



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

April 16, 2009

SR-6J

Gary L. Kelterborn  
Project Coordinator  
CMS Energy  
1945 W. Parnall Road  
Jackson MI 49201

Re: Final Mercury Flux Model Protocol

Dear Mr. Kelterborn:

The United States Environmental Protection Agency (EPA) is enclosing a final version of the subject mercury flux model protocol. This final document reflects the input of CMS, EPA, and MDEQ personnel who have been involved in this effort for the past few months. Finalization of this document is an important step in the process outlined in latest project flow diagram dated February 25, 2009.

Some key points in the final document worth highlighting include:

**Hydraulic Conductivity:** CMS shall submit to EPA a written proposal for developing a site-specific correction factor to adjust the hydraulic conductivity value for individual wells where a mini pump was unsuccessful. Separate correction factors may be developed for hydro-geologically distinct zones (i.e., West vs. Northshore areas at East Park).

**Hydraulic Gradient:** Use of electronic water level transducers shall be limited to selected shoreline wells as indicated in the protocol (i.e., exhibiting a groundwater elevation difference relative to the lake of 0.5 feet or less). Prior to selection of wells which would require installation of these transducers, CMS shall use transducers in all of the wells for at least one sampling event to provide a continuous 24-hour record of groundwater elevation changes in each well. *(Note: While the final protocol does not specifically state it, transducers need not be installed in all wells simultaneously; the transducers could be installed in a stage-wise fashion- perhaps 4 to 8 at a time as each well cluster is sampled. This would eliminate need to purchase and/or install all 50 transducers at once. As an alternative to requiring transducers in all wells during the initial sampling event, CMS may submit to EPA comparable continuous records of groundwater elevations for individual wells obtained at other times, either before or after the initial sampling event, for which corresponding lake elevation data are available for comparison.)*

If you have any questions, please feel free to call me at (312) 886-6195.

Sincerely,

A handwritten signature in cursive script that reads "R. del Rosario". The signature is written in black ink and is positioned above the printed name.

Ross del Rosario

Enclosures

Cc: Ralph Dollhopf (e-copy)  
Brian Kelly (e-copy)  
Bob Wagner, MDEQ (e-copy)  
Heather Prentice, CMS (e-copy)  
Tim McGarry, MDEQ (e-copy)  
Rick Mandle, MDEQ (e-copy)