

# EPG

# CONNECTION

Your Resource For Environmental Pollution Solutions!  
Landfill, Remediation and Industrial Applications

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*We'll See You  
at  
Waste Expo  
2003*

EPG COMPANIES INC.  
19900 County Road 81  
Maple Grove, MN 55311  
Phone (763) 424-2613  
800-443-7426  
Fax (763) 493-4812  
www.epgco.com

## EPG Acquires NBT, Launches E-Wave

In December 2002, EPG Companies Inc. completed a significant expansion of its control systems integration and automation operations through the purchase of NBT, Inc. of St. Louis Park, MN. This expansion augments EPG's systems engineering and design manufacturing capacity to continually meet the needs of the landfill, remediation and industrial markets.

NBT has been involved in the design and manufacturing of a variety of control and communication related products for over 12 years. NBT will operate as a division of EPG serving primarily the US, Canada and Mexico markets providing controllers, remote telemetry units (RTU's), modems, switches and other communication products.

As landfill, remediation and industrial operations necessitate the move to become more automated, EPG responds with E-Wave, a radio-based control, license free spread spectrum technology that can benefit nearly all sites. John Hasslen, president of EPG, articulates . . . "By combining our superior control systems manufacturing with NBT's state-of-the-art RTU and wireless modem

systems, we can synergistically achieve one of the most innovative and cost-effective control solutions in the industry."

Compared with typical buried cable systems, EPG's E-Wave System is less expensive to install, requires little to no maintenance and provides increased site control functionality. Specialized controllers, software and I/O products are also available to satisfy a broader range of applications.



**Reliable Control for:**  
Start & Stop Pumps  
Leachate Recirculation Valves  
Remote Shutdown  
Storage Tanks  
Remote Alarm Signals  
and More . . .

For more information, call or visit our web site today.  
www.epgco.com / www.nbtinc.com

## 2003 Service School

Continual education is invaluable in today's industrial economy! That correlates precisely to reduced operating and maintenance costs, lower budgets and peak performance. Our SWANA\* accredited classes provide just that! We offer a hands-on educational experience designed to help develop your knowledge, expertise and troubleshooting ability as you serve in the landfill industry. Our school is applicable to all who are involved with the design, installation, and maintenance of leachate and gas condensate collection systems and/or the use of equipment manufactured by EPG Companies Inc.

\*Receive up to 10 continuing education credits through SWANA.



Next School Date: March 17, 18 & 19, 2003

If you would like more information about EPG products, services and/or capabilities, please call us at 800-443-7426, fax us at (763) 493-4812, or e-mail us at info@epgco.com.

# Field Service Program

EPG has joined forces with various service providers to offer a Landfill Field Service Program for EPG's line of leachate pumps and control systems. These EPG field service providers will supply factory-trained, certified technicians to service EPG pump systems at landfills across the country.

With over 3,500 installations and years of application experience, EPG advises that only proper maintenance can significantly increase the life of pumping system components and ensure environmental compliance. Even slight adjustments can radically improve long-term performance. Pump systems that are neglected or have been improperly installed can lead to high maintenance costs, equipment failure, and regulatory headaches. Landfill managers and operators that understand the value of on-going equipment maintenance are utilizing EPG's landfill field service program as an "insurance policy" that yields optimum system performance and ultimately reduced operational costs.

Once per quarter, field service technicians follow EPG's detailed key system inspection checklist including:

- Electrical system measurement (voltage, amperage, and resistance)
- Megohmmeter motor lead
- Test run pumps
- Verify function of level sensing and control systems
- Verify function of data collection systems

Cost for the service is based upon site location and number of units to be serviced.



Please call EPG Companies for more information on a field service program near you. EPG's Field Service Program: one more reason why EPG Companies Inc. is the choice among thousands of landfill professionals.

# Force Main Sizing

When sizing a pumping system it is vital that the entire discharge piping network be taken into consideration for pressure losses. If more than one pump is connected or may be connected to a common discharge line/force main, the combined flow through a given size pipe multiplies the friction loss. Doubling the flow in many cases more than quadruples the required line pressure.

If pump sizing does not account for the combined flow line losses, the result may be lower flow than needed or even a dead head condition with no flow from the pump(s). To reduce overall capital cost and long term electrical cost, plan ahead and consider upsizing or size the force main appropriately to accommodate all pressure losses. Friction loss charts are available through most pipe suppliers or

EPG Companies Inc. If you need assistance in calculating your pumping system flow and total dynamic head (TDH) requirements optimizing pump selection, please contact your local sales representative or EPG.

Friction Loss in Feet of Head per 100' of Pipe			
GPM	SCH 40 PVC (O.D.)		
	1.5"	2"	4"
25	3.95	1.15	0.04
50	14.25	4.16	0.16
100	--	15.03	0.58
200	--	--	2.08
400	--	--	7.52

# Load Out Panel

Ever had overflowing and spillage at the leachate transport truck loading facility? Now you can have total control with the EPG Load Out System. Get accurate sensing control over flow and level and avoid the problems associated with leachate loading.

The EPG Load Out Control Panel System combines a storage tank level sensor, volume batch controller, flow sensor, remote start/stop pendant, and transport truck overflow protection to provide an easy, safe and worry-free method of loading leachate transport trucks.

Operating this system is easy and reliable. The operator enters the number of gallons to be pumped into the flow meter keypad and presses the run (start) button. Flow rate can be monitored with the easy-to-read backlit LCD display. When the desired number of gallons has been pumped, the pump stops. The controller is reset and ready for the next loading operation. As a safety precaution, a stainless steel truck tank high level sensor is attached to the top of the truck to prevent overflowing. The outcome - no spillage, no contamination, no regulatory concerns. Your leachate loading operation will run safely, quickly with less downtime.

The EPG Load Out Panel has the flexibility to accept a variety of flow and level sensors and can be designed to fit your specific application. Call EPG if you have a specific project you wish to discuss.

A few examples utilizing our flow/level sensors are included in the next column.

## Flow Sensor

**Paddlewheel Flow:** Flowing liquid turns a paddlewheel sending out a pulse proportionate with flow rate.

**Magnetic Flow:** Liquid passes through a magnetic field producing a measurable voltage.

**Ultrasonic Flow:** Transmits/receives high frequency signals to/from the solids flowing within the liquid.

## Level Sensor

**Mercury Float Switches:** High level pump disable float and pump start/stop float are used to control loadout pump.

**Submersible Pressure Transmitter:** LevelMaster™ meter is used to display levels, set alarm and set pump stop point.



If your name is Jim Oates or Bob Kalinski, call EPG by 3/14/03 to receive \$25!

## EPG People...

From control panels to doughnuts, Purchasing Agent Ann Rombough orders it all . . . and has been for over 13 years. Ann was EPG's first employee. In the early years, she helped build, test and ship EPG pumps and control panels. That experience helped develop her ability to know and purchase only quality parts and materials. That means you, our customer, can know you will receive only the best. Ann is an invaluable asset to EPG and the customers we serve.

At home, Ann enjoys the stillness that sewing can bring, the joy of time spent with grandchildren, the beauty of a sun filled day and, of course, the excitement of a successful fishing trip. Yep! She's a real keeper!



**Ann Rombough**

# Product Highlights



**Tank Full Sensor**

EPG's tank full sensor is a level displacement sensor (float) that is used to monitor liquid levels in a storage tank. The sensor is normally closed (N.C.) and standard features include 25' of SJ cord and a weathertight junction box with two inch male pipe threads (2" MNPT). It is installed into the top of the tank and will float when submerged in water or petroleum products. When the fluid level rises to the point where the float is submerged, signal status will change. The tank full sensor can be used to send a signal to enable or disable the influent pump, and to annunciate a tank high level alarm.



**Hand Held Simulator**

The EPG Model 3748 Hand Held Test Simulator is a dual function unit that simulates both 4-20 mA output and pulse output. The simulated 4-20 mA output is used to test level meters and other receivers while the simulated pulse is used to test flow meters. The unit is loop powered so there is no need for batteries.

Features include, easy to use adjustable dial for milliamps and push button for pulse, test leads with alligator clips, detailed operating instructions, and a protective carrying case.

## EPG Upcoming Events

**MARCH 24-27**

*Landfill Gas Symposium  
Tampa, FL*

**MARCH 31 - APRIL 2**

*TxSWANA  
El Paso, TX*

**APRIL 27-30**

*New York SWANA  
Bolton Landing, NY*

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P.O. BOX 427  
ROGERS, MN 55374

