Stammler, Theodor B

Subject: Free Water Volume at KIF Ash Pond Discussion with Missy Hedgecoth
Entry Type: Phone call

Start: Fri 4/11/2003 2:00 PM
End: Fri 4/11/2003 2:00 PM
Duration: 0 hours

Dan Smith (Parsons) had prepared an estimate of free water volume and faxed this to Missy for review. After some discussion, it became apparent that some revision was needed. The following details the basis for developing a minimum free water volume for KIF in the event a gypsum stack is considered for the existing ash pond. There are a number of ways to accomplish this, and the following methodology is considered feasible for concept development. It may or may not become the basis for final design. Information used to determine free water volume: December 1998, 2002 letter from E.L. Deskins (KIF Plant Mgr) to Mr. Sims Crownover, Manager TDEC Division of Water Pollution Control, Enforcement and Compliance Division.

Free water volume needed for permit: 505,050.5 cy
Existing elevation of weirs in stilling basin: 754.37. Raise weir in stilling basin to 759.5 (leaving 4 ft of freeboard). This provides 430,750 cy. 505,050.5 - 430,750 = 74,300.5 cy, minimum volume needed in ash pond to meet free water volume requirements.

Assume the water elevation in ash pond = water elevation in stilling basin, and assume an average 4.5 ft depth
Assume an L shaped area with the following dimensions: 2900 ft x 200 ft x 4.5 ft/27 = 96,667 cy. This provides an excess of 96,667 - 74,300.5 = 22,367 cy.

Therefore, it would be feasible to leave the stack configuration for Option 3 the same as Option 2 for purposes of the study.

Stammler, Theodor B

From: Smith, Daniel R.
Sent: Monday, April 28, 2003 9:40 AM
To: Hedgecoth, Missy
Cc: Stammler, Ted; Petty, Harold L.
Subject: Free water volume at KIF Ash Pond

A couple of weeks ago, you and I discussed the free water volume at KIF. Attached is a summary of our conversation, and the conclusions we arrived at after discussion. We met last Wednesday to discuss the presentation for gypsum disposal options, and someone made the comment that additional free water volume would have to be included if the gypsum were sluiced, and wet ash disposal continues. Based on our conversation (see attachment), there is some extra volume based on our assumptions. I would need to know what the additional volume for free water would be to include the gypsum slucing, in order to include in the total. Someone explained that the additional volume would relate to the volume of water used for slucing gypsum.

If you have any questions or comments on the attachment, please let me know.

Free Water
lume at KIF Ash I

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