UK's Leading Waste Management Company and 30 Years of Data Management With MonitorPro

MonitorPro: The professional environmental sustainability and management solution, trusted by thousands of users worldwide.

Established in 48 countries with over 163,000 employees and millions of customers worldwide, the UK's largest waste management company has been operating in the United Kingdom since 1990 and has been using **MonitorPro** since 1996.

Pre-MonitorPro and the Limitations of Environmental Data Management Using Spreadsheets

Before implementing **MonitorPro** the environmental team were using spreadsheets to manage their environmental data to meet their environmental obligations at several landfill sites. This was becoming increasingly difficult due to the increased volume and complexity of collected environmental data, which included leachate and groundwater (with a range of variables including depth, ammoniacal nitrogen, Cl, SO4, conductivity, pH, BOD, COD and a range of metals), and gas (CO2, CH4, O2 and pressure), which was a result of changes to waste management regulations that required more extensive monitoring and reporting.

As the company acquired more landfill and waste transfer stations across the UK it was clear an automated system was required to manage, analyse and report their environmental data to meet their stringent compliance obligations.

"Data is collected from a number of operational and restored Landfill sites and is made up of both field readings and laboratory analysis. Much of it is collected to fulfil Environmental Permit requirements which are regulated by the Environment Agency (EA)".

Environmental Co-ordinator, Waste Management Client

Implementation and Solving the Environmental Data Management Problem with MonitorPro

In 1996 **MonitorPro** was implemented throughout the company. MonitorPro brought several advantages to the company's environmental data management and onward reporting and meant that when the Pollution Prevention and Control Act (PPC) and it's resulting regulations were implemented in 2000 the company was able to deal with these changes with ease.

MonitorPro continued to prove it's worth when the Environmental Permitting Regulations (EPR) came into force in April 2008, replacing the previous legislations of both the Waste (WML) and Pollution control systems (PPC) to provide a single environmental permitting procedure, to which several amendments have been made in 2010, 2012, 2015 and 2016. This increased the number of regulated activities which required monitoring and required the collection of significant amounts of data.

Automated importing of data into the MonitorPro's centralised database meant this increased amount of data management, compliance, analysis and reporting could be done simply and easily by the environmental team.

The Development of MonitorPro

MonitorPro has ensured environmental compliance has been successfully maintained over the last 30 years through the development of several key features:
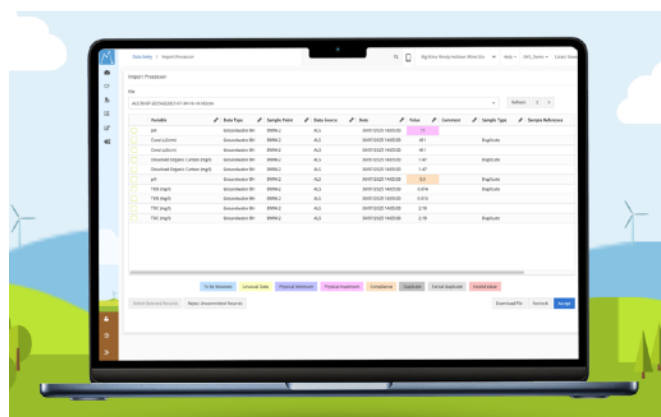
Centralised Secure Database

Field and laboratory data is automatically collected from multiple landfill sites and stored within one centralised database, removing the need for manual sharing of data between sites and users, where data can be lost or have delays in it being recorded.

Now the data is centralised it's easily accessible by key personnel and is used as the central source of truth to understand and report each landfill site's performance over time, a key component in monitoring the site's compliance against Permit conditions.

Automated Importing and Data Validation

MonitorPro has several routes for importing data automatically into the database, including the Importer API (data from generic data sources such as weather data, data loggers or weather stations, and lab data), an Email importer which removes the need for manually processing routine emails and eliminates the issues of employee absence, shared inboxes, and human error, and a database importer for the import of historical data (PI and SCADA).

This simplifies the import of data and reduces the time required to manipulate data for importation, meaning more time can be spent on analysing the reporting the data to ensure compliance with the companies Permits.
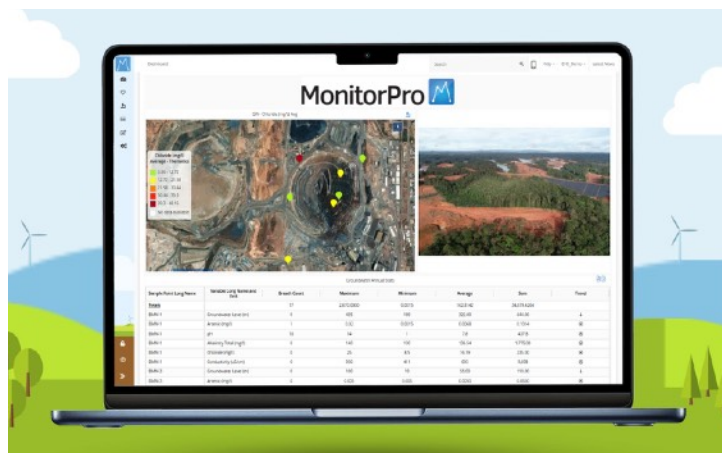
Data is also automatically validated during the import process, either for physical limitations, or compliance levels (often these are borehole or site specific). These levels are set for a variety of situations including ground/surface water quality, air quality, and soil gas concentrations. This ensures any abnormal results are flagged and held for approval before uploading to the database. Automated alerts are sent to key users to assess and fix any validation or compliance issues on import.

Customisable Dashboards

The environmental team utilise **MonitorPro's** dynamic dashboards which allows users to build dynamic reporting of their data utilising a variety of widgets. Several widgets can be used including reports, mapping, alerts, and graphing options. These dashboards are a fast and simple way to view data and observe trends and once created they can be quickly and easily shared among other stakeholders.

Dashboards can be set as a user's home screen and the data displayed is dynamically updated to include the latest data for a particular dashboard. This allows the environmental team to monitor and identify any issues quickly so that the necessary steps can be taken to resolve any issues.

Multiple Graphing Options

There are numerous graphing options available in **MonitorPro** including Pie, Bar, Combo, Polar, and Line Graph. These aid the environmental team identify any trends in their data, making it easier to set control/trigger level exceedances, and also include in annual reports.
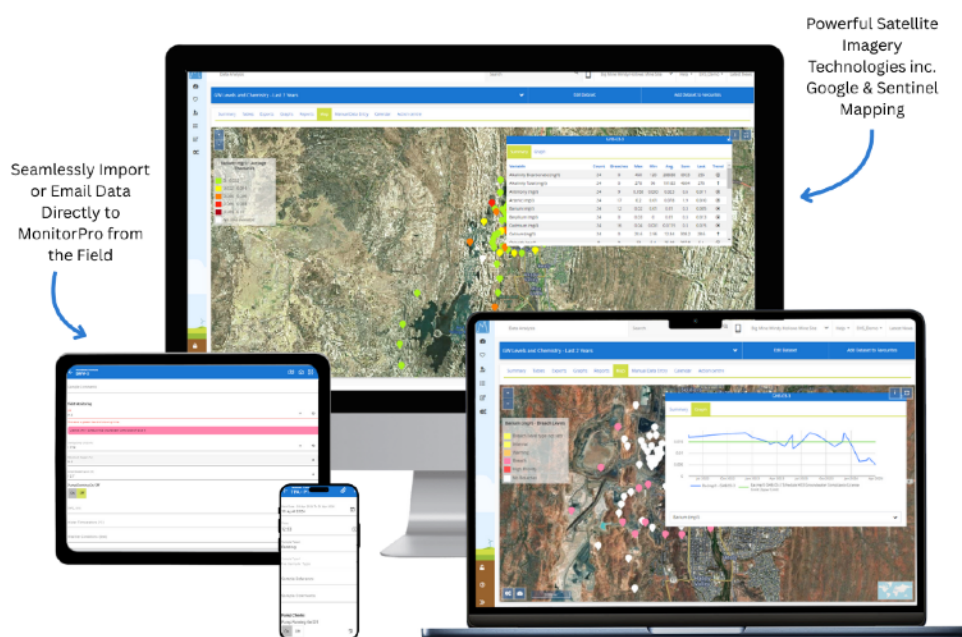

Automated Reporting

Using **MonitorPro** means reports and exports are now directly downloaded from the database, they can be automatically generated and sent to assigned contacts at a designated frequency which simplifies the collation of routine data submissions to the appropriate authorities, including the Environmental Agency (EA) and saves a significant amount of time.

The Future with MonitorPro

MonitorPro is used daily by 3 environmental teams across the UK. Each individual team is equipped with a database relating to their region and are consistent with the same reporting structure, dashboards and variables they need to stringently adhere to compliance regulations. Being hosted, their system is routinely updated to the latest versions, taking advantage of the latest **MonitorPro** innovations as technology and user requirements advance. This means they can focus on permit requirements of analysing and reporting data, rather than having to deal with system upgrades, or having to use software which is not continually developed alongside changes in reporting rules and regulations.

The experienced team here at **EHS Data** has worked closely with the company for the last 30 years to help them successfully and effortlessly manage their environmental data and is looking forward to continuing this journey for many more years.

Powerful Satellite Imagery Technologies inc. Google & Sentinel Mapping

Seamlessly Import or Email Data Directly to MonitorPro from the Field

"As reports can be directly downloaded from the database, this means there is very little effort required to collate the routine data submissions to the appropriate authorities, including the EA. The graphing function can also aid greatly with understanding trends when assessing control/trigger level exceedances or writing reports."

Environmental Co-ordinator, Waste Management Client