

Monitoring System for Ground Water

The establishment of the sampling program is in response to groundwater quality complaints related to the installation of another solar farm in Rideau Lakes Township (Western Solar Farm) where construction during the installation was deemed, by the Ministry of Environment (MOE), to have 'adversely impacted (turbid)' neighbouring wells (MOE memorandum 04 Feb 2011).

The Province has deemed the ground water in the area to be highly vulnerable, due to the lack of soil depth over the fractured bedrock base. It has been determined that property owners with wells located within 500 meters from the Smiths Falls 2 and Smiths Falls 5 solar projects have continual well water monitoring. Residents with wells located within 750 meters from the solar projects have also had water monitoring done to determine their preliminary baseline status. The well water monitoring program will be done by the Township of Drummond /North Elmsley in partnership with Rideau Environmental Action League (REAL) and AGAT Laboratories on behalf of Recurrent Energy.

Residents within the solar projects buffer zone have been contacted where a well history was collected and raw well water was preliminarily tested. Raw water is water that is coming directly from the well without passing through any water treatment systems. It is imperative to gather information about the local property wells and groundwater quality to establish a baseline of water quality and well status prior to construction on the solar project sites. The Township feels the monitoring needs to be adequate and cover all areas around the projects. Testing will be completed; before, during and after the construction projects and the same around the decommissioning in thirty years. Testing will include mineral composition and bacteria counts. Any information regarding water quality will be owned by the property owner and shared with the Township and the developer Recurrent Energy. Finally, exceedances in any of the parameters are reported immediately to the homeowner, and a second set of samples will be collected and submitted for analysis as soon as possible. (Sourced from: RE Smith Falls 2 ULC- RE Smith Falls 2 Solar Project, *Well Water Quality Baseline Report*, MOE, p.1,3)



Centers for Disease Control & Prevention, *Well Water*. May 30 2012