ADDENDUM III

Sunnyside Flow Data

SCA UPDES PERMIT UT0024759

OUTFALL #	NAME	STORAGE VOLUME ABOVE DECANT (ACFT)	DECANT PIPE SIZE	HEIGHT OF SPILLWAY ABOVE DECANT PIPE	FLOW RATE CAPACITY (CFS)	CALCULATED 24 HOUR DISCHARGE VOLUME (CUFT)	Million Gals/ day	
002	Water Supply Pipeline	0.009	Operating pipeline discharge unlikely			410	0.00	
003	Water Supply Pipeline	0.007	Operating pipeline discharge unlikely			308	0.00	
007	Rail Cut Pond	1.8	2"	3.27	0.19	16,416	0.12	
008	Old Coarse Refuse Road Pond	0.6	2"	3.65	0.2	17,280	0.13	
009	Pasture Pond	1.9	2"	4	0.21	18,144	0.14	
012	Coarse Refuse Toe Pond	0.9	4"	5.43	0.98	39,204	0.29	
013	Facility Sedimentation Pond	0.7	12	1	1.4	28,314	0.21	
014	Coal Pile Sedimentation Pond	0.5	2"	1.9	0.14	12,096	0.09	
016	**Borrow Area Pond**	**2.7**	**4"**	**2.73**	**0.69**	**59,616**	**0.45**	**Pond with Highest Max Flow/day**
017	SCA #1 Ash Landfill Phase II Landfill Sedimentation Pond	0.5	12	1.3	1.4	20,386	0.15	
018	SCA #2 Ash Landfill Sedimentation Pond	2.8	2	6	0.26	22,464	0.17	
							1.76	**Total loading from all ponds/ day**

Explanation:
Storage volume is the calculated volume that could be stored prior to discharge from overflow spillway minus the volume below the decant pipe that cannot be discharged
Flow rate capacity is the calculated flow through the decant pipe if the pond were full and decant valve opened
24 hr discharge is the volume that would occur if the decant pipe discharged for 24 hours at the calculated rate
Note - 012, 013 and 017 have discharge pipes which can drain the stored volume above that pipe and below the overflow spillway in less than 24 hours. As such, the calculated discharge volume is shown as the storage volume above the decant pipe.
Note - 002 & 003 are intended for draining the low portion of the pipeline at creek crossings. Discharge calculation is based on estimated volume in the low point segment of the pipeline.
Note - 018 is not yet constructed so information is from planning criteria

Outlet control orifice
Area = Q