

▶ **THE EMISSIONS TRIFECTA:
Combining Title V, Air Emissions
Inventory and GHG Reporting**

White Paper

▶ Enviance



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With greenhouse gas (GHG) and other pollutants meeting increased scrutiny worldwide, governmental agencies have put multiple regulations and environmental programs in place to tackle this growing problem. But effectively tracking and managing data for Title V, an air emissions inventory and the EPA's new mandatory GHG reporting rule can prove to be overwhelming for companies, consuming significant time, personnel and budget resources.

Many companies are maintaining multiple systems and spreadsheets to collect, manage and report data for these various regulatory programs. Fortunately, however, there is a way to centralize all emissions information into one system, enabling companies to streamline their operations and data collection, while saving time and money –

and the result is increased environmental compliance.

Title V Work Activities: Out of Sight, Out of Mind

With the introduction of the Title V permit program and its certification requirements, much of the responsibility for compliance has shifted to the operations personnel. The threat of fines or jail time for non-compliance has increased involvement within operations, with the responsible official now accountable for certifying potentially thousands of permit conditions and federally enforceable regulations.

While the emissions portion of Title V permits can be relatively straightforward – companies are either above or below the permit limit – the work activities necessary to demonstrate compliance are more problematic.

For many companies, it's the work activities required for each permit that prove difficult to identify, manage and document. If the work activities aren't completed, however, companies can be found out of compliance. This is where a centralized system for compliance task management and emission tracking becomes invaluable.

Centralizing Title V Compliance

An air emissions management system enables companies to clearly identify and document necessary work activities and assign them to the appropriate plant

personnel who are then responsible for completing the tasks. Calculations are also kept in one central location, which means that the system can quickly and automatically provide updated calculation results with any new calculation or data point.

As a result, the system automatically checks a company's emissions data against the Title V limits, noting any potential exceedances which flag those potential deviations and send notifications to environmental personnel for further investigation and final determination as a Title V deviation or not.

By centralizing Title V data, companies benefit from a comprehensive inventory of compliance activities, which can easily and automatically be assigned to responsible users and groups. Developing a register of necessary activities – and discovering gaps – does involve an initial investment of time, however, this is a requirement of Title V. The investment leads to better compliance with far less effort over time. For example, a calibration typically involves activities such as documenting the process, completing the readings and making copies for the permit application. With a centralized system, the information is stored indefinitely once it enters the system. No more time is wasted searching for old files and documents, making copies, or worse – reinventing the wheel.

Combining Title V and Air Emissions Inventory

Creating and reporting an emission inventory is another responsibility of companies and related to Title V permitting. Typically submitting an emission inventory is a permit condition in a Title V permit. There is some overlap of data between the programs in that some of the same emissions tracked and reported in a Title V permit are required to be submitted as part of the emission inventory.

Many companies track and calculate Title V permit data and emissions inventory in different systems or spreadsheets. This creates additional work, requiring more labor and resources. One centralized system can provide the required calculations for both programs – companies don't need to maintain or perform two sets of calculations.

In addition to providing the required calculations, a centralized system can also assign and manage the work activities necessary for an emission inventory. Ultimately, this affords companies more savings as they're able to directly leverage their data against what is needed for Title V.

GHG Reporting – Completing the Trifecta

The EPA recently instituted mandatory GHG reporting, which requires that specific industries or facilities that emit over 25,000 metric tons of CO₂e need to track greenhouse gas emissions this year. Under the new requirements, nearly 85 percent of all GHG emissions will be accounted for.

A facility may be subject to the reporting requirements through one of four

mechanisms: source category, emissions amount/source type, stationary fuel combustion/emissions amounts, and suppliers of fuels, industrial GHGs and CO₂. The requirements mandate that companies provide extensive information and documentation, such as including the following mandatory records in their report:

- A list of all units, operations and processes for which GHG emissions were calculated
- Supporting data for each unit characterized by fuel or material type:
 - The GHG emissions calculations and methods used
 - Analytical results for the development of site-specific emissions factors
 - The results of all required analyses for high heat value, carbon content and other required fuel or feedstock parameters
 - Any facility operating data or process information used for the GHG emission calculations
- Annual report
- Missing data computations
- Written GHG monitoring plan (April 1, 2010)
- Results of all certifications and QA tests
- Maintenance and calibration records

- Three year record retention (electronic records are allowed)

In addition, the GHG Reporting Rule requires additional mandatory information from different types of reporters. For example, emitting facilities need to also include data about annual emissions, excluding biogenic CO₂, aggregated for all GHG from all applicable source categories in certain rule subparts and expressed in metric tons of CO₂e. In addition, annual GHG emissions for each of the source categories located at the facility need to be supplied, by gas. Activity data, such as fuel use and feedstock inputs, used to generate emissions data and additional data to support quality assurance or quality control, and emissions verification should be provided.

In addition to the reporting requirements, all reporting facilities and suppliers must maintain specific mandatory records at their facility and make them available for inspection upon request by the EPA. The recordkeeping requirement includes such items as supporting data for each unit characterized by fuel or material type, including the GHG emissions calculations and methods used, analytical results for the development of site-specific emissions factors and missing data computations, among others.

Centralizing the Pieces

As you can tell, the EPA's Mandatory GHG Reporting Rule – as well as many of the

other regulatory environmental programs – requires an extensive amount of verifiable data and documentation. It could be nearly impossible to track the information necessary for the EPA’s new rule and develop the required reports without a comprehensive system to help guide companies through the process and store information in a centralized, secure location – much less the added work and burden of tracking and reporting the data required for Title V and the emissions inventory.

Some of the information needed for the GHG reporting rule, however, may also be needed and utilized for maintaining an emission inventory or acquiring a Title V permit. Why should companies waste precious resources tracking this information separately, using multiple systems and spreadsheets? Streamlining emissions data into one comprehensive, centralized system that has been designed to capture and report the data required for a variety of different regulatory environmental programs saves companies time, money and personnel.

Conclusion

Companies are scrambling to meet the rapidly evolving emissions permitting and reporting requirements. By centralizing their emissions management function into one centralized system that has been uniquely designed to meet the various emissions requirements, companies can eliminate the archaic process of maintaining multiple systems and spreadsheets. Instead,

companies can achieve greater cost savings, more easily attained compliance, and have greater confidence in their data and reporting by using one system to meet the organization’s entire emissions management needs.

About Enviance

Enviance is the leading provider of Environmental ERP software. With more than a decade of experience providing environmental data management and expertise, Enviance’s proven system is used by the world’s largest corporations and government agencies.

Enviance maintains deep domain expertise in EHS management and technology, and has more than 17,000 users in more than 49 countries, including American Electric Power, Arch Coal, Chevron, CH2M Hill, Dimension Data, DuPont, Freescale Semiconductor, Fujifilm, Georgia-Pacific, Los Angeles World Airports, Pfizer, Syngenta, and the U.S. Army. [Full customer list](#). Industry leaders have used Enviance to streamline GHG management since 2006.

For more information, visit:

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