

Representative Title V Applications

CLIENT: Welding and Cutting Products Manufacturer

This South Carolina facility manufactures numerous components and full products for high-end welding and cutting machinery. Onsite sources include multiple coating operations for metal and plastic components, solvent degreasers, electroplating, plastic molding, combustion sources, and numerous particulate sources. Due to large HAP emissions, the plant is a major source, and our engineers developed the complete Title V permit application for the facility. This included alternative operating scenarios and compliance plans for two MACT regulations to which the plant was subject. During the Title V application process, we developed several recommendations for reducing HAP emissions that would reduce emissions to a point where the plant would not be subject to Title V, or to requisite MACT regulations that apply to major sources. Because of operational requirements at the time, and the testing needed for process changes, the plant was not able to make changes prior to the Title V application due date. Subsequently, the plant adopted a product substitution and LEAF was able to prepare a reclassification request to a small source.

CLIENT: Utility and Steam Host Utilizing Multiple Renewable Solid Fuel Boilers

These North Carolina facilities operate boilers for the generation of electrical power with the combustion of biomass, tire derived fuel, and coal. LEAF was retained by the facilities to coordinate compliance with the Major Source Boiler MACT, address future fuel mixture changes, simplify the operating permit, and evaluate methods to avoid PSD review. LEAF submitted applications for each facility to address ongoing issues. LEAF coordinated stack testing and continuous monitoring of pollutants with representatives at the plant, representatives of the NCDEQ, and stack testing companies to ensure testing was accurate and completed prior to the compliance deadline. LEAF also worked with the facilities to ensure operational parameters and fuel mixtures were acceptable for testing and future compliance with emission limits.

CLIENT: Large Lumber Mill with Wood-fired Boilers and Direct-Fired Kilns

This Virginia lumber mill produces southern yellow pine kiln-dried dimensional lumber. The facility approached LEAF about installing a new direct-fired continuous kiln at their facility. The installation of the new kiln resulted in pollutant emissions in excess of Title V emission thresholds and also triggered an air toxic review and modeling demonstration. LEAF worked with the client to ensure an operating permit was in place prior to installation of the kiln. Dispersion modeling of air toxics from the kilns and boilers at the facility were completed prior to operating the continuous kilns. LEAF prepared a detailed emission inventory, a determination of applicable requirements, the compliance assessment and statement, and all monitoring, recordkeeping, and reporting requirements. LEAF also provided electronic tracking logs to ensure compliance with permit limits.

CLIENT: Furniture Manufacturer

This large manufacturer of wood furniture has numerous coating, gluing and other sources that result in the facility being a Title V major source. Because the facility is subject to the furniture MACT, a thorough evaluation of MACT compliance options was made at the time the Title V application was being developed. Projected changes in operation and concomitant source reductions were addressed, and the application developed to provide as much flexibility to the plant as possible when the permit is issued. Source reduction techniques were also addressed to reduce potential compliance problems with the state air toxics regulations. As with all other Title V applications, we developed a detailed emission inventory, a determination of applicable requirements, the compliance assessment and statement, and all monitoring, recordkeeping, and reporting requirements.

CLIENT: Plastics Components Manufacturer

This facility, which produces plastic components for numerous commercial and industrial customers, is a Title V facility due to coating operations. Our engineers worked closely with plant management to identify all emission sources and anticipated business needs over the projected five year permit period. Possible impacts of future MACT regulations and Section 112(r) requirements were also assessed. Our staff then developed the emissions inventory and conducted all of the required evaluations to prepare the Title V application. The project included a complete compliance assessment, determination of applicable requirements, compliance statement, recommended monitoring, and recordkeeping and reporting requirements.

CLIENT: Plastics Components Manufacturer

This facility, also a Title V plant, included possible NSPS sources and was subject to the North Carolina air toxics regulations. A major challenge in developing this Title V application was identifying future plant business operations, since the facility's production is customer driven. Numerous coatings and possible plastic molding changes were considered, and HAP compliance evaluated. Our engineers developed emissions data and prepared a complete Title V application package, including a full compliance assessment as well as monitoring, recordkeeping, reporting, and applicable requirements determination. Sources included molding operations, coating operations, gluing operations, particulate matter from machining, and combustion sources.

CLIENT: Textile Dyeing and Finishing Facility

For this facility, our engineers conducted a comprehensive site evaluation and developed a complete emissions inventory for actual and potential emissions. LEAF then evaluated all emission sources to determine Title V applicability with respect to criteria pollutants and HAPs. Operational data was thoroughly evaluated to ensure proper applicability of each emission unit. We carefully analyzed each source to ensure that true potential was calculated, and so that no unnecessary sources might be included in the CAM monitoring requirements. The plant includes numerous fuel burning sources, including PSD and large industrial boilers. Several alternative operating scenarios were developed to minimize operating restrictions prior to operation of new boilers. Our engineers prepared a complete Title V application for the facility, which included emissions data and information, a full compliance assessment and compliance statement, and monitoring, alternative operating scenarios, recordkeeping and reporting requirements.

CLIENT: Textile Greige Fabric Manufacturer

For this facility, engineers conducted a comprehensive site evaluation and developed a complete emissions inventory for actual and potential emissions. All emission sources were evaluated to determine Title V applicability with respect to criteria pollutants and HAPs. In addition to the technical considerations for the permit application, we carefully evaluated possible future business needs, operational changes that could occur, and plant modifications to ensure that the Title V application would be designed for maximum flexibility for the plant. In addition to operations/production related processes, the facility contains large industrial boilers. Our engineers prepared a complete Title V application for the facility, which included emissions data and information, a full compliance assessment and compliance statement, and monitoring, recordkeeping and reporting requirements.

CLIENT: Cigarette Manufacturer

LEAF engineers prepared a complete emission inventory, which included the development and evaluation of numerous emission factors. Working with the client, we evaluated potential future changes against existing plant and ensured that the Title V application addressed any known future changes, thus minimizing the need for future permit revisions. Onsite sources include numerous combustion sources in addition to printing and production/operations emissions units. The complete Title V application was prepared, including the determination of applicable requirements, a compliance assessment for state only and Title V requirements, and the monitoring and recordkeeping/reporting requirements. MACT requirements were evaluated as part of the compliance assessment.

CLIENT: Knit Fabrics Finishing Facility

This facility dyes and finishes knit fabrics, and is a Title V source due to criteria emissions from its onsite boilers, but is not a major source for HAPs. Our engineers worked with the facility to develop a “split-Title V permit” application. The plant is Title V for criteria pollutants only, and is a non-major source for HAPs. In this way, they are able to avoid MACT applicability for future MACT regulations. We prepared the application to reflect this strategy, and recommended periodic monitoring to assure the synthetic minor status for HAPs for purposes of Section 112 compliance, so that the facility need not be subject to requirements for major source under Section 112 of the Clean Air Act. As with all other Title V applications, we developed a detailed emission inventory, a determination of applicable requirements, the compliance assessment and statement, and all monitoring, recordkeeping, and reporting requirements.