

Government Steam Plant Streamlines Environmental Permitting and Compliance



Challenge

The plant wanted to ensure compliance with relevant laws and regulations, including environmental protection and energy reduction requirements, and efficiently manage the heating and cooling costs for the buildings it serves.



Solution

Trinity partnered with the plant to perform a wide range of environmental compliance and permitting activities.



Result

By working as an extension of the plant's team, Trinity has reduced the number of annual Title V deviations from hundreds to less than 10 and has helped the plant enable continuous improvement.

A government steam and chilled water plant committed to planning for the future keeps abreast of the latest technologies and solutions available to save energy, reduce environmental impacts, and maintain a reliable source of steam and chilled water for the buildings it serves. The plant has engaged Trinity since 2008 for a wide variety of continual compliance activities that span air, oil pollution, waste, and water programs. Trinity has helped the plant with quarterly, semi-annual and annual reports and permits for new equipment; filing of environmental records; auditing of environmental programs; tracking of environmental compliance, weekly inspections and review of sampling; conducting emergency drills, annual trainings, and more.

Challenge

Government agencies and facilities must conduct specific activities, maintain certain records, and submit reports in accordance with state and federal environmental regulations, including the U.S. Environmental Protection Agency (EPA) as well as Title V of the 1990 Federal Clean Air Act Amendments, which requires each state to develop a comprehensive operating permit program for major industrial sources of air pollution. The plant management team also wanted to help reduce the costs associated with heating and cooling the facilities it serves.

Solution

While Trinity was initially engaged in 2008 to help with air quality compliance, the partnership has since expanded to a wide range of environmental compliance activities, with Trinity serving as an extension of the plant's team and helping ensure continual compliance with a variety of activities.

- ▶ **Clean air:** Trinity prepares the quarterly, semi-annual, and annual air reports required by the plant's Title V permit as well as the greenhouse gas and New Source Performance Standard (NSPS) reports required by the federal government. Trinity also helps prepare the Title V operating permit renewal applications and permits to construct applications for changes to the plant, including the permit application as well as review and negotiation of the air construction permits for new plant equipment. In addition, Trinity conducts quarterly audits of refrigerant records and has prepared and maintains the plant's ozone depleting substances (ODS) and refrigeration management plan.
- ▶ **Oil pollution prevention:** Trinity wrote the plant's Spill, Prevention, Control and Countermeasure (SPCC) plan and continues to maintain it; we also provide required annual training for the plant's employees. Trinity team members also conduct weekly SPCC tank inspections and work with the plant's teams to minimize spills and implement corrective actions.
- ▶ **Waste management:** Trinity performs weekly inspections to address waste accumulation requirements at the plant, advising the plant on when waste should be shipped offsite. We also prepared the plant's waste management plan and continue to maintain it and provide annual waste training.
- ▶ **Water pollution prevention:** Trinity helped develop and implement the plant's slug control plan as part of its wastewater permit and stormwater pollution prevention plan. We also prepare renewal applications for the plant's wastewater discharge permit; attend annual compliance inspections with the agency that oversees the plant's wastewater operations; prepare monthly water reports; review results of wastewater and stormwater sampling; and conduct weekly inspections of all stormwater drains.
- ▶ **EMS:** Trinity also helped the plant develop and implement an environmental management system (EMS) at the site in accordance with ISO 14001 standards. Trinity provides annual EMS awareness training at the site as well as recorded training offered on demand.
- ▶ **Ongoing safety programs:** Trinity developed a safety checklist program for monthly checks of all safety equipment (e.g., fire extinguishers, exit signs, and emergency lights) and created evacuation maps for the plant. Trinity also wrote the plant's Hazard Communication (HAZCOM) policy, conducts annual chemical inventories, assists with chemical labeling activities, and provides annual HAZCOM awareness training. In addition, we maintain the plant's emergency action and response plan and provide annual training on this plan along with conducting monthly emergency trainings and drills.

Result

Since engaging Trinity, the government steam plant has successfully improved and streamlined its compliance activities. As a plant operating under a Title V permit, it must report the number of deviations from current permit conditions; working with Trinity, the plant's deviations went from hundreds to less than 10—an important metric for a government building whose operations are monitored closely by the media as well as environmental watchdogs. Trinity's team also helped the plant eliminate all ozone-depleting substances from its refrigeration equipment as well as significantly reduced deviations for that equipment.

Perhaps most significantly, Trinity has also helped the plant go beyond mere compliance and move toward greener, more energy-efficient operations and equipment, with the Trinity team receiving numerous accolades from site leadership for its “professional, reliable, and honest work” that enables the plant's environmental compliance team to do twice as much as it would otherwise be able to do. From facilitating construction permits to instituting processes that help employees work more efficiently and effectively, saving taxpayer dollars, Trinity has served as an integral partner to the government plant in its journey of continuous improvement.