

COAL MANAGEMENT

EPA's 40 CFR 98 regulation has been in effect since January 1, 2011. Active underground coal mines monitored for methane must monitor and report emissions.

ARE YOU READY TO MONITOR AND REPORT?

Recent rulings by EPA under the Greenhouse Gas Reporting Program (GHGRP) have determined that active underground coal mines monitored by the Mine Safety and Health Administration (MSHA) for methane must monitor and report emissions. These EPA GHG methane sample requirements contain additional parameters that are not captured via the MSHA samples, requiring mining companies to track and report new data. The power generation industry has already experienced similar monitoring requirements and has since been subject to reduction programs at a great cost.

DEVELOP A STRATEGY AND MANAGE RISKS

Enviance provides a platform designed to help the mining industry with developing a strategy to manage risks and potential costs in the face of future regulations. Keeping up with ever-changing environmental regulations is a daunting task. CH2M HILL and Enviance can take the guess work out of the equation and provide a sustainable solution for your company's GHG reporting requirements.

The Enviance platform features:

- Centralized database to enter, consolidate and store emissions data
- Robust, powerful emissions calculator to derive GHG emissions
- Organizational entity hierarchy and reporting to accommodate your unique business needs
- Anytime, anywhere access to emissions data and reports online
- Easy benchmarking, including progress toward reduction goals
- Standardized reporting for multiple programs, regulations and organizations coal

EPA'S 40 CFR 98 AT A GLANCE

EPA's regulation has been in effect since Jan. 1, 2011 and requires applicable facilities to report:

- Quarterly methane liberation from each ventilation well or shaft, and/or each centralized monitoring point
- Weekly methane liberated from each degasification system and/or centralized monitoring point
- Weekly methane destruction from each destruction device at point of offsite transport
- Quarterly CO₂ emissions from coal mine gas methane destruction where the gas is not a fuel input for energy generation or use
- Annual CO₂ and N₂O emissions from stationary fuel combustion devices

Note: The samples taken by MSHA are insufficient in providing the necessary parameters required to report for the EPA.

ACCURATE AND VERIFIABLE DATA

Most companies today generate high-level estimates of their GHG emissions. But with recent steps taken by government agencies, estimates are not enough. Enviance enables standardized GHG emissions accounting and quantification

methodologies that allow accurate and complete emissions inventory across the entire organization. Without a comprehensive Environmental ERP system like Enviance, it would be virtually impossible to track such large amounts of information. Many sustainability software providers simply aggregate data once it has been manually fed into the system. But drilling down and reporting on inaccurate data is pointless. Verifiable data comes from operational data. Enviance provides compliance-level data that is auditable and can be used for multiple purposes. The Enviance Environmental ERP system provides a closed-loop process from data capture through to reporting by leveraging a compliance engine that enables one system to be used to both gather and verify data. As a result, the delivery of data—when using Enviance—is an auditable process derived directly from the business requirement. In addition to flagging errant data, the Enviance System verifies the data as part of an auditable process. In an era of increased efficiency needs and reduced workforces, Enviance collects and verifies data, allowing personnel to spend their time analyzing data—not wasting time collecting and verifying it.

GHG FAST TRACK WITH ENVIANCE

Enviance's GHG Fast Track is a turnkey GHG solution to comply with EPA's mandatory reporting requirement featuring:

- Best practices related to sampling to ensure risk mitigation for EPA Reporting
- Pre-configured calculation models for Part FF (Specific to Coal mining EPA GHG rule)
- Automated electronic reporting capabilities (Bypass learning EPA's EGGRT process)

CH2M HILL AND ENVIANCE CAN HELP

Together, CH2M HILL and Enviance have delivered GHG solutions to some of the industry's largest companies, automating data collection and reporting to applicable regulatory agencies. We are able to provide custom built

interfaces designed according to your specifications allowing for a level of integration not possible with off-the-shelf solutions. We will deliver a state-of-the-art system that can grow with your company's ever-changing compliance needs.

We can help you:

- Develop a strategy to put control of data with the mines
- Establish a monitoring plan that is consistent across facilities
- Ensure quality assurance/auditing capabilities related to compliance
- Establish proven calculations that are consistent across all facilities
- Create a process for taking multiple samples and retaining records
- Capture all relevant data
- Have electronic storage of data (useful for tracking and trending)
- Report to EPA based on strategic determinations developed to minimize current and future risk
- Report electronically

ENVIRONMENTAL ERP

Environmental ERP meets the unique and evolving business need to measure, understand, report on and mitigate a company's impact on the environment—providing a comprehensive understanding of environmental performance within the broader business context.

Based in Carlsbad, California, Enviance is a leader in cloud-based Environmental, Health and Safety (EH&S) software, leveraging cloud computing technology to deliver its platform online in real-time—anywhere, anytime and enterprise-wide. Deployed by some of the world's leading corporations and governments, the company's solutions enable organizations to better measure, manage and report mission-critical EH&S data.

See why EH&S success starts with Enviance at enviance.com.