



From: Mark Lindley
Sent: Wednesday, February 09, 2005 2:50 PM
To: Bill Pfanner
Cc: 'Richard Sapudar'; John Kessler; Steve Terusaki
Subject: RE: Fw: Copy of Supplementary Storm Water Drainage Calculations
Bill:

I received the Supplementary Storm Water Drainage Calculations for BEP from Rob Holt this afternoon. The supplementary calculations are new and have not been previously submitted by the Applicant. The cover letter indicates that he also sent you, Tom Cameron, and Robert Looper a copy of the calculations. Let me know if you only received the cover letter, and I can send you a copy of the calcs for the docket.

The supplementary calculations include an "as-built" (according to Rob Holt) Stage-Area-Volume chart that documents the full capacity of the retention basin. This new SAV relationship is somewhat different than the version submitted by the Applicant in response to DR 163. Apparently the constructed basin had side slopes of 3:1 as compared to the initial plans that called for 2:1 slopes, and the "as-built" basin has somewhat less capacity than reported by the Applicant.

At elevation 333 feet, the basin provides 89.6 acre-feet of storage with 2 feet of freeboard below the 335 feet perimeter elevation. Given the measured percolation rate at the site of about 12.5 acre-feet per day, the basin should be able to contain the 96.6 acre-feet of runoff predicted for the 100 year storm.

I also faxed Rob Holt the original capacity calculations submitted by the Applicant and walked him through the calculations. The error in the calculations that led the Applicant to determine that a 55 acre-feet basin could contain 97 acre-feet of runoff volume was easily identifiable to Rob. Rob apologized that they did not catch the error during their review of the calculations. It was good to walk through this with an engineer from BEP.

Rob and I discussed one other issue that was identified in the supplemental calculations. Based on the erroneous capacity calculations, the Applicant indicated that up to 3.5 feet (24.25 acre-feet) of sediment could accumulate in the bottom of the basin before BEP would need to remove the accumulated sediment. Rob and I agreed that BEP should remove accumulated sediment more frequently because the basin does not have any spare capacity to contain sediment and the 100 year runoff volume. Rob suggested that we should handle the issue in a Condition of Certification that requires removal of accumulated sediment when 0.5 to 1.0 feet (2.1 to 4.3 acre-feet) of sediment has accumulated in the basin.

I plan to update the PSA to reflect both the actual capacity of the basin and to include the agreed upon Condition of Certification.

Let me know if you need any additional information on this, or if you do not receive a full set of the Supplementary Storm Water Drainage Calculations.

Thanks, Mark

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From: Bill Pfanner [mailto:Bpfanner@energy.state.ca.us]
Sent: Monday, February 07, 2005 9:02 AM
To: Mark Lindley
Subject: Fwd: Fw: Copy of Supplementary Storm Water DrainageCalculations

Hi Mark: I understand that Rob Holt sent you some information re: water drainage calculations for BEP I. I just want to make sure that I get a copy of all information so that it is Docketed and included in our BEP II public record. Please check back with me after you receive the information to make sure that I also got a copy.

Thanks