

Transforming Landfill Data Management with Project Portal: A New Era of Efficiency and Compliance

BY: HEATHER LITTLE, PG ON FEBRUARY 13, 2025



How Sanborn Head's Partnership with ddms is Revolutionizing Landfill Data Management

As regulatory scrutiny tightens and methane emissions become a focal point of environmental compliance (regulations 40 CFR 60 Subpart XXX, 40 CFR 63 Subpart AAAA, and 40 CFR 62 Subpart OOO), the landfill industry faces increasing pressure to adopt more efficient systems for data collection, reporting, and compliance management. This trend is closely tied to evolving ESG considerations in waste and recycling. The need for transparency to address stakeholder concerns about emissions and other environmental variables is at an all-time high. Against this backdrop, Sanborn Head & Associates has partnered with ddms to bring an innovative solution to the market: Project Portal®.

Project Portal® is a modernized evolution of landfill data management, tailored to meet the specific needs of landfill operators. This cloud-based tool combines Sanborn Head's landfill expertise with ddms' existing technology to address gaps in data management tools and incorporate GIS/mapping capabilities into the platform. It leverages ddms' robust system, designed specifically to collect, manage, and analyze environmental data with cutting-edge technology.

This blog explores the transformative potential of Project Portal®, highlights its key features, and discusses why it represents a game-changer for landfill management.

Key Data Features of Project Portal

Regardless of the level of compliance data a landfill must collect, all landfills can benefit greatly from Project Portal®'s automation, streamlined data processing, and advanced visualization capabilities. This comprehensive platform empowers landfill operators to efficiently manage their operations, improve regulatory compliance, and enhance decision-making with real-time insights.

High-Frequency Telemetry Data

What It Does:

Remote sensors collect high-frequency data on critical landfill metrics, such as flow rates, pressure, temperature, and liquid levels, as frequently as every 15 minutes. This data is automatically processed and sent to the Project Portal®, generating reports, charts, and dashboards accessible to both landfill operators and consultants like Sanborn Head.

Example:

The system can help identify abnormal gas flow rates to a landfill flare in real-time, allowing operators to respond more promptly and avoid prolonged downtime of flare operations. This intervention prevents further operational disruptions and can help avoid potential regulatory penalties.

Landfill Gas Wellfield Compliance Data

What It Does:

There is critical data to be collected from landfill gas collection and control systems, including methane concentrations being fugitively emitted from the landfill surface, applied vacuum data, and landfill gas temperatures, which must remain below 145°F to comply with EPA regulations. Sampling is essential, especially for high volumes (300+) of wells which must all be sampled at least monthly.

SANBORNHEAD.COM 1



With Project Portal®, operators can manage sampling schedules and results immediately, ensuring no wells are overlooked. The platform enables technicians to upload well and surface methane concentration data directly into the system, which then generates comprehensive reports, maps, and alerts to pinpoint wells or readings that exceed compliance thresholds. This ensures timely interventions, preventing operational disruptions and avoiding potential regulatory penalties.

Example:

A landfill operator used the system to identify methane emissions exceeding acceptable thresholds, enabling them to mitigate the issue promptly and avoid regulatory penalties while demonstrating proactive environmental stewardship.

Leachate Management

What It Does:

Project Portal® tracks real-time leachate tank storage levels, sump levels, and leachate flow rates. The platform enables operators to detect and track leakage between primary and secondary containment layers to improve regulatory compliance. Monitoring the level of liquid in a landfill sump helps operators maintain compliance with leachate level thresholds and can provide notification when a pump is not properly operating. Project Portal® can also generate early warning alerts to manage and prevent leachate storage tank overflows.

Example:

The system flagged increasing flow rates in a secondary containment layer, enabling operators to inspect and address a potential breach in the liner system before damage to the surrounding environment could occur.

Why Project Portal is a Game-Changer

Project Portal® represents a transformative leap in landfill management, offering tools and features that automate time-intensive tasks, enhance operational insights, and ensure regulatory compliance. By streamlining data collection and processing, Project Portal® reduces human error, freeing up teams to focus on strategic priorities. Its real-time visualization and alerting capabilities empower operators to stay ahead of industry challenges, from regulatory pressures to optimizing day-to-day operations. The following highlights the key ways Project Portal® delivers unparalleled value to landfill operators.

- Cost Savings & Improved Accuracy Through Automation:
 - By automating data collection and reporting, Project Portal® significantly reduces manual tasks, minimizes human error, and frees up resources for strategic planning.
- Real-Time Insights for Proactive Management:
 - With instant alerts and notifications, operators can address emission and other anomalies before they escalate into larger issues.
- Enhanced Data Visualization & Compliance:
 - Dynamic dashboards and GIS mapping tools simplify compliance reporting, ensuring landfill operators stay ahead of evolving regulations.

Conclusion

Discover how Project Portal® can revolutionize landfill management by visiting Sanborn Head's Project Portal page. Explore how this platform can streamline your data collection, compliance, and reporting processes, and stay ahead of industry changes.

For inquiries or a demonstration, contact Sanborn Head today at projectportal@sanbornhead.com and see why they remain a leader in innovation and landfill solutions.

SANBORNHEAD.COM 2