

Worosilo, Jannette

From: Wade Loo *RL*
Sent: Wednesday, April 29, 2009 5:28 PM
To: Brian Bonser; Randy Musser
Cc: Ruben Hamilton; George Kuzo; Donald Forbes; Patrick Lessard; Joseph Austin; Jannette Worosilo
Subject: RE: Update on Groundwater Monitoring/Blowdon Line at Harris

Need to clarify one point. MPC inspected over 5,000 feet of pipe from the cooling tower to the last manway which is located a few feet where the land meets the lake reservoir and not the opening because the opening is in the middle of the lake.

From: Wade Loo
Sent: Wednesday, April 29, 2009 3:59 PM
To: Brian Bonser; Randy Musser
Cc: Ruben Hamilton; George Kuzo; Donald Forbes; Patrick Lessard; Joseph Austin; Jannette Worosilo
Subject: Update on Groundwater Monitoring/Blowdon Line at Harris

Just to let you know where we are at regarding the cooling tower blowdown line with regards to HP issues in short. We have had several meetings with the various licensee staff and walked down the various areas of the blowdown line and have the following information:

1) Silar Services, who conducted the groundwater site characterization study and installed monitoring wells (Silar did work for Brunswick), subcontracted with Miller Pipeline Corporation (MPC) to inspect the condition of the inside of the pipe. MPC inspected over 5,000 feet of the fiberglass pipe from the cooling tower to the pipe discharge opening into the lake reservoir (one area of the pipe was not inspected, ~300 feet downstream from the cooling tower to cistern #1 due to low oxygen concentrations and the ability of the workers to egress from that area of the pipe safely due to large amounts of mud in one section of the pipe, they are referring to it as the "dead end pipe"). MPC completed that inspection and its preliminary report identified numerous cracks, space between joints, and roots growing on the inside of the pipe all along the entire length of the pipe where the discharge could potentially leak into the surrounding ground.

2) With regards to the elevated tritium levels observed and reported in accordance with the Groundwater Protection Initiative, the licensee had MPC repair a pipe crack ~200 ft downstream cistern #2 using a "Weco Seal" (metal bands that hold a rubber gasket in place over the crack and entire diameter of the pipe area). Based on the slope of the downstream portion (did not slope down downstream direction but sloped down upstream direction), the amount of water found in it (water filled in upstream in valley between cistern #1 and manhole which is downstream of cistern #2), and condition of the inside pipe (entire circumference of pipe is dirty and not clear) they believe this crack is the one that has the highest potential for leaking the tritium to the monitoring wells and needed an immediate fix via this "Weco Seal".

3) The licensee only repaired one crack in the pipe. There are other large cracks and spaces in joints identified in the pipe downstream but due to the oval or egg shape of the inside diameter of the pipe this "Weco Seal" is not an option for repair (good for repairing round pipes but not oval shaped pipes). In addition, there were areas of the pipe that had horizontal and vertical cracks together (cross shaped). These cracks were not repaired with the "Weco Seal" because the pressure from the "Weco Seal" to seal the vertical crack could propagate and cause more damage to the horizontal cracks in that same area.

4) MPC has not finalized their report but the licensee is hoping to have a draft report by next week (MPC just completed their pipe inspection late yesterday). The licensee is awaiting MPC's report so that Engineering can evaluate it and determine from that report what actions to take with regards to addressing how to fix the pipe. There are several options on the table: a) repair the cracks that can be repaired with the "Weco Seal"; b)

replace portions of the pipe that need to be fixed; c) place an inner sleeve in the areas of the pipe that need to be fixed; or 4) just put in a whole new blowdown line. This has not been decided at this time.

5) The licensee is awaiting this report so that they can evaluate if they will need additional monitoring wells installed (which they most likely will need to do since they have identified numerous cracks and open joints in the pipe) and if so, where to install them.

6) We have reviewed liquid release permits for discharges made since discovery of the pipe cracks. All were within the confines of the permit that allowed the release and were within their ODCM limits.

7) We have lots of documents to bring back for everyone to look at if there are any questions (release permits, diagrams of the blowdown line, pictures of the inside of the pipe and "Weco Seal", NCRs associated with this issue, monitoring well sample results, composite sampler results, etc.

8) The licensee is planning to have a conference call with the region and residents next Tuesday at ~10:00 AM to discuss the status of the blowdown line.

9) We have reminded Plant Personnel not to forget about areas that should be added to decommissioning plans.

Hope this is what you are looking for as far as a summary. We could not get electronic copies of the pictures so that you could look at them now but I have color copies of some of them that I will bring back next week. May be kinda hard to understand what I am talking about above but hopefully, with the pictures and diagrams, they can help you understand it.

Let me know if you have any questions. Otherwise, we can talk more on this next week. Thanks.