Companies that generate aqueous wastes such as acids and brines may find conventional liquid waste treatments expensive and environmentally risky. For these companies, deepwell injection can be an attractive alternative. Involving the pumping of liquid wastes under pressure into porous rock formations deep underground, deepwell injection is usually less expensive and more environmentally sound than any other liquid waste treatment method.

NATURE’S DEPOSITORY

Near Vickery, Ohio, the geologic setting is perfect for deepwell injection. Almost three thousand feet below rolling farmland lies the Mt. Simon Formation, a layer of porous sandstone stretching over thousands of square miles. Because the Mt. Simon Formation is sandwiched between layers of impenetrable rocks above and below, wastes are contained and held indefinitely without posing any risks to people, animals, plants, groundwater supplies or drinking water resources.

Since the late 1970s, Vickery Environmental Inc., a Waste Management company, has been utilizing this natural depository by pumping liquid wastes under pressure into its subterranean confines. Today the Vickery facility accepts liquid wastes from generators across North America, providing them with a safe, economical and permanent disposal alternative.

WASTES ACCEPTED

Vickery accepts a wide variety of hazardous and non-hazardous aqueous wastes from industrial operations, including wastes that are subject to Landfill Disposal Restrictions. Acceptable wastes include:

• Acid wastewaters
• Airport de-icing fluids
• Ammonia and other caustic wastewaters
• Aqueous solutions of pesticides and pharmaceuticals
• Brines and salt solutions
• Chemical manufacturing wastewaters
• Leachate
• Metal plating and galvanizing solutions
• Waste pickle liquor (acids)

The facility does not accept radioactive waste, medical waste, aqueous waste with a flashpoint less than 212 degrees F, TSCA waste (i.e., PCBs) and F-listed dioxin waste.
21ST CENTURY TECHNOLOGY

Vickery utilizes the latest in liquid storage, pumping and monitoring technology to ensure the long-term integrity of its system.

Liquid wastes received from customers are first stored in aboveground tanks with approximately one million gallons of permitted capacity. After analysis, treatment and filtering, the wastes are transferred through an aboveground piping system to one of four fully permitted Class 1 injection wells.

Each well is composed of fiberglass tubing surrounded by four to six encasement layers of steel and concrete. Between the innermost layer of protective steel and the injection tubing is a space called the “annulus,” which is filled with fluid maintained at a pressure that is higher than the pressure inside the injection tubing. This pressure differential ensures that in the event of a breach in the injection tube, no wastewater can escape into the surrounding environment.

Advanced computer systems with built-in redundancies continuously monitor and control the wells and verify that they operate in full compliance with all permit requirements. In addition to these automatic safeguards, trained employees routinely make visual inspections of the equipment, and annual testing is done to confirm the wells’ mechanical integrity.

YOUR “ROCK SOLID” SOLUTION

Vickery Deepwell Injection offers a permanent disposal solution to your hazardous and/or non-hazardous wastewater needs. Vickery Environmental Inc.’s unique facility and experience, coupled with the size, expertise and resources of Waste Management, provide a liquid waste alternative that is affordable, environmentally responsible and in total compliance with all local, state and federal regulations. It is truly a “rock solid” solution to your hazardous and non-hazardous wastewater disposal needs.

For more information on Vickery Deepwell Injection, contact your Waste Management Landfill and Industrial Services sales representative.