

All Employees Contribute to Environmental Compliance

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Knowing and complying with all environmental and regulatory requirements are daily responsibilities for each employee of South Mississippi Electric. Tremendous strides are being taken across the Association to maintain a culture of compliance for all requirements that ultimately affect each aspect of the organization's operations.

"Environmental compliance has become an important business function across the electric utility industry," said Joey Ward, environmental affairs and fuels director. "The Board of Directors and employees of South Mississippi Electric have embraced the same responsibilities to maintain full compliance with all regulations and standards."

The entire environmental group – including Ward, Hank Sossaman, environmental data coordinator; Rod Rogers, results engineer at Plant Morrow; and Alex Howard, results engineer at Plant Moselle – meets regularly to discuss the status of federal environmental regulations. Due to the nature of the issues, federal regulations change often, as do the detailed reporting requirements associated with the regulations.

"All of us have a responsibility to keep each other informed," Ward said. "As the regulations change, we all must work together to plan and carry out compliance efforts. We receive a daily copy of the Federal Register, an archive of all federal changes. These, along with updates from NRECA, allow us to stay current on changes and additions issued by the federal government on standards that are relevant to our compliance standards."

Howard and Rogers work with each section at their respective plants to gather the environmental data required by state and national agencies, including Environmental Protection Agency (EPA), Mississippi Department of Environmental Quality (MDEQ), Rural Utilities Service (RUS), U.S Army Corps of Engineers, U.S. Fish and Wildlife Service, and Mississippi Department of Archives and History. SME's environmental requirements include air and water control, solid and hazardous waste disposal, and oil spill protection.

For air quality control, the plants follow guidelines outlined in Title V of the Clean Air Act. According to the EPA website, the goal of the operating permit program is to streamline air pollution regulations by consolidating all air pollution control requirements into a single, comprehensive "operating permit" that covers all aspects of a source's year-to-year air pollution activities. Title V permits must be renewed every five years.

Solid wastes from Plant Morrow include any by-product from the combustion of coal – fly ash, bottom ash, and scrubber by-products. Procedures are also in place there for waste disposal, including household items, industrial items (used oil, paint, cleaning supplies, etc.), occasional radioactive waste, electronic devices, and other items.

"Properly disposing of wastes requires some investigation and thought," said Rogers. "The key is to choose materials from the beginning that will minimize the plant's hazardous wastes. We have procedures in place for disposal of most items, and employees usually ask someone before disposing of questionable items. Employees also receive updates on proper waste disposal."

Other requirements for the plants include water discharge permits, storm water pollution prevention, spill prevention, and wetlands management. Plant Moselle is also responsible for all operation and compliance efforts at Sylvarena, Silver Creek, Benndale, and Paulding.

Additionally, Plant Morrow must meet requirements related to the landfill and the cooling tower blowdown pond dam, which is considered a high-hazard dam by the MDEQ due to its close proximity to Black Creek.

The cooling tower blowdown pond dam is regulated per the Mississippi Rules for Dams. Water from the cooling towers, as well as water from other plant sources flow to the blowdown pond, where it is monitored as per the National Pollution Discharge Elimination System (NPDES) permit, before being discharged into the Black Creek. Black Creek eventually empties into the Pascagoula River in northern Jackson County.

Howard and Rogers compile environmental data into several reports that are sent to Sossaman, who is responsible for formatting the reports for submission to the environmental regulatory agencies. "Environmental reporting requirements vary with each aspect of our compliance responsibilities," said Sossaman. "Some standards require monthly reports, while other reports are submitted only every six months. The process is continuous, and there is a lot of data to manage; but with cooperation from each facility, we are able to stay ahead of the curve."

The EPA recently announced that six greenhouse gases – including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – pose a danger to the environment and the health of Americans, and that the agency would start drawing up regulations to reduce those emissions.

The Clean Air Act set low thresholds for regulation that opponents argue would require rules for everything from laundries to office buildings, from cow farms to coal plants. But the EPA said it would impose new rules only on large factories, refineries, power plants and other facilities emitting more than 25,000 tons a year of carbon dioxide.

"Emissions monitoring is one of the largest environmental efforts that we have," said Howard. "We already measure and record CO₂ emissions with our current emissions monitoring systems. The EPA has provided emissions factors to calculate for the remaining gases. We will continue to accurately monitor our emissions and make the appropriate plans to meet any new regulations that are headed our way."

Another environmental issue that appears to be coming in the near future will be the EPA's review of waste water discharge guidelines. As power plants add controls for air pollution, the EPA is mindful that what may be taken from the air could end up in the waste water discharge.

"This issue is something that will affect us eventually," said Howard. "As with any new or modified regulation, we will continue to meet the standards that are currently in place, knowing that additional requirements can be expected in the near future."

To involve employees in environmental compliance, the environmental affairs group has begun implementing "Take 2" into monthly safety meetings. The results engineers at the plants are given a few minutes in each meeting to highlight environmental issues and to discuss the environmental effects associated with any upcoming projects.

“The Take 2 program is new,” said Rogers, “and we expect it to be an effective way to keep the employees informed of plant environmental issues. We also encourage the employees to take two minutes before performing a task to consider the environmental effects associated with that task. Environmental compliance is complex, so we are doing what we can to educate employees on its importance in every aspect of what they do.”

“The corporate emphasis on environmental compliance has resulted in a more systematic and coordinated effort across the Association,” said Ward. “The environmental affairs group is taking the necessary steps to ensure complete compliance at all of South Mississippi Electric’s facilities.”