

Prysby, Mike (DEQ)

From: Bloemker, Jon (DEQ)

Sent: Tuesday, April 10, 2012 1:25 PM

To: Prysby, Mike (DEQ)

Cc: Skinker, Bethel (DEQ); Donaldson, Kristina (DEQ); Shekter Smith, Liane (DEQ); Fisher, Brant (DEQ); Ashford, Stephen (DEQ); Cook, Pat (DEQ); Lee, Lonnie (DEQ); Sleight, Cathy (DEQ)

Subject: Karegnodi Water Authority (Genesee County Drain Commission) Intake Meeting

On April 10, 2012, a meeting was held at the Saginaw Bay District office to discuss the Karegnodi Water Authority's proposed intake into Lake Huron. Present at the meeting representing the Genesee County Drain Commission were John O'Brien, Matthew Raysin, and David Jansen, from Rowe Engineering was James Redding, the USACOE was Mark Lesinski, and the DEQ were Cathy Sleight and Jon Bloemker.

The Authority is now an incorporated P.A. 233 agency based in Sanilac County. The intake has received a withdraw permit for up to 85 MGD. The authority is proposing to install about one mile of 78-inch line into Lake Huron to about a water depth of 35 feet. The single line will utilize two intakes, each housed in 65 foot diameter octagon, timber cribs. The 78 inch line will be paralleled by a single, 16 inch line acting as a sleeve for three, 4 inch plastic chlorine solution lines. The proposal calls for boring the first 700 to 3,800 feet of the 78 inch line from the west side of M-25 to the east into the lake. The final distance will be opened cut. The length of the bore will be dependent on the soils and the amount of boulders encountered. The bored section of the 78 inch line will be reinforced concrete pipe, and the open cut portion of the line will be either reinforced concrete or steel. The opened cut portion of the line will be bedded with native material and stone. Large stone riprap armor the area above the trench.

The county was warned that typically two intake lines are normally required due to reliability, frazil ice, security and maintenance issues. The county was told that the department would entertain a signed agreement with Detroit and/or Flint to provide back up emergency service in the event of any problems with the single intake line.

The county was informed about the WRD and/or USACOE permitting requirements for construction near the shoreline, a declared beach erosion area and along the lake bottom. The county was told that it would need to contact the DNR regarding the construction season due to spawning and migrations and to obtain a Part 21 easement for the lake bottom construction.

There were discussions about spoil disposal, estimated at 35,000 yd³. A few of the issues surrounding the testing and depositing the spoils in a DMDF and/or upland area were discussed. It was suggested, due the amount of virgin soils, that the county may want to talk to a few of the area's landfills about free or a moderately cost daily cover material. The county was told that side casting the spoils from the dredging back into Lake Huron would be prohibited.

The county and consultant were told that at present the Saginaw Bay District is planning on reviewing the intake, the low lift station and the raw water line to the treatment plant. Also, they were told that the Lansing District would review the treatment plant.

The county hopes to submit its applications in June and start construction in October.