



## EHS Data Newsletter Q4 2011



### INSIDE THIS ISSUE

Welcome from Managing Director	1
Environment Agency goes live with new regulatory portal to	1
Rio Tinto Site at Richards Bay Minerals adopt MP5	2
MP5 version 7 released	3
Imperial Metals Mount Polley Mine adopt MP5	4
Bluescope Steel Improve Reporting for New South Wales	5
MP-Link, our new Outlook plug-in	6
Other news	7

### WELCOME TO THIS ISSUE OF OUR NEWSLETTER FROM MANAGING DIRECTOR PHIL ELY

Welcome to this edition of our newsletter  
This half year we have had a significant drive in product development:

- Improvements in MP5 (version 7 released)
- A new release of MP5.Web
- A new Outlook plug-in for sending data to the MP-5 auto importer
- Big improvements and enhancements for MP-IMS (Our browser based incident, audit and training records management system).

We will cover more on IMS in future issues of the newsletter but now have systems in both the USA and UK.  
Of particular note in this regard has been the recent work we have conducted with Viridor in the UK to build on their ability to share their data with the regulator. This project changes both the mechanism and culture of regulation as well as leading to a reduction in costs and time for both the regulator and the regulated (see below for further detail).

Overseas we are now working with a number of new clients in North America and Africa. This has meant our staff have again spent significant periods of time out of the country helping clients with installs, training and bespoke consultancy. Before the end of the year we are planning further trips to Australia, Namibia and North America. If you feel you would like a visit to help you make the most of your EHS data system feel free to contact us (details on the left).

### Contact Details

EHS Data Ltd.,  
Newark Beacon  
Beacon Hill Office Park  
Cafferata Way  
Newark  
Nottinghamshire  
NG24 2TN

+44 (0) 845 388 2458  
enquires@ehsdata.com  
www.ehsdata.com

### ENVIRONMENT AGENCY GOES LIVE WITH NEW REGULATORY PORTAL TO MP-5...NO MORE REPORTING!



**Viridor** A revolutionary new secure portal enabling the sharing of environmental monitoring information with the UK Environment Agency. It sets a new standard for regulatory reporting, negating often onerous reporting requirements, saving money and building trust.

It has been built in partnership with Viridor and the EA, and will now be scaled from three Viridor sites to 50 from July 2011.

#### Key features and benefits

- Demonstrates work has been scheduled and data collected correctly in line with permits
- Presents data in tabular and graphical forms
- Presents details of their actions to permit trigger breaches
- Demonstrates the continual maintenance of systems
- Data downloadable by Agency staff
- Enables full audit of their performance from Agency offices

This provides an end to end means of managing data from scheduling of data collection tasks, automated import and validation, data scrutiny in the system and the sharing of relevant data with the regulator. They envisage



## ENVIRONMENT AGENCY GOES LIVE WITH NEW REGULATORY PORTAL TO MP-5...NO MORE REPORTING!

this approach will be the future of regulatory reporting in the years to come. For further information see also <http://www.ehsdata.com/products/environment-agency-portal.aspx>

We envisage this method will be the future of regulatory reporting across many sectors in the years to come.

lection, and safe and efficient landfill disposal. Each year the company recycles c. 2 million tonnes of materials, has the capacity to generate over 127.5 megawatts of renewable energy and handles over 8 million tonnes of waste material.

The company has a robust approach to environmental management, is accredited to ISO 14001 and has a number of Environmental Permits which are regulated in the UK by the Environment Agency (EA).

Within all of this, Viridor are obligated to collect and report on a range of environmental data and have used MP5 to do this for many years with more than 45 users of the system within the company. Without MP5 this task would be extremely arduous. In 2010 for example 34,100 files of source

data have been handled in MP5 - an average of 51,200 pieces of data needing to be managed each day.

Since 2008 Viridor have also worked with EHS data to develop our Incident Management System (MP IMS) which allows the management and reporting of a whole range of incidents (Health and Safety, complaints, environmental incidents audits, security breaches etc.) see also <http://www.ehsdata.com/media/pdf/case-studies/viridor.pdf>.

Viridor have code-named the project 'Open Space'.

Monitoring Type	Short	Trigger	Permit
Perimeter Gas Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leachate Level Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leachate Quality Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surface Water Quality Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FID Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groundwater Brankesome Sands Quality Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groundwater Brankesome Sands Level Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groundwater Poole Formation Level Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groundwater Poole Formation Quality Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deposited Dust Measurements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The system saves a large amount of time, eliminates duplication of effort and improves the relationships with regulators who can assess performance in a more open format when they choose.

The system also enables them to make judgments not just on compliance with permit targets but more generally on the overarching environmental management process.

Viridor is one of the largest waste management companies in the UK. It provides the full range of recycling and waste services including advanced materials recycling, glass and plastics reprocessing, composting, mechanical & biological treatment, waste to energy, transport, col-



## RIO TINTO SITE AT RICHARDS BAY, SOUTH AFRICA ADOPT MP5

Following a review of 11 environmental data management systems, and the securing of the number one slot by our MP5 system, Rio Tinto have committed to using MP5 as its standard for environmental data management across its African region. As part of the progressive roll out of the system, which began with QIT Madagascar Minerals in November 2010 (see <http://www.ehsdata.com/media/pdf/newsletters>

[/ehsdata newsletter Q12011.pdf](#)), Richard's Bay Minerals (RBM) have now also adopted the system.

Richards Bay Minerals is jointly owned by Rio Tinto, BHP Billiton (each having a 37% stake with 24% owned by Blue Horizon Investments and 2% by RBM permanent employees. The company is a leading mineral sands producer and is situated north of Richards Bay in Zululand, in the South African prov-



## RIO TINTO SITE AT RICHARDS BAY, SOUTH AFRICA, ADOPT MP5



ince of KwaZulu-Natal. It's core business is extracting heavy minerals from the dune sands and processing them to manufacture rutile, zircon, titanium dioxide feedstock and high purity pig iron. RBM is a major economic contributor to the area and employs 1800 permanent staff and up to 2000 contractors.

Since RBM's establishment in 1976 the company has implemented a sound corporate social development programme and an internationally recognised environmental rehabilitation programme to restore the mined dunes to their natural state after mining.

During operation in order to manage environmental impacts RBM collects and reports on a large amount of data. This includes:

- Meteorological data (rainfall, temperature, pressure, wind speed and direction).
- Waste produced as 65 different waste types as solids and liquids.
- Water quality (chemical and bacteriological)

- Sustainability impacts (including energy used, production as tonnes mined and final product produced, land area rehabilitated etc.)

This data is among that to be managed within MP5. RBM will be using a five user system and the first task undertaken has been to transfer all historic data from their legacy systems into MP5. Installation and training are now complete.

As part of this implementation, we have developed a new sample labelling system to anonymise particular sample point names and locations prior to sending to the laboratory. These bogus names are automatically (or manually) generated in the system and then, when data is presented for import, MP5 will automatically equate the bogus names in the data received from the laboratory to the actual names retained in the system. Reports can also be produced of historic real and artificial names in order to enable users to better interrogate old data and discuss with the laboratory as needed.



## MP-5 VERSION 7 RELEASED

After a good deal of work, last month we released a new version of MP-5 (version 7). We have created a number of new features to the product that we believe will bring great benefits for our customers.

Among these, we have created some brand new screens to improve ease of use and give the user greater visibility of their work tasks. The new MP-5

desktop for example enables users to create their own desktop containing items which they have to do regularly such as a review of last months groundwater data, or a report on last months energy use. The desktop view is unique to each user logon and so can be tailored to reflect an individual users tasks.

We have also created a new calendar view so users can now see current and future tasks, those tasks overdue,

MP-5 Today	Count
Files in the import processor:	1
Files imported today:	0
Monitoring visits scheduled for today:	0

New MP5 Desktop view enabling clients to create their own home page and rapidly navigate to the tasks relevant to them based on their login



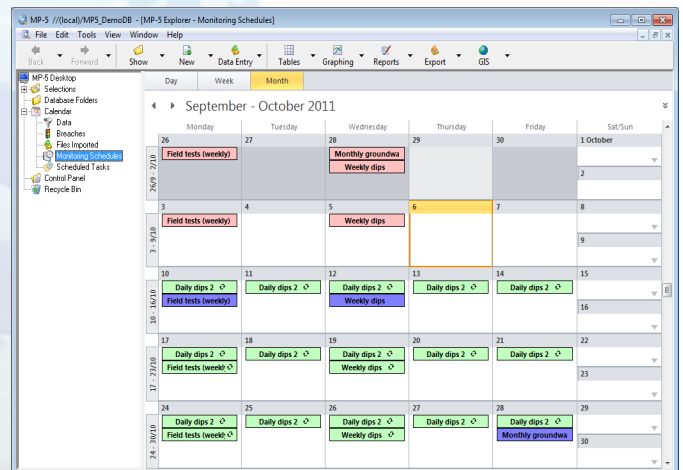
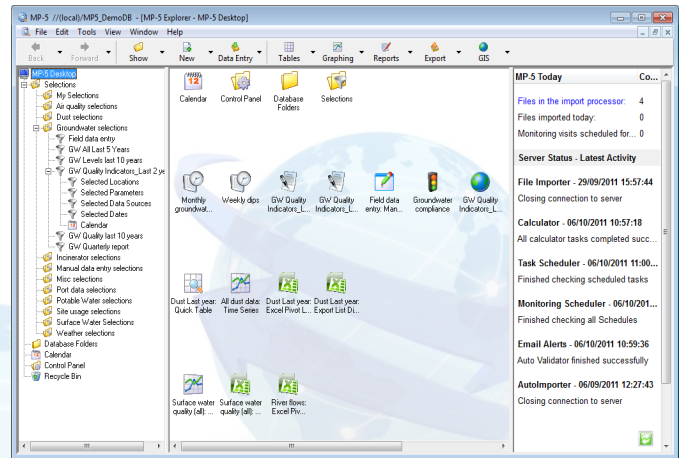
## MP5 VERSION 7 RELEASED

dates and status of imported files breaches of data and scheduled tasks (e.g. reports and exports of data). This calendar is interactive and users can drill down onto individual items on the calendar.

In addition we have created a series of other improvements which include:

- MP-5 today informs users of current tasks and processes running
- Pivot link, a direct link from an MP-5 selection to an Excel Pivot Table, gives hundreds of ways to user-define data summaries, layouts and charts
- Export of monitoring schedules to laboratories for pre-registration of samples for analysis
- Calculation option to produce less than values if those are present in the source data
- Sample anonymising system where sample location names can be anonymised prior to sending to a laboratory and then reconciled automatically at import

Right: The new MP-5 desktop with shortcut to user-defined favourites, and the new calendar view in monitoring schedule mode



## IMPERIAL METALS MOUNT POLLEY MINE ADOPT MP5

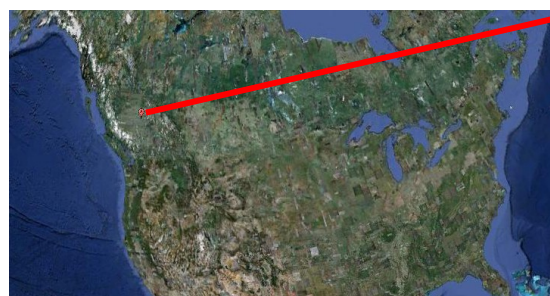


**Imperial Metals Corporation** is a Canadian mining company based in Vancouver, British Columbia. The Company is active in the acquisition, exploration, development, mining and production of base and precious metals. It has two producing mine sites at Mount Polley and Hucklebury. It is also exploring and developing a number of other facilities including the Red Chris site in north west British Columbia

In July 2011 and following a number of years of using an alternative system The company ordered MP5 as a replacement for its existing system. MP5 will now be used as its future data management and reporting solution for Mount Polley and other sites. We are currently

importing Mount Polley and Red Chris historical data and expect to visit the site to install and train in October 2011.

The data to



Mount Polley Mine Site

be managed in the system includes a range of environmental data such as water quality (groundwater, surface e water, drinking water), waste and weather.



## BLUESCOPE STEEL IMPROVE REPORTING FOR NEW SOUTH WALES LOAD BASED LICENSING AND NATIONAL POLLUTION INVENTORY



BlueScope Steel are a steel producing company with operations in Australia, New Zealand, Asia, Oceania and USA. In Australia they operate Port Kembla Steelworks, an integrated

steelmaking operation with an annual production capacity of approximately 5.3 million tonnes of crude steel. It is the largest manufacturer and supplier of flat steel in Australia. Since 2008 Port Kembla have been using MP5 to manage and report their environmental data ([http://www.ehsdata.com/media/pdf/newsletters/ehsdata\\_newsletter\\_q1\\_2010.pdf](http://www.ehsdata.com/media/pdf/newsletters/ehsdata_newsletter_q1_2010.pdf)).

Part of the motivation in using MP5 is driven by the need to comply with local regulations and permits. In New South Wales there is a pollution licensing scheme that is based on charges for pollutant emissions. Within this Load Based Licensing (LBL) scheme licensees are obligated to pay the Department of the Environment, Climate Change and Water (DECCW) for pollutant emissions from their sites. For each industry the pollutants and the sources of the emissions are specified in the DECCW document 'Load Calculation Protocol'.

In order to determine these pollutant emissions there are two broad methods. The first is based on actual analytical data obtained from the site monitoring programme and the second is based on using predefined factors. In the first case, and using air emissions as an example, the load of a pollutant in kg per year can be determined from a calculation using gas-phase flow rate and concentration, scaled to a one year timescale. There

are however nuances that need to be taken into account in this method, such as accounting for less than values which may be reported from a laboratory, or a plant does not run for 365 days per year.

The calculation using emission factors is more simple where, for example, the factor is multiplied by the annual production figure or the annual fuel consumption or some other relevant variable as defined by the OEH (Office of Environmental Heritage) document.

In each case, irrespective of the method used to calculate the pollutants, the totals for each pollutant are aggregated. The LBL fees (\$/kg) are then determined and used to calculate the total charge. Thresholds for each pollutant are also applied and if the thresholds are breached then the company may be required to pay twice the pollutant fee for the load above the threshold.

For the Port Kembla works there are 25 pollutants of relevance. The loading of these materials is determined from sampling of 68 stacks and 12 drains as well as, in some cases, approved emission factors. To date the annual LBL pollutant loads and fees have been produced using excel spreadsheets. This is a very labour-intensive process and although look-up formulae and pivot tables have been used to avoid excessive cutting and pasting, the process is prone to human error.

MP5 already contains much of the data needed and is currently used within MP5 to produce quarterly reports. Recently Port Kembla and EHS Data have been working together to conduct the LBL calculations within the MP5 environment and to





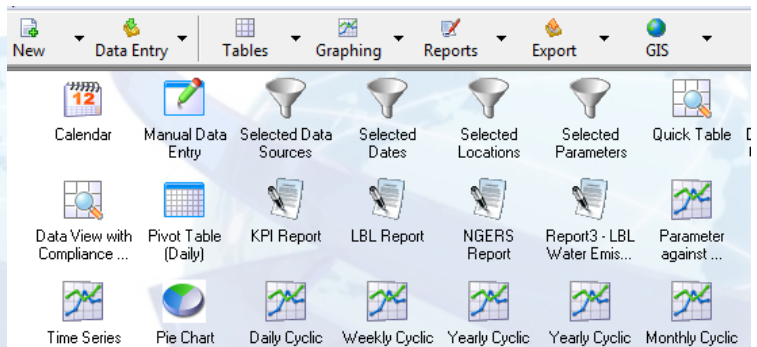
## BLUESCOPE STEEL IMPROVE REPORTING FOR NEW SOUTH WALES LOAD BASED LICENSING (LBL) AND NATIONAL POLLUTION INVENTORY (NPI)

produce the necessary reports of both loadings and charges which apply. Among the reports required are

- a report for air and water showing loads, fees and charges
- A report for all air emission points. Within this report there will be a sub report for each air emission point. This will show the load calculation methodology.
- A report for all drains. Within this report there will be sub reports, a report for each water pollutant for each drain.
- A report on water pollutants other than the LBL water pollutants.
- A report for the drain flow rates.

- A report for the consumption data. This report will list all monthly consumption data for the licence period.

This system is due to go live at Port Kembla shortly and be used for 2012 reporting.

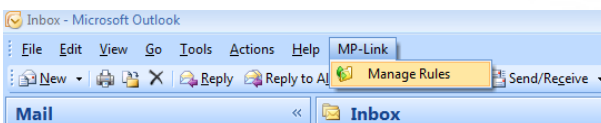


## MP-LINK, OUR NEW OUTLOOK PLUGIN



We have a new plug-in for Outlook called MP-Link. It allow users to define rules to send incoming data files directly and automatically to MP-5 import folders which are being watched. This makes the whole import process seamless, from a file being sent by email to alerts being received by email if any issues arise.

It installs as a new menu item in the Outlook toolbar, is VeriSign secured, and automatically updates itself as we develop further improvements to its functionality.



It is a direct replacement for our original system (called Merlin). Its cost is £250 per Outlook inbox.



## **EHS Data Ltd**

Beacon Hill Office Park  
Cafferata Way  
Newark  
Nottinghamshire.  
NG24 2TN

+44 (0)845 388 2458  
enquiries@ehsdata.com  
www.ehsdata.com

## **LATEST NEWS**

### ***Viridor's environmental monitoring database passes 50 million readings mark***

Viridor use Monitor-Pro systems to manage environmental compliance, Waste to Energy data and incident recording. Volumes of data collected and managed is ever-increasing. During 2010, their MP-5 environmental monitoring system imported and quality checked 34,100 files from 19 different sources, averaging 51,200 readings every day!

Viridor is one of the UK's leading recycling, renewable energy and waste management companies. They work with more than 90 local authorities and thousands of private customers across the country.

### ***Trimble PDAs go off to Canada for MP-5 field data entry***

Recently two Trimble robust PDAs were sent to a mining client in Canada to use for field data entry. Enhancements were made to MP-5 to download planned monitoring visits from the MP-5 Monitoring Scheduler. The PDAs synchronise with the plan and provide data entry forms with GPS navigation to the monitoring locations.

### ***BHP Billiton in Pinto Valley adopt the training module of our MP-IMS system***

BHP Billiton's Pinto Valley operation have been a user of MP5 for many years and are now trailing our MP IMS system to manage training within their organisation. The IMS Training Records module manages employee training records and the status of employee training compliance.

### ***Rio Tinto's Bunder Project in India adopt MP-5***

The proposed diamond mine in Madhya Pradesh is Rio Tinto's first and most advanced diamond mining venture in India. They will be using MP-5 to manage environmental testing data including ground and surface water.

### ***Future overseas visits***

During this year we have so far carried out a number of visits to Africa, Australia, Turkey and South America. Before Christmas we also have further visits planned to see customers (new and old) In Canada, Australia, India and Namibia.