the greater challenges for public water systems in Indian country.

Regions will maintain effective microbial rule compliance assurance by ensuring that resources previously devoted to the microbial rules priority are not redirected to activities outside the SDWA core work plan. At the end of the FY 2007, OECA will re-evaluate trends in the annual report on microbial SNCs to determine if the core drinking water commitments require readjustment.