

▶ **Read Between the Lines:
Understanding the EPA Verification
of GHG Reporting**

White Paper

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On October 29, 2009 the Environmental Protection Agency (EPA) issued its Greenhouse Gas (GHG) Reporting Rule, which requires collection and reporting of GHG data beginning January 1, 2010. The GHG Reporting Rule requires that specific industries or facilities that emit over 25,000 metric tons of CO₂e needed to start tracking greenhouse gas emissions in 2010. Additional industries are required to collect and report on emissions in 2011. The EPA estimates that nearly 85 percent of all domestic GHG emissions will be accounted for through these reporting processes.

The federal government's introduction of the mandatory GHG reporting program and its unprecedented subsequent rules and announcements regarding GHG emissions control have drastically transformed the environmental management landscape. The

EPA is now holding corporations – and the C-level executives that run them – accountable for the GHG emissions they produce. The GHG reporting rules are the information foundation upon which the EPA will base many of its future GHG regulatory actions, and mandating thousands of companies to track and report their carbon emissions – many for the first time – is not the only transformation the Mandatory Reporting Rule has incurred.

A closer look at the rule's reporting requirements finds that it is no longer enough to estimate and report environmental emissions data. For the first time within a reporting-only program, the EPA is also requiring submission of process and activity data (such as fuel use or feedstock inputs) that will allow remote verification of reported values. Previous large scale reporting initiatives (e.g., the Toxics Release Inventory, the Acid Rain Program) have required that companies keep records that will allow onsite inspectors to evaluate compliance with the reporting requirements.

This shift in EPA's approach to compliance means that auditable GHG data tracking and management has become a necessity at most reporting entities. This white paper explores this departure from previous EPA policy and what it means for businesses to successfully meet EPA reporting and verification requirements going forward.

Verification in the GHG Reporting Rule?

The EPA characterizes its approach on verification as “self certification with EPA verification.” They rejected the concept of 3rd party verification (as is required in California for AB-32) due to the high cost and the follow up it would have required for issuance of verification protocols and training. The EPA went to significant lengths to articulate its verification approach when the rule was issued on October 30, 2009. For example, it stated:

“EPA decided to finalize the rule with EPA emissions verification for several reasons. First, we determined that the combination of comprehensive electronic review and a flexible and adaptive program of on-site auditing will enable us to effectively target verification resources while also providing the necessary consistency and quality in the data. Utilizing the national data set developed under this rule will provide unique resources for the review of reports. A centralized emissions verification system provides greater ability for EPA to identify trends and outliers in data and thus assist with targeted follow-up review, and our approach can evolve over time as we gain experience with GHG reporting.”

The EPA also suggested that its verification approach for GHG reporting is consistent with such requirements as the Acid Rain Program (ARP). It is true that the ARP uses a self certification process through a designated representative for the facility, but

the ARP does not require submission of process and activity data to EPA for remote verification. Such data must be kept onsite and must be available for inspection.

While the EPA has recently issued a temporary stay on the reporting of certain data elements that might be considered confidential business information, it is clear the agency intends to move ahead with its plans to build a “national data set” in a “centralized emissions verification system”. EPA plainly states that it will use such data to perform “targeted follow-up.” In other words, if your data is an outlier, keep an eye on the front door and expect to hear the phrase “I’m here to help you”.

EPA Pushes the Envelope of Section 114 Authority

Section 114 of the Clean Air Act authorizes the EPA to require sources to submit reports, monitor emissions and certify compliance with the Act’s requirements, and authorizes EPA personnel to conduct inspections.

While Section 114 provided the legal authority for the EPA’s Mandatory GHG Reporting Rule verification requirements, this is the first time the EPA is actually requiring verification of reported values. In the past, the compliance point was about the data itself – not to verify calculations. In fact, emissions inventories submitted at the state level don’t require back-up information, only that companies keep a record.

The EPA's departure from simply a recordkeeping approach has evolved into a data submission for verification approach and is the continuation of a 20 year trend of increasing transparency. With the introduction of the Mandatory Reporting Rule, the EPA is increasing the transparency not just of emissions numbers but emissions calculation methods.

The Data Management Burden

The GHG Reporting Rule – and the increased focus on verifiable data – has increased the data management needs of every company subject to the rule. Businesses can no longer just submit numbers. They need to meet the calculation verification requirements. In essence, the Rule has increased the need for an intelligent system to collect, manage, report and verify GHG emissions information.

Looking back on the Subpart C example, the calculation methods change depending on the frequency of data, requiring a frequency analysis. Comprehensive Environmental Enterprise Resource Planning (Environmental ERP) systems automatically perform frequency analyses to select the correct algorithm for calculation and reporting. As the calculations can change from year to year, Environmental ERP systems that automatically update and perform the accurate algorithms are placed at a premium.

The Risks and Consequences of Noncompliance

With the EPA's changing approach to recordkeeping and verification, the definition of noncompliance must be expanded to include lacking verification information and methods. And the consequences of noncompliance can be costly. The first year of the GHG Reporting Rule – reporting year 2010 – is expected to yield the equivalent of warning tickets. By reporting year 2011, however, monetary penalties are expected, in the range of \$25,000 per day.

But it's the internal costs that should cause companies the most concern. The biggest cost of noncompliance is the recalculation and defense effort to resubmit emissions data, not to mention the legal staff required to accompany such a project. In addition, the embarrassment factor is a significant risk, as no company wants to be the first poster child for failed emissions reporting.

Thinking longer term, however, companies need to consider how the emissions data submitted is going to be used for longer term GHG requirements. The EPA is building a database of emissions information to use to target industries for future GHG rules. In fact, proposed rules specific to the refining and utility industries have already been proposed. Data collected now supports future regulatory programs, so companies need to be careful what they submit.

Conclusion

The EPA has experienced a monumental shift in its data submission approach, transforming from a focus on recordkeeping to a data verification approach. Therefore, it is no longer enough to simply estimate and report environmental data. The EPA's requirement of verifiable reported values means that auditable GHG data tracking and management have become a necessity at most businesses. In order to successfully meet the EPA reporting and verification requirements, companies need an Environmental ERP system that can manage, measure and report emissions data that can be verified as required by the Mandatory GHG Reporting Rule.

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, Pfizer, Syngenta, Sempra Energy, U.S. Army, Chevron, Fujifilm, Conoco Phillips and DuPont. Industry leaders have used Enviance to streamline GHG management since 2006.

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