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EPG CONNECTION

Your Resource For Environmental & Industrial Solutions

INSIDE

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EPG Telemetry - Making a Difference!

This morning was different! All seven leachate sump systems were operating at peak performance. With coffee in hand, Bill switched confidently between seven screens that displayed the sump level data, system status, pump flow rates and system alarm logs. "Why didn't we install this system five years ago?" he thought.

"Hey Bill, you got that report?" his supervisor greeted him as he entered the room. "Yah, I'll print it out right now," replied Bill as he opened Excel to print the data from the 92-acre landfill site. "You know," Bill continued, "we should have done this five years ago. Just imagine those frustrating compliance issues and maintenance costs we could have avoided if we'd just known before hand our high level problems."

Yes, this morning was different for many sites throughout North America, thanks to EPG Companies' innovative Remote Telemetry/Data Acquisition Control Systems. The fact is, EPG Control Systems reduce operating and maintenance costs as well as improve site functionality.

In Bill's case, the 92-acre Mississippi landfill had seven leachate sumps serving 40 acres. A sideslope riser design was being utilized with a variety of pumps and control systems spread over a large footprint requiring thousands of feet of conduit and wire. Over time as pumps failed, a variety of types and brands of pumps were used including water well-type submersibles and grinder pumps. Electrical control panels had been patched together by various contractors with no uniformity. A recent permit modification included a requirement to monitor leachate head level daily. This was not possible with the installed equipment. So EPG was invited to visit the site and make recommendations. Why? Because of EPG's reputation for excellent performance, technical support, system approach to leachate management (all components sourced through a single supplier), and the value-added services including EPG's Pump, Control Panel and Telemetry Schools.

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Education & Training

Continual education is invaluable in today's industrial economy! That correlates precisely to proper equipment decisions, reduced operating and maintenance costs, and peak performance.

This fall, EPG's training classes include:

Landfill Design: For all who are involved with the design of liquid or gas handling systems or remediation systems for landfills.
Date: November 17 & 18, 2003

Telemetry Basics: For all who are involved with the design, maintenance and/or installation of telemetry, SCADA and data acquisition systems.
Date: November 19, 2003

Please call or visit our web site soon to register.

If you would like more information about EPG products, services and/or capabilities, please call us at 1-800-443-7426, visit our web site at www.epgco.com or e-mail us at info@epgco.com.

Tank Gauging Innovation

EPG has recently developed the WNSA 1000, an innovative, easy-to-use tank gauging system (Figure 1) that simultaneously measures and displays liquid level (feet) and volume (gallons) in horizontal and vertical cylindrical tanks of up to 30,000[1] gallons. The system combines unparalleled accuracy with convenient versatility. The WNSA 1000 Tank Gauging System includes the EPG LevelMaster™ Submersible Level Sensor and a unique tank level monitor, which can be easily set up to handle a variety of tank geometries.

The EPG LevelMaster Submersible Level Sensor was originally designed to specifically work with the EPG SurePump™ to accurately measure liquid levels (pressure) and transmit signal to the meter. For years, this submersible pressure transducer has proven to be dependable and highly accurate. It can be used in side slope riser, well, sump, reservoir, settling pond and tank applications.

The EPG submersible transducer is constructed with a silicone pressure cell (many ranges are available) mounted in a rugged 316 stainless steel housing. The sensor is fully submersible in any liquid compatible with 316 stainless steel and the chemical resistant polyurethane jacketed cable (optional Tefzel[2] cable is available). Unlike transducers whose signals may be distorted by outside interference, the EPG sensor gives outstanding noise immunity, utilizing a 4-20 mA output to maximize signal accuracy and strength. In addition, the sensor features built-in temperature compensation as well as precise calibration, with accuracy of ±1.0%, and a combined repeatability and hysteresis error of ±.125%.

There are three installation options available (Figure 2) for the EPG LevelMaster Sensor:

- Suspended by its lead into the tank (A)
- Flange or thread mounted (B)

There are many systems that monitor and display only liquid level. What makes the WNSA 1000 so unique is its capability to be programmed to calculate liquid volume for virtually any tank geometry and its ability to monitor more than one tank simultaneously. Further, two serial ports are available to facilitate hardwire or wireless communication and/or integration into a larger, plant-wide control system via modbus protocol. We also can provide customized programming and configuration so that it will fully meet your specific application. All this adds up to tank gauging innovation that is dependable, accurate and conveniently sourced through one provider.

Do you want consistent, accurate liquid volume and level measurements in either one or all your cylindrical tanks? Do you need to integrate tank monitoring into a larger control system and be able to monitor it from one location?

The answer to these questions may be the WNSA 1000 and EPG control systems; one of the most innovative and cost effective monitoring and control solutions in the industry.

[1] Models for larger tank volumes are available

[2] Used for highly corrosive environments

Figure 1

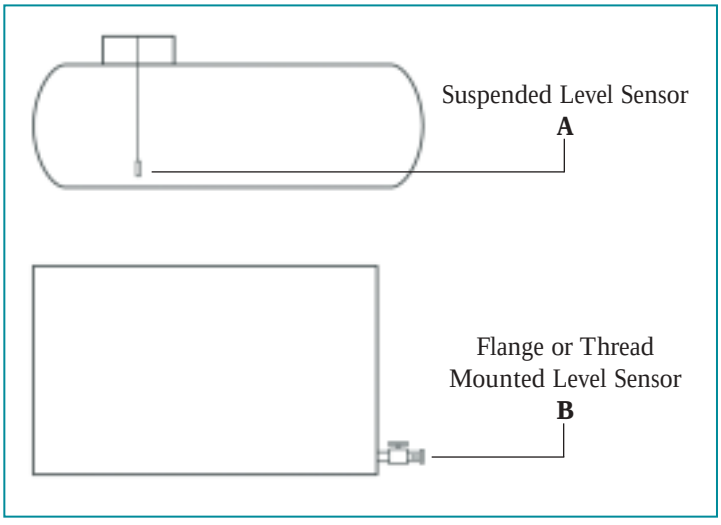

Figure 2

Making a Difference - continued

Today, after installing EPG pumps, control panels, flow meters, transducers, transmitters, repeaters, receivers, and easy-to-use software, this landfill is experiencing the EPG difference: optimum performance, uniformity, centralized control and documentation of leachate head level.

Not only are EPG's Remote Telemetry Control Systems cost effective in improving site functionality, they also simplify report generation and help to meet compliance issues. For example, a 373-acre disposal site in Virginia was having difficulty obtaining field data on a consistent and reliable basis. Personnel had the time consuming task of driving out to each location to make manual adjustments or collect data, and then translate it into a useful spreadsheet format. Needless to say, data gaps and compliance issues occurred due to scheduling, vacation conflicts and time/personnel restraints. EPG had the solution: full site monitoring and control including alarm functions and report writing capabilities from one location. The system includes wireless remote RTUs installed at tanks and lift stations that report to the master station's computer back at the office. Data to be reported is from nineteen flow meters, seven sump levels and four tank levels. All monitored information is displayed on the computer and placed in a spreadsheet format.

Now that the EPG telemetry control system is in place, operating and maintenance costs are down, visual inspections or manual system adjustments are eliminated, breakdowns and pollution incidents are prevented, and system monitoring and easy report generation help to meet compliance issues.

As in the two prior cases, installing an EPG Telemetry Control or Data Acquisition System at your site makes a big difference! Our easy-to-use systems are reliable, cost effective, and provide numerous benefits including:

- Reduced acquisition costs for expansion or upgrades compared to buried cable systems
- Improved system efficiency and performance through continual real-time system monitoring
- Reduced maintenance and repair costs, system disruptions or shutdowns through real-time system monitoring
- Reduced man-hours required for troubleshooting, on-site visual inspection or data collection
- Reduced labor cost by automatic report generating
- Compliance with local, state and federal regulatory agencies
- Increased options for technical support
- Open architecture protocol for future upgrades and expansion

Do you need to upgrade or expand your site? Are you facing compliance issues? Do you need centralized control and documentation? Yes? Then make a difference at your site. Call EPG today and ask for a Telemetry Control System specialist.

EPG People...

"Aaagh, my computer froze! Better get David. He can fix anything." OK, he might not be able to configure a newly built control panel yet, but he sure knows computers and networking, and has been serving up IT solutions at EPG now for over two years. From basic technical computer support to project implementation, EPG's Information Technology Project Manager, David Gartner keeps us up and running 99.9% of the time. Well, there was that time when the power went out. Maybe that was just a little reminder that sometimes we'd all be in the dark without David's IT expertise and troubleshooting ability.

David spends his free time with his wife and two boys and even sometimes - with his computer.

David Gartner

Product Highlights

Leak Detection Sensor

EPG's Leak Detection Sensors utilize stainless steel electrodes to detect the presence of conductive fluids. They are mounted in a small diameter stainless steel housing that adds weight, allowing the sensor to be suspended in a small annular space. Each sensor has 35' (standard) of yellow waterproof, gasoline, oil and chemical resistant outer jacket over a twisted pair of color coded signal wire. The sensor is set at the point where leakage is to be detected. Conductance is made from probe to probe through the liquid.

Truck Full Float

EPG's Truck Full Float is a vertical, liquid level, float switch used to prevent tanker truck overfilling. The Buna-N float is housed in a cylindrical, stainless steel body and includes 50 feet of 18-2 SJ power cord. The float body is suspended from the tanker top opening by a convenient hook. When the tanker liquid level reaches maximum, the float rises on its stem and actuates a magnetic switch, sending a signal to stop the pump.

EPG Upcoming Events

EPG EDUCATION & TRAINING	CANADIAN WASTE & RECYCLING TRADESHOW	EPG EDUCATION & TRAINING
Landfill Design - Nov. 17 & 18, 2003	*December 3-4, 2003*	*Pumps and Controls Service School*
Telemetry Basics - November 19, 2003	*Toronto, Canada*	*February 18 - 20 or 23 - 24*
Maple Grove, Minnesota		*Maple Grove, Minnesota*

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Landfill, Remediation, Industrial and Water & Wastewater Solutions

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