



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

The Office of Inspector General received a Hotline complaint alleging that the State of North Carolina's National Pollutant Discharge Elimination System (NPDES) permits do not protect waters from harmful environmental effects caused by thermal discharges. We evaluated North Carolina's and Region 4's compliance with Clean Water Act (CWA) requirements for protecting surface waters from thermal discharges.

Background

Power and industrial facilities draw water from rivers and lakes to cool equipment and then discharge those cooling waters at a higher temperature back into those waterbodies. Either a state or the U.S. Environmental Protection Agency (EPA) may issue a variance under CWA Section 316(a) to allow facilities to discharge cooling waters at an alternative thermal effluent limit that is still protective of aquatic life.

For further information, contact our Office of Congressional, Public Affairs and Management at (202) 566-2391.

The full report is at:
www.epa.gov/oig/reports/2011/20110509-11-P-0221.pdf

Oversight of North Carolina's Renewals of Thermal Variances

What We Found

Region 4 has not adequately implemented management controls contained in its memorandum of agreement with North Carolina. Properly implemented controls would assure EPA that NPDES permits would comply with the CWA and applicable federal regulations. In four of the six draft permits we reviewed, Region 4 did not agree with the North Carolina Division of Water Quality that there was sufficient information to support the draft permit limits for temperature. Region 4 requested that the state add conditions to the final permits so that information could be collected to determine whether the thermal limits harm aquatic life. The two other draft permits we reviewed either did not contain a thermal variance request, or the region never commented on the thermal variance. We also found that the state limited the public's opportunity to review information and comment on these variances by not following regulatory requirements for developing complete permit fact sheets and public notices.

Due to procedural lapses by the North Carolina Division of Water Quality and Region 4, it cannot be determined whether waters are protected from harmful environmental effects caused by thermal discharges. The state and Region 4 will not make further determinations on the thermal variances until these facilities request NPDES permit renewals. As a result, until 2015, these facilities will continue discharging heated waters as allowed under their current permits and thermal variances.

What We Recommend

We recommend that the EPA Regional Administrator, Region 4, enforce the management controls of the NPDES memorandum of agreement; verify that thermal variances are protective of a balanced, indigenous population; and verify that permit fact sheets and public notices comply with federal regulations. The region agreed with our recommendations. We agree that their actions meet the intent of the recommendations.