**Monitoring Committee Report**

**Annual General Meeting, April 5, 2016**

CMEI has continued to advocate for improvements in the monitoring system at the Crane Mountain Landfill in order to protect the environment and the water supply of those living downgradient of the site. We have received ongoing independent assessments of various landfill issues from John Sims and Fred Baechler, senior hydrogeologists at **exp.** Services (formerly ADI). Thus, we have ensured that all of our recommendations have had a sound scientific basis.

During the past year, we have focused on four main areas: adding monitoring requirements to the landfill's Approval to Operate; creating a numerical model of the geographical area leading downhill from the landfill to our area's wells; enhancing the analysis of monitoring data; and improving the testing and analysis of data from domestic wells.

On May 7, 2015, representatives from CMEI met with Department of the Environment staff Jeff Porter and Mark Bolden at their offices in Fredericton. On behalf of CMEI, Sims and Baechler had drawn up a list of specific recommendations to be included in the upcoming Approval to Operate. We engaged John Sims to attend the meeting and to explain the reasons for adding these monitoring requirements to the new Approval. Although our MLA, Rick Doucet, was unable to attend the meeting, his executive assistant, Lorraine O'Brien, was present to demonstrate Doucet's support for our initiatives.

Through communication with Jeff Porter in December, we were informed that our recommendations would not be added to the new Approval. However, the Approval to Operate was made for a two-year period instead of the usual four-year period, during which the Department would give further consideration to our recommendations, and would observe the progress of the numerical model and statistical analysis that the General Manager has initiated.

In order to move the numerical model beyond the basic information provided by the UNB study last year, general manager Marc MacLeod requested that we ask our consultants to provide a framework and actions to identify a path to a numerical model. Therefore, in September of 2015, CMEI arranged for both John Sims and Fred Baechler to spend two days at the site: analyzing the fractured rock, inspecting the monitoring wells, meeting with the CMEI Board, and finally meeting with the General Manager. At that meeting, they demonstrated the steps involved in first, creating a conceptual model, and then moving from there to creating a numerical model of the groundwater flow and transport downgradient from the landfill.

Marc MacLeod responded by tentatively putting $30, 000 in the budget for this project. He also applied for funding from the Environmental Trust Fund for the first phase--the creation of a conceptual model. He used the information provided by Sims and Baechler for this application.

For years now, CMEI has been advocating for an adequate analysis of monitoring data. Several years ago, the landfill purchased a Statistical Analysis Protocol, but this program has not yet been implemented. In March, 2016, CMEI representatives met with the new technical advisor for several

New Brunswick landfills, Peter Baxter, to discuss this analysis program and the selection of trigger parameters and trigger concentrations to go with it. Mr. Baxter has been asked to get a statistical analysis program ready for implementation, hopefully before the end of the year.

Ensuring adequate testing and analysis of domestic wells downgradient of the landfill has been an ongoing priority for CMEI; however, we have so far had little success in that area. We have made recommendations to the General Manager and to the Department of the Environment and will continue to work towards implementation of these recommendations.

Although we have not achieved all that we hoped to during the past year and have been disappointed on some fronts, we are convinced that CMEI has made a difference. There is a lot more work to do, and we will continue to press for improvements in these four areas and beyond.