

---

**Project**                    **PICKERING NUCLEAR GENERATING STATION – GROUNDWATER MANAGEMENT SYSTEM**

**Client**                    **Ontario Power Generation (OPG)**

---

### Objectives

- Develop a data management system to automate the mechanical tasks of managing a routine groundwater sampling program. This includes sample management and scheduling, chain of custody requirements and compliance reporting/mapping.

### Outcomes

- A complex environmental monitoring program can be undertaken by site staff without a significant increase in workload.

### Key Aspects

- Scheduling of sampling program and task organization
- Automated labeling/chain of custody
- Laboratory data file management (import and QA)
- Data screening and filtering for automated reporting
- Built-in mapping and hydrogeological cross-section tools for review of data



### Project Description

A groundwater sampling and data management system was required at the Pickering Nuclear Generating Station as part of the approval procedures necessary to start the 'B' series of reactors. EarthFX was retained to customize the database system, prepare the necessary interface software, mapping systems, automated reporting tools, and lead staff training.

Key elements of the interface software (SiteFX) were the ability to develop and operate extensive scheduled sampling programs, automate the process of reconciliation of laboratory data with requested data, and the ability to easily produce report-quality graphs and tables of selected sub-sets of data.