



MDE Maryland Department of the Environment

Severn Groundwater Investigation

Anne Arundel County, MD

Meeting April 17, 2013



Agenda for Public Meeting

- Background Information – Summary of Site History and Environmental Investigations
- Action Plan –
 - Short-term Actions Taken To Date
 - Ongoing Investigations
 - Future Steps
- Conclusion and Information Resources for Residents

Off-site Investigation

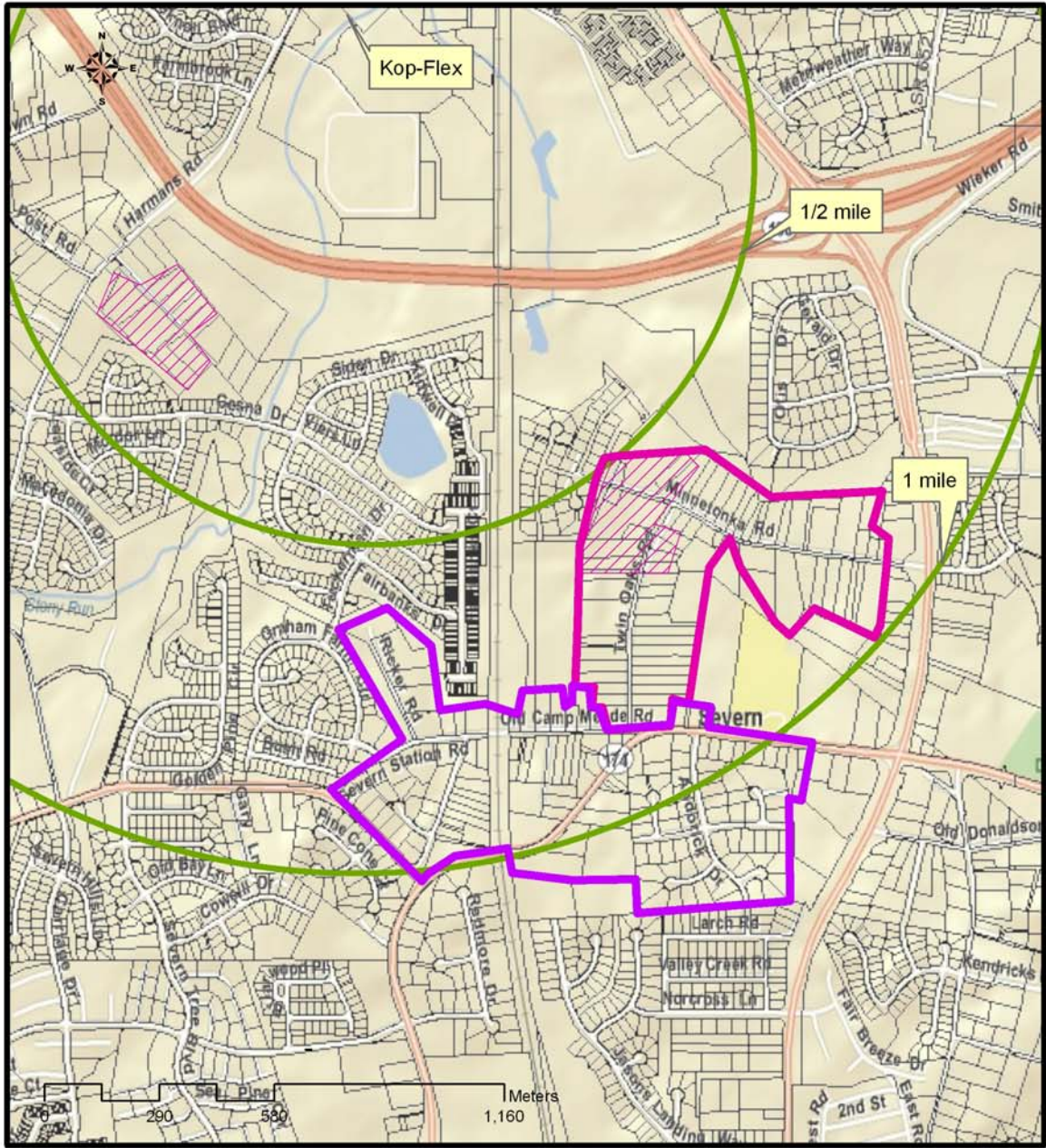
- In June 2012, installed 1 deep well off-site to the south of Kop-Flex facility (north of Route 100)
 - 1300 ppb of 1,1-DCE
 - 342 ppb 1,4-dioxane
 - Also identified deep groundwater flow to the south-southeast
 - Confirmed data with re-sampling in August



Residential Well Sampling

- November 2012 - Initial Sampling – Contact 15 closest homes – 4 responses. 3 impacted on Twin Oaks. Immediately provided bottled water.
- Phase 1 Sampling - January 2012 - 76 homes on Twin Oaks & Minnetonka.
- Phase 2 Sampling - February/March 2012 - 137 homes including Andorick Acres, Old Camp Meade Road, Ricker Road, Severn Station Road and Reece Road





Residential Well Sampling Areas

Initial Contacts - Pink Hatch - 4 responses
 Phase 1 - Pink Outline
 Phase 2 - Purple Outline

1,1-Dichloroethene Concentrations (ug/L)

- Well Not In Use/ Public Water
- Not Sampled/ Declined
- Results Pending
- <0.5
- Detected Less than MCL (<7 ug/L)
- 7-100 ug/L
- 100-200 ug/L
- >200 ug/L



Phase 1 Sampling

- 76 homes contacted:
 - 40 sampled;
 - 14 with no well;
 - 4 declined;
 - 18 did not respond (as of 4/11/2013)
- 7 residents impacted with 1,1-dichloroethene above MCL (7 ug/L) and 1,4-dioxane.
- Immediately provided bottled water.
- Impacted Well screen depths between 163 feet and 247 feet.
- Two wells detected but below MCL (wells greater than 247 feet)





Phase 2 Sampling

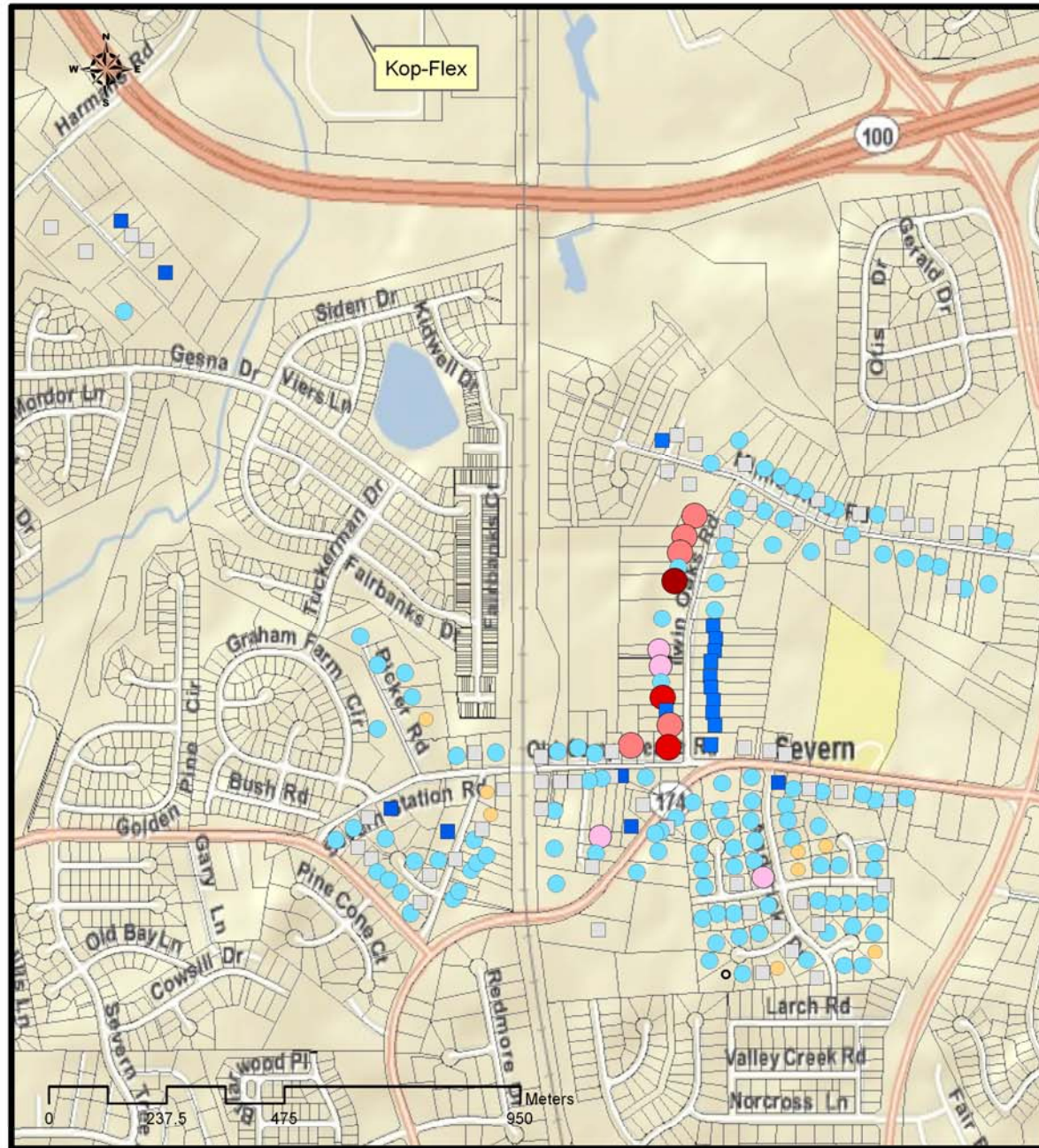
- 137 homes contacted:
 - 91 sampled (7 waiting for results);
 - 6 with no well in use;
 - 1 declined;
 - 39 did not respond (as of 4/11/2013)
- One resident impacted with 1,1-dichloroethene above MCL (7 ug/L).
- Immediately provided bottled water.
- Consistent with Phase 1 – impacted well has screen depth between 163 feet and 247 feet.
- Two wells detected but below MCL (wells greater than 247 feet)



Residential Well Sampling Results for All Wells (Sampling through 4/11/2013)

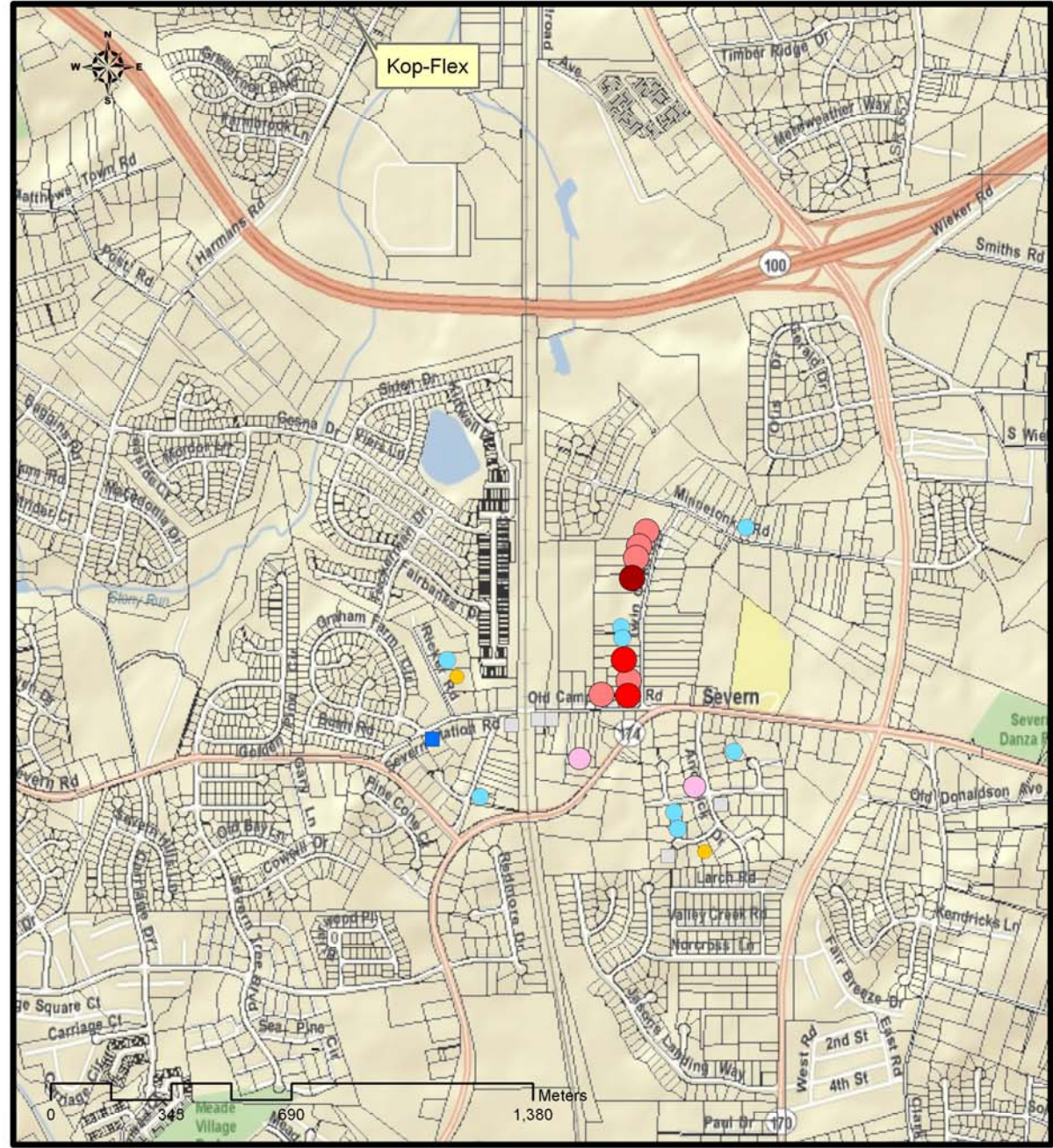
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Residential Well Sampling Results
for Wells Greater Than 163 feet
(Sampling through 4/11/2013)

1,1-Dichloroethene Concentrations
(ug/L)



- Well Not In Use/ Public Water
- Not Sampled/ Declined
- Results Pending
- <0.5
- Detected Less than MCL (<7 ug/L)
- 7-100 ug/L
- 100-200 ug/L
- >200 ug/L



Ongoing Actions

- Continued supply of bottled drinking water to impacted residents (7 homes)
- Continued residential well sampling
 - Second contact letters were sent March 22
 - Seven homes awaiting results
 - Installation of off-site monitoring wells (status?)





Future Actions

- Quarterly Sampling for homes below MCL (4 homes) starting May 2013
- Immediate public water connection where available (3 houses)
- Expedited expansion of water main and public water connection where possible (4 houses)





Maryland Department of the Environment

Land Restoration Program

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