

Summary of Technical Meeting
March 29, 1999
NIROP Fridley
Fridley, Minnesota

Results of Technical Committee Meeting

4/29/99

Site tour

Technical Team Consensus: TtNUS shall look into the use of longer well screens (e.g., 10 to 20 feet) in order to allow the collection of groundwater samples which more closely represent the vertical profile of the aquifer system. The 5 feet well screens proposed for the middle and deep sample zones prohibits the ability to sample a large vertical portion of the aquifer system. The well screen placement and thickness would be determined on a well-by-well basis based upon the lithology determined from the well boring with a general rule to use longer well screens (e.g., 10 to 20 feet) where possible.

TtNUS: Based upon the objective of sampling a larger vertical portion of the aquifer, it was proposed that sampling techniques (i.e., conventional versus low-flow sampling) should be re-evaluated for the proposed field event. In addition, the use of low-flow techniques creates a data comparability issue when comparing analytical results from groundwater samples using the low-flow technique with those samples taken using conventional techniques (i.e., Annual Monitoring Report sampling).

4/30/99

Consensus of proposed wells to be installed based upon five objectives (noted in the Strawman, January 1999) of the Proposed Anoka Park Investigation. Based upon these objectives proposed wells and locations are described below and shown on the figure attached to the original Meeting Minutes):

1. **Better define the extent of the plume in the shallow, intermediate, and deep intervals of the unconsolidated aquifer(s).**
 - Installation/sample Well I (intermediate well only) at location of 19-S and 9-D
 - Installation/sample well cluster L (shallow, S; intermediate, I; and deep, D intervals) at southern boundary of Anoka Park
 - Installation/sample Well K (intermediate well only) at location of 17-S and 7-D
 - Sample existing USGS wells 5 and 8
2. **Further develop the hydrogeologic framework and define the impact on the Prairie du Chien (PC) bedrock aquifer from site-related contamination.**
 - The lithologic information collected from all of the well borings mentioned herein and a synoptic water level measurement from all of the existing and proposed wells on the NIROP, Anoka Park, and UDLP properties will assist in meeting this objective.
3. **Verify capture zone effectiveness of extraction system.**

- Installation/sample well cluster M (S, I, D) at location adjacent to cart path (cannot get well closer to river due to terrace slope (dual purpose well to evaluate compliance point).
 - Installation/sample well cluster N (S, I, D) located between AT-2 and AT-3A (closer to AT-2).
 - Installation/sample well cluster O (S, I, D) located between AT-2 and AT-3A (closer to AT-3A).
 - Installation/sample well cluster P (S, I, D) located west of AT-3A (potentially located in the medial strip –the feasibility of this will be evaluated by MPCA and TtNUS. The alternative plan is to locate this cluster east of East River Road)
 - Installation/sample well cluster Q (S, I, D) located west of 17-D (potentially located in the medial strip – the feasibility of this will be evaluated by MPCA and TtNUS. An alternative plan to be located southwest of East River Road)
 - Installation/sample well cluster R (S, I, D) located south of AT-5A and AT-5B
 - Installation/sample shallow well at 8-IS.
 - Installation/sample shallow well at 12-IS.
 - Installation/sample shallow well at 13-IS.
 - Installation/sample Well H (PC well only) at location of 27-S, 16-IS, and 16-D (eliminate previously proposed Well Cluster H due to accessibility of drill rig down terrace slope at that proposed location- dual purpose well to evaluate compliance point).
 - Installation/sample well cluster I (S, I, D) at location adjacent to cart path (cannot get well closer to the river due to accessibility of a drill rig down terrace slope – multi-purpose well to evaluate Anoka Park Anomaly and monitor groundwater at compliance point).
 - Installation/sample PC well at location of 18-S, 4-IS, and 8-D (installation of this well is contingent upon what is found in other wells installed for the purpose of defining the Anoka Park Anomaly).
 - Installation/sample Well S (PC well) south from well cluster I at the top of the terrace slope along the river (dual purpose well to monitor groundwater at compliance point).
4. **Establish compliance monitoring network for discharge of the plume to the river (i.e., the site compliance point).**
- Installation/sample Well H (PC well) at location of 27-S, 16-IS, and 16-D (eliminate previously proposed Well Cluster H due to accessibility of drill rig down terrace slope at that proposed sample location - dual purpose well to evaluate capture effectiveness).
 - Installation/sample well cluster I (S, I, D) at location adjacent to cart path (cannot get well closer to the river due to accessibility of a drill rig down terrace slope – multi-purpose well to evaluate Anoka Park Anomaly and capture effectiveness).
 - Installation/sample Well S (PC well) south from well cluster I at the top of the terrace slope along the river (dual purpose well to evaluate capture effectiveness).
 - Installation/sample well cluster M (S, I, D) at location adjacent to cart path (cannot get well closer to river due to steep terrace slope (dual purpose well to evaluate effectiveness of capture).
 - Sample existing well FMC-20 (shallow well)
 - Sample existing well FMC-43 (PC well – this well is currently part of UDLP's compliance network)
5. **Better define the extent of the Anoka Park anomaly for future remedial measures.**
- Installation/sample Well Clusters B, C, and E (S, I, D) at previously proposed sample locations. Well Cluster B moved slightly to evaluate the potential impact of Former Vehicle Maintenance Building
 - Installation/sample well cluster I (S, I, D) at location adjacent to cart path (cannot get well closer to the river due to accessibility of a drill rig down terrace slope - dual purpose well to evaluate groundwater at compliance point).
 - Installation/sample well cluster F (S, I, D) at originally proposed location.

Total number of Proposed Wells to be Installed: 42 (15 shallow wells, 14 intermediate wells, 10 deep wells, and 3 PC wells)

Action Item: MPCA to contact MDOT and MDH to determine accessibility and limitations on installation and maintenance of wells in medial strip in the center of East River Road

Action Item: TtNUS to send TechLaw, Inc. electronic and hard copy of USGS results on pumping test analysis.

Action Item: TtNUS to prepare a summary of the USGS pump test results. This is pending the issuance of a response by the Navy to TtNUS comment letter.

Action Item: TtNUS to locate the predetermined source areas at the "North 40" area on a map.

Action Item: MPCA to obtain all available data on the river depth, elevation, and profile.