



Liberty Environmental secures air-quality permit for project in PA

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Reading, PA Liberty Environmental (Liberty), with offices in New York, New Jersey and Pennsylvania, provides a broad range of air quality consulting assistance for voluntary “greenhouse gas abatement” projects including coal mine methane projects. These are voluntary projects that produce “carbon credits” which are valuable (in this case funded by California climate change programs) because they reduce emissions of greenhouse gases (GHG) by capturing and controlling methane emissions from coal mining operations.

In September 2024, Liberty secured an air quality construction permit in Pennsylvania for one of the largest single carbon offset projects in the U.S. – the installation of an RTO oxidizer to abate VAM emissions from an underground coal mine located in southwestern Pennsylvania.

Coal mines require large ventilation air methane (VAM) systems to maintain safe underground hygiene conditions, and these VAM exhausts are large sources of methane emissions. By installing multiple highly efficient regenerative thermal oxidizers (RTOs) on a large VAM exhaust, this project will achieve one of the largest reductions in greenhouse gas emissions achieved in the U.S. from a single methane abatement project.

Liberty has also provided air permit assistance for other, smaller, coal mine voluntary methane abatement projects, notably installation of flares to control coal mine borehole methane emissions. These are relatively small exhausts that have high methane concentrations, and that can be controlled by small enclosed flares instead of large oxidizers. Liberty has prepared air permit exemptions for these projects and in 2023 participated in the development of the current General Permit (GP-21 for “Coal Mine Methane Enclosed Flare”) that is now used in Pennsylvania to streamline air permitting for these projects.

Liberty’s permitting efforts included preparation of air emissions inventories, evaluating “best available technology” (BAT) for air pollution control options, and negotiating an air permit for the one of the largest VAM methane control projects in the U.S., which we believe will encourage future development of similar projects.

Note that PA DEP recently announced guidance for their Reducing Industrial Sector Emissions in Pennsylvania RISE PA program which identifies fugitive emissions reduction technologies at coal mine VAM exhausts as eligible projects for federal funding.

Liberty's air permitting services extend to a wide variety of industrial sources including building products, metal parts fabrication and surface coating, fabric and vinyl coating, cleaning products and chemicals, recycling, and wood products. Liberty's climate and sustainability services include greenhouse gas (GHG) emissions inventories, mandatory US EPA Part 98 GHG reporting, voluntary GHG reporting through the Carbon Disclosure Project (CDP), and carbon credit project evaluations.

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