



## MPCA Ambient Groundwater Network Contaminants of Emerging Concern (CEC) Monitoring

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### Background:

- Today's presentation focuses on monitoring results from a MPCA report specific to Contaminants of Emerging Concern (CEC) in groundwater. This report is nation-leading and an example of how Clean Water Fund appropriations are enabling Minnesota to be a leader in protecting our waters.
- The term "CEC" is meant to encompass a large number of chemicals that have typically not been monitored in the past, and are often unregulated. These include, hormones, pharmaceuticals, fire retardants, plasticizers, and other chemicals. Other terms like "Contaminants of New Concern (CNC)" are also used to describe these chemicals, as well as terms for subsets of these chemicals like "Endocrine Active Compounds (EAC)" or "Pharmaceuticals and Personal Care Products (PPCP)".
- The MPCA monitors groundwater in the non-agricultural areas of the state for a broader range of chemicals than just CEC, using a network of currently over 200 wells. The network is still being installed and will have 280 wells when completed in 2014, and we are monitoring the network as we build it.
- This study focused on 40 wells thought to be most likely to show CEC contamination, to give an initial sense of the likely worst case scenario of CEC contamination. This included monitoring wells with indications of possible wastewater contamination and three wells at closed unlined landfills.

### Key Findings:

- Detections of CEC were found in one-third of the wells (13 of 40).
- One-fifth of the CEC analyzed were detected (20 of about 100).
- Individual wells had 4 or fewer CEC, other than 2 of the landfill wells that had up to 10.
- Contamination levels were very low; well below applicable health guidance levels, even at the landfills.
- **Thus, the spatial extent and levels of CEC contamination are currently low, but since they are present should continue to be monitored over time to determine trends.**

### Looking Ahead:

- The entire groundwater monitoring network will be analyzed for CEC by 2016 and will be remonitored to show changes over time. The number of CEC evaluated is increasing as lab methods improve.
- An update to this report with triple the number of wells will be released this summer.
- An overall report on findings from the current network beyond CEC will be issued this spring.