{In Archive} Re: Fw: Flow Schematic Questions

palmeag to: John King 03/02/2011 02:25 PM
Cc: Damien Houlihan

From: palmeag@nu.com
To: John King/R1/USEPA/US@EPA
Cc: Damien Houlihan/R1/USEPA/US@EPA
Archive: This message is being viewed in an archive.

John, I've been told that the U1 slag sluice is in fact turned completely off for extended periods of time during the day. Also, the basin hydrostatic line was activated by flood waters on 5/15/2006.

With regard to U1 blowdown, both sources are correct. Total blowdown is 1440 with half vented to atmosphere and 720 to WTP #4. Add in the 880 gpd contribution from boiler drains and the total flow is 1600 gpd.

Good luck tomorrow, Allan.

From: king.john@epamail.epa.gov
To: Allan G. Palmer/NUS@NU
Date: 03/02/2011 08:59 AM
Subject: Fw: Flow Schematic Questions

Please see the following.

Thank you, John
----- Forwarded by John King/R1/USEPA/US on 03/02/2011 09:02 AM -----

From: Damien Houlihan/R1/USEPA/US

To: John King/R1/USEPA/US@EPA

Date: 03/02/2011 08:49 AM

Subject: Re: Flow Schematic Questions

John -

Could you follow up with Allan on:

Schematic lists Unit 1 boiler blowdown as 1400 gpd, and 1600 from blowdown tank to WTP#4, and 720 gpd lost to evap. May 5, 2010 form 2C list 720 gpd for boiler blowdown. Which is correct?

Damien Houlihan
US EPA
(617) 918-1586

From: John King/R1/USEPA/US

To: palmeag@nu.com

Cc: Damien Houlihan/R1/USEPA/US@EPA

Date: 03/01/2011 01:06 PM

Subject: Flow Schematic Questions

Allan,

Referring to the attached Merrimack Station Water Flow Schematic:

- MK1 Slag Tank flow to the Slag Settling Pond is shown as intermediate. Should be continuous?
- What is the "Hydrostatic Relief Line" coming off Outfall 003A/003B?
- Is there actually run off from the East Coal Pile? Isn't the Coal Pile run off directed into the ground?
- Please explain the dual direction, intermediate flow between the FGD WWTS/FGD Absorber and WWTP No. 1. (It seems that the FGD system may have waste that need to be treated by the WWTP No. 1. Why, though, does the WWTP No. 1 have an intermediate discharge to the FGD system?)

Appreciate your clarifications, John

[attachment "MK-M-1235.PDF" deleted by Damien Houlihan/R1/USEPA/US]

{In Archive} Re: Flow Schematic Questions

palmeag to: John King 03/02/2011 11:53 AM
Cc: Damien Houlihan, auclaaa

From: palmeag@nu.com
To: John King/R1/USEPA/US@EPA
Cc: Damien Houlihan/R1/USEPA/US@EPA, auclaaa@nu.com
Archive: This message is being viewed in an archive.

Hi John, Very good questions:

1. The U1 slag sluice flow is close to continuous, but I think it is truly intermittent. If you watch the pipe, the discharge surges off so that it actually stops for brief periods.
2. The hydrostatic relief line is an original engineering design of the wastewater treatment plant. I am told that when the river rises to an extreme level, the pipe allows water from the canal to flow into the basins to prevent them from popping out of the ground. I am not aware that it has ever been used.
3. Coal pile runoff has never been introduced to the system. We included it as a precaution in case there was an emergency situation where we needed to truck runoff to wastewater treatment.
4. Please note that the intermittent connection between the three areas you reference is marked as "(Future)." Here's the concept: The absorber is equipped with a large storage tank to drain the vessel during a major outage. The remainder of the time it sits empty. We're thinking that it may be possible to use that tank in the wastewater treatment process, e.g., to temporarily store an ash wash. The 3-way interconnection is to open up the possibility of exchanging wastewater between the systems to provide the most flexibility and efficient treatment. Nothing has been decided yet, and quite likely the conditions of your permit will play into the process. Our intent is to lay the groundwork now to allow us the opportunity to discuss options with you in the future.

A new development:

1. As I explained in our recent conversation, the pump house that provides water to the absorber will require filters to be backwashed. This water will be pulled from the treatment pond (WWTP No. 4) and directly returned with some added TSS and treated to a pH of 7.0ish. There is also an emergency pump to quench the FGD flue gas stream should the absorber trip off-line. This pump needs to be tested occasionally and will also simply withdraw from and discharge water to the pond. We are presently awaiting flow estimates and can add them to the schematic, but I think we agree that the NPDES implications are relatively minor.

I hope this answers your questions. Thanks, Allan.

From: king.john@epamail.epa.gov
To: Allan G. Palmer/NUS@NU
Cc: houlihan.damien@epamail.epa.gov
Date: 03/01/2011 01:03 PM
Subject: Flow Schematic Questions

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(See attached file: MK-M-1235.PDF)[attachment "MK-M-1235.PDF" deleted by Allan G. Palmer/NUS]

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