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File Act/007/007

#2

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**Sunnyside
Coal Company**

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

October 11, 1991

Lowell P. Braxton
Associate Director, Mining
Department of Natural Resources
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RECEIVED

OCT 15 1991

**DIVISION OF
OIL GAS & MINING**

Re: Division Order, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-DO-91-B, Folder #3, Carbon County, Utah

Dear Mr. Braxton,

Sunnyside Mine has reviewed the Division Order and Finding of Permit Deficiency dated September 9, 1991, to Mr. Fielder. In order to adequately review and analyze the sediment pond, impoundment and containment pond calculations and in order to prepare a complete permit change application package addressing pond compliance or modifications, Sunnyside requests a 90-day extension of the Division order for the 15 listed ponds.

Sunnyside Mine has conducted a preliminary review of each of the ponds, impoundments and containments. A copy of this review is attached. Preliminary review and analysis concludes the existing sediment pond and impoundment discharge systems pass the 25-year, 6-hour events. Containment ponds in the refuse pile area are specifically designed not to discharge.

Compliance with the principal and emergency spillway provisions requires a combination of manual decantation and/or changing elevation of the existing sedimentation pond discharge pipes. The impoundments adequately pass peak storm flows in addition to the normal ongoing discharge. Several compliance options are presented for the containment ponds with regard to the non-discharging design.

Corporate Offices
The Registry
1113 Spruce Street
Boulder, CO 80302
303-938-1506
FAX: 303-938-5050

Sales Office
1350 17th Street
Suite 350
Denver, CO 80202
303-534-3348
FAX: 303-825-8626

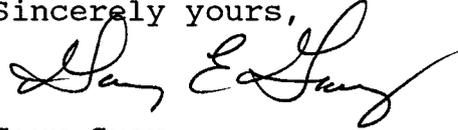
West Coast Division
1345 Astoria Drive
Fairfield, CA 94533
707-425-4506

Operations
Highway 123
P.O. Box 99
Sunnyside, UT 84539
801-888-4421
FAX: 801-888-2581

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Sunnyside Mine appreciates your understanding and cooperation in our request for an extension. Our current staffing coupled with the age of some of the ponds and the number of ponds to be analyzed precludes the proper analysis and design change within the specified 30-day time period.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Gary Gray".

Gary Gray
Chief Mine Engineer

cc:

Sunnyside Mine
Impoundments, Sediment Structures, Slurry Containment Ponds

Proposal for Compliance with Division Order, Sunnyside Coal
Company, Sunnyside Mine, ACT/007/007-DO-91B, Folder #3, Carbon
County, Utah

TwinShafts Mine Water Discharge Impoundment (001)
Old Whitmore Mine Water Impoundment (002A)
New Whitmore Mine Water Impoundment (002B)
Clear Water Pond Sediment Pond (004)
Manshaft Sediment Pond (006)
Railcut Sediment Pond (007)
Old Course Refuse Road Sediment Pond (008)
Pasture Sediment Pond (009)
Lower No. 2 Canyon Sediment Pond (010)
Upper No. 2 Canyon Sediment Pond (011)
No. 3 Hoist House Sediment Pond (013)
Slurry Cell No. 1 Sediment Pond
Slurry Cell No. 2 Sediment Pond
East Slurry Cell Containment Pond
West Slurry Cell Containment Pond

Twinshafts Mine Water Discharge Impoundment

The Twinshafts Mine Water Discharge impoundment with NPDES discharge point designation 001 is an off-channel, temporary impoundment with a total as-built contained volume of approximately 4.5 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). Designed to contain a sustained mine water inflow rate of 600 gpm with a retention time of 24 hours, the impoundment requires approximately 2.7 acre-feet of storage as a mine water impoundment. The impoundment is discharged through a 24-inch CMP culvert when the contained volume of the pond is approximately 3.4 acres (an as-built 0.7 acre-foot sediment volume and a 2.7 acre-foot storage volume). The impoundment also contains a 2-inch valved victaulic pipe located approximately 2-inches above the bottom of the 24-inch CMP.

The 24-inch CMP has a full flow capacity of 35 cfs and the 2-inch victaulic has a full flow capacity of 0.1 cfs for a combined full flow capacity of 35.1 cfs. A 25-year, 6-hour precipitation event requires a peak discharge of 1.0 cfs plus the 1.3 cfs discharge from the mine water inflow for a total of 2.3 cfs. The current combination of pipes exceed the 25-year, 6-hour event. Although Sunnyside envisions no circumstances where this impoundment will not control or pass the storm event, Sunnyside commits to pumping any sustained or rising water levels above the top of the CMP outlet culvert.

As built, the impoundment captures undisturbed runoff from a small 3.5 acre watershed within an approved ASCA northeast of the impoundment. The watershed inflow from a 100-year, 24-hour storm event requires less than 0.1 acre-feet of capacity and a 10-year, 24-hour event is virtually insignificant. Sunnyside will submit plans for a diversion berm to divert this runoff flow from entering the pond.

Whitmore Canyon Mine Water Discharge Impoundments

The Whitmore Canyon Mine Water Discharge impoundments (NPDES discharge point designations 002A and 002B), are off-channel, temporary impoundments with a total as-built contained volume of approximately 2.8 acre-feet for discharge 002A and approximately 5.7 acre-feet for 002B. The structures are not addressed by the MSHA criteria of 30 CFR 77.216(a). Impoundment 002A is designed to contain an average mine water inflow of 500 gpm and impoundment 002B is designed to contain a sustained mine water inflow rate of 600 gpm. Both impoundments are designed with a retention time of 24 hours. Both impoundments may receive mine water discharge water from an 8-inch pipe, with either pond or both ponds in operation. No surface water runoff is diverted to either pond.

The 002A impoundment is discharged through a 15-inch CMP culvert at elevation 7007.7 when the contained volume of the pond is approximately 2.1 acre-feet. An additional 0.7 acre-feet of capacity is contained between the bottom of the 15-inch CMP culvert and the freeboard elevation of 7010 feet (1 foot beneath the top of the impoundment). The impoundment is cross-tied to the 002B impoundment with an 8-inch connection pipe at an outlet elevation of 7005.9 feet (separate from the 8-inch inlet pipe).

Impoundment 002A is capable of discharging 5.2 cfs through the 15-inch CMP. The 8-inch victaulic is capable of diverting 1.9 cfs to the adjacent impoundment. A 25-year, 6-hour storm requires a discharge capacity of 0.5 cfs plus the normal discharge of 1.1 cfs for a total storm discharge of 1.6 cfs. The existing pipes adequately pass this storm event.

The 002B impoundment is discharged through a 24-inch CMP culvert at elevation 7003.8 when the contained volume of the pond is approximately 4.1 acres. This volume allows 1.4 acre-feet sediment storage and 2.7 acre-feet water storage for a 24-hour retention period. An additional 2.1 acre-feet of capacity exists between the bottom of the 24-inch CMP outlet and elevation 7008 feet (1 foot of freeboard at the top of the impoundment). The 8-inch cross-tie pipe is at elevation 7001.8 feet, 2 feet below the 24-inch CMP outlet.

Impoundment 002B is capable of discharging 16.0 cfs through the 24-inch CMP and diverting flow back through the 8-inch pipe to the adjacent impoundment. A 25-year, 6-hour storm requires a discharge of 0.7 cfs plus the normal discharge of 1.3 cfs from the mine water inflow for a total storm discharge of 2.0 cfs. The existing pipes adequately pass the storm event.

Although Sunnyside does not envision a situation where these impoundments will not control or pass a 25-year, 6-hour storm event, Sunnyside commits to pumping any sustained or rising water levels above the top of the CMP outlet culvert.

Clear Water Sediment Pond

The Clear Water sediment pond is a water storage pond and final sediment pond. Fed by Slurry pond No.1 and 2 through an 8-inch inlet pipe, the Clear Water pond is constructed to store approximately 2.4 acre feet of water. The water is occasionally appropriated for watering an alfalfa field, otherwise the discharge is released into Icelander drainage. The pond has NPDES discharge point 004.

The Clear Water sediment pond is an off-channel, temporary sedimentation pond that captures runoff from a small area immediately surrounding the pond and accepts discharge from either Slurry pond. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure is continuously discharging through a perforated 8-inch standpipe. Typically discharging 30 gpm and designed for a maximum 300 gpm (<1.0 cfs), the 8-inch standpipe can discharge 3.2 cfs.

The 8-inch standpipe provides an emergency discharge 1 foot below the top of the pond, maintaining 1 foot of freeboard. A 10-year, 24-hour storm requires 0.33 acre-feet of capacity and a 25-year, 6-hour storm requires a peak discharge of 0.9 cfs. The pond capacity of 2.4 acre-feet and the 8-inch pipe capacity of 3.2 cfs adequately handle either event.

The Clear Water pond has one discharge outlet. The Clear Water pond will be modified for an open channel emergency spillway capable of diverting a 25-year, 6-hour storm flow into Icelander drainage.

Manshaft Sedimentation Pond

The Manshaft sediment pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The pond passes the 25-year, 6-hour storm without modification to the 18-inch CMP discharge culvert.

The Manshaft sediment pond (NPDES 006) is an off channel, temporary sediment control structure with a total as-built volume of approximately 1.1 acre-feet. The structure captures runoff from 3 watersheds by the manshaft area. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.35 acre-feet of sediment load capacity and a 0.76 acre-feet of storm capacity. The storm capacity breakdown is 0.40 acre feet for a 10-year, 24-hour storm capacity and 0.36 acre-feet excess capacity to the top of the CMP outlet. The top of the culvert is 1.5 foot below the top of the pond, allowing a 1.5 foot freeboard. A 10-year, 24-hour storm requires 0.28 acre-feet of capacity.

The above capacities require changing the 2-inch pipe elevation. The 2-inch pipe is currently set to discharge at 7231 feet and will require a 1.1 foot extension to set the discharge elevation at 7232.1 feet, 1.4 foot below the 18-inch culvert. The 18-inch CMP currently discharges at 7233.5 feet and requires no modifications.

The Manshaft sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 18-inch CMP set 1.4 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 0.9 cfs. The combined discharge capacity of the 18-inch CMP and the 2-inch pipe exceeds 10.6 cfs.

Sunnyside does not envision a situation where a 25-year, 6-hour storm event will not be properly controlled. Sunnyside commits to manual decantation of the pond following a storm event. The gate valve on the 2-inch pipe is to remain open.

Railcut Sediment Pond

The Railcut sediment pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The pond passes the 25-year, 6-hour storm without modification to the 48-inch CMP discharge culvert.

The Railcut sediment pond (NPDES 007) is an off channel, temporary sediment control structure with a total as-built volume of approximately 13.2 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 1.03 acre-feet of sediment load capacity and a 12.2 acre-feet of storm capacity. The storm capacity breakdown is 4.26 acre feet for a 10-year, 24-hour storm capacity and 1.37 acre-feet excess capacity to the top of the CMP outlet. Additional capacity between the top of the culvert and the freeboard (1 foot below the top of the dam) is 6.57 acre-feet. A 10-year, 24-hour storm requires 3.8 acre-feet of capacity.

The above capacities require changing the 2-inch pipe elevation. The 2-inch pipe is currently set to discharge at 6207.1 feet and will require a 2.8 foot extension to set the discharge elevation at 6209.9 feet, 1 foot below the 48-inch culvert. The 48-inch CMP currently discharges at 6210.9 feet and requires no modifications.

The Railcut sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 48-inch CMP set 1 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 16 cfs. The combined discharge capacity of the 48-inch CMP and the 2-inch pipe exceeds 124 cfs.

The modifications to the discharge pipes will require manual decantation of the pond by pumping following storm events. The gate valve on the 2-inch pipe is to remain open.

Old Coarse Refuse Road Sediment Pond

The Old Coarse Refuse Road Sediment Pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The pond passes the 25-year, 6-hour storm without modification to the 18-inch CMP discharge culvert.

The Old Coarse Refuse sediment pond (NPDES 008) is an off channel, temporary sediment control structure with a total as-built volume of approximately 1.1 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.1 acre-feet of sediment load capacity and a 1.0 acre-feet of storm capacity. The storm capacity breakdown is 0.8 acre feet for a 10-year, 24-hour storm capacity and 0.2 acre-feet excess capacity to the top of the CMP outlet. The top of the culvert is at the freeboard elevation of the pond (1 foot below the top of the dam). A 10-year, 24-hour storm requires 0.52 acre-feet of capacity.

The above capacities require changing the 2-inch pipe elevation. The 2-inch pipe is currently set to discharge at 6395.5 feet and will require a 2 foot extension to set the discharge elevation at 6397.5, one foot below the 18-inch culvert. The 18-inch CMP currently discharges at 6398.5 feet and requires no modifications.

The Old Coarse Refuse sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 18-inch CMP set 1 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 3.9 cfs. The combined discharge capacity of the 18-inch CMP and the 2-inch pipe exceeds 21 cfs.

The modifications to the discharge pipes will require manual decantation of the pond by pumping following storm events. The gate valve on the 2-inch pipe is to remain open.

Pasture Sediment Pond

The Pasture sediment pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The pond passes the 25-year, 6-hour storm without modification to the 18-inch CMP discharge culvert.

The Pasture sediment pond (NPDES 009) is an off channel, temporary sediment control structure with a total as-built volume of approximately 0.47 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.02 acre-feet of sediment load capacity and a 0.45 acre-feet of storm capacity. The storm capacity breakdown is 0.29 acre feet for a 10-year, 24-hour storm capacity and 0.16 acre-feet excess capacity to the top of the CMP outlet. The top of the CMP allows 1 foot of freeboard to the top of the pond. A 10-year, 24-hour storm requires 0.21 acre-feet of capacity.

The above capacities require changing pipe elevations. The 2-inch pipe is currently set to discharge at 6486.5 feet and will require a 0.8 foot extension to set the discharge elevation at 6487.3 feet. The 24-inch CMP currently discharges at 6488.3 feet and requires no modifications.

The Pasture sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 18-inch CMP set 1 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 0.72 cfs. The combined discharge capacity of the 18-inch CMP and the 2-inch pipe exceeds 14 cfs.

The modifications to the discharge pipes will require manual decantation of the pond by pumping following storm events. The gate valve on the 2-inch pipe is to remain open.

No. 2 Canyon Lower Sediment Pond

The No. 2 Canyon Lower sediment pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The pond passes the 25-year, 6-hour without modification to the 24-inch CMP.

The No. 2 Canyon Lower sediment pond (NPDES 010) is an off channel, temporary sediment control structure with a total as-built volume of approximately 0.67 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.07 acre-feet of sediment load capacity and a 0.60 acre-feet of storm capacity. The storm capacity breakdown is 0.35 acre feet for a 10-year, 24-hour storm capacity and 0.15 acre-feet excess capacity to the top of the CMP outlet. An additional 0.10 acre-feet of capacity exists above the top of the culvert to the freeboard elevation 1 foot below the top of the pond. A 10-year, 24-hour storm requires 0.25 acre-feet of capacity.

The above capacities require changing pipe elevations. The 2-inch pipe is currently set to discharge at 6747.3 feet and will require a 3.7 foot extension to set the discharge elevation at 6751 feet. The 24-inch CMP currently discharges at 6752 feet and requires no modifications.

The No.2 Canyon Lower sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 24-inch CMP set 1 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 0.19 cfs. The combined discharge capacity of the 24-inch CMP and the 2-inch pipe exceeds 42 cfs.

Sunnyside commits to modifications to the discharge pipes and manual decantation of the pond by pumping following storm events. The gate valve on the 2-inch pipe is to remain open.

No. 2 Canyon Upper Sediment Pond

The No. 2 Canyon Upper sediment pond contains the 10-year, 24-hour storm with minor modifications to the 2-inch pipe. The sediment pond passes the 25-year, 6-hour storm with minor modifications to the 18-inch CMP.

The No. 2 Canyon Upper sediment pond (NPDES 011) is an off channel, temporary sediment control structure with a total as-built volume of approximately 0.27 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.05 acre-feet of sediment load capacity and a 0.22 acre-feet of storm capacity. The storm capacity breakdown is 0.14 acre feet for a 10-year, 24-hour storm capacity and 0.08 acre-feet excess capacity to the top of the CMP outlet. The top of the CMP allows 1 foot of freeboard. A 10-year, 24-hour storm requires 0.14 acre-feet of capacity.

The above capacities require changing pipe elevations. The 2-inch pipe is currently set to discharge at 6822 feet and will require a 1 foot extension to set the discharge elevation at 6823 feet. The 18-inch CMP currently discharges at 6824.4 feet and requires cutting 0.4 feet from the culvert to maintain a 1 foot freeboard.

The No.2 Canyon Upper sediment pond discharges through a 2-inch pipe located above the 10-year, 24-hour storm capacity and an 18-inch CMP set 1 foot above the 2-inch discharge pipe. A 25-year, 6-hour storm requires a peak discharge of 0.97 cfs. The combined discharge capacity of the 18-inch CMP and the 2-inch pipe exceeds 6 cfs.

Sunnyside commits to the modifications to the discharge pipes and manual decantation of the pond by pumping following storm events. The gate valve on the 2-inch pipe is to remain open.

No. 3 Hoisthouse Sediment Pond

The No. 3 Hoisthouse sediment pond contains the 10-year, 24-hour storm without any additional modifications. The sediment pond also passes the 25-year, 6-hour storm without any additional modifications.

The No. 3 Hoisthouse sediment pond (NPDES 013) is an off channel, temporary sediment control structure with a total as-built contained volume of approximately 0.8 acre-feet. The structure is not addressed by the MSHA criteria of 30 CFR 77.216(a). The structure includes 0.13 acre-feet of sediment load capacity and a 0.68 acre-feet of storm capacity. The storm capacity breakdown is 0.25 acre-foot as a 10-year, 24-hour storm capacity, 0.20 acre-feet excess capacity to the top of the CMP culvert, and an additional 0.23 acre-feet from the culvert to the freeboard elevation (1 foot below the top of the dam). A 10-year, 24-hour storm event is estimated to require 0.16 acre-feet of capacity.

The No. 3 Hoisthouse sediment pond is discharged through a 2-inch pipe above the 10-year, 24-hour storm capacity and a 12-inch CMP culvert located 1 foot above the 2-inch pipe. A 25-year, 6-hour storm requires a peak discharge capacity of 0.72 cfs. The combined discharge of the 12-inch culvert and the 2-inch pipe exceed 180 cfs.

The sediment pond is not presently plumbed for decantation without pumping. Sunnyside commits to pumping storm events after a 24-hour retention period. The gate valve on the 2-inch pipe is to remain open.

Slurry Ponds No. 1 and 2

Slurry Ponds No. 1 and 2 receive fine refuse material from the coal preparation plant by way of an open slurry ditch. The ponds are designed for dewatering, settling and filtration of the coal fines. Typically one pond is in use while the other has sediments removed. Occasionally both ponds require servicing and the East Slurry Cell receives the output from the slurry ditch until one of the ponds can be put back into operation.

Both ponds are off channel, temporary control structures. Pond 1 is designed with a volume of 18.9 acre-feet when empty and requires 4.8 acre-feet of remaining storm and freeboard capacity when the pond is taken out of service. Pond 2 is designed with a volume of 12.6 acre-feet when empty and approximately 4.4 acre-feet remaining when taken out of service. Neither pond is addressed by the MSHA criteria of 30 CFR 77.216(a).

Each pond is built as a partitioned pond with a coarse refuse filter dike typically discharging 30 gpm and capable of discharging 255 gpm of water to an 8-inch outlet to the Clear Water Discharge Pond. The 8-inch outlet is the only outlet from the ponds.

Both surface water runoff and coal preparation plant fines may reach the ponds during a storm. Slurry Pond No. 1 and 2 and the East Slurry Cell all may see the drainage associated with the slurry ditch depending upon which structure is receiving the slurry during the time of the storm. Other than the drainage associated with the slurry ditch, the Slurry ponds capture only the surface water associated with their own disturbance.

Routine flow of coal fines is manually controlled. Sunnyside commits to maintaining 2.5 feet of elevation below the top of the pond for Slurry Pond No. 1 and 3.0 feet of elevation for Slurry Pond No. 2. Each pond then has 1 foot of freeboard. Slurry Pond No. 1 requires 2.58 acre-feet of capacity for a 10-year, 24-hour storm and 1.5 feet results in 2.8 acre-feet of available capacity. Pond No. 2 requires 2.54 acre-feet and 2 feet of elevation results in 2.8 acre-feet of capacity.

Each pond has an 8-inch outlet to discharge water to the Clear Water pond. Sunnyside commits to providing an emergency spillway for each of these ponds. Both of the Slurry ponds will be modified for open channel emergency spillways safely passing a 25-year, 6-hour storm event. Both ponds will divert the storm flows to the Clear Water pond.

East Slurry Cell

The East Slurry Cell is an active slurry dewatering and settling pond. Currently in use while both Slurry Ponds No. 1 and 2 are being dried and cleaned, the East Slurry Cell was constructed in 1974 prior to the deactivation of the West Slurry Cell. The East cell remains the backup contingency cell at this time.

The East Slurry Cell is a temporary control structure with MSHA No. 1211-UT-09-01813-01. The cell was designed and built as a totally containing structure. Current capacity is estimated to exceed 120 acre-feet. No outlet structures currently exist for this cell.

The East Cell, Slurry Pond No. 1 and 2 all may see the drainage associated with the slurry ditch depending upon which structure is receiving the slurry during the time of the storm. Other than the drainage associated with the slurry ditch, the East cell captures only the surface water associated with its own disturbance.

Routine flow of coal fines is manually controlled. Sunnyside commits to maintaining 2.5 feet of elevation below the top of the pond for the East Slurry Cell. The cell then has 2 foot of freeboard and 0.5 feet of elevation corresponding to approximately 3.2 acre-feet of storm storage capacity. A 10-year, 24-hour storm requires 2.9 acre-feet of capacity.

The East Cell is currently a non-discharging structure. The East Cell will be modified for an open channel emergency spillway safely passing a 25-year, 6-hour storm event. The East Cell will divert the storm flows to a terrace on the refuse pile, via an existing road ditch and ultimately to the Railcut Sediment pond.

West Slurry Cell

The West Slurry Cell is an inactive slurry dewatering and settling pond. The cell is to be incorporated into the refuse pile as the next refuse lift is placed.

The West Slurry Cell is a temporary control structure with MSHA No.1211-UT-09-01813-01. Designed specifically to hold slurry, the cell was last used as a slurry cell in 1975. Since 1975, dry coal fines from other slurry cells have been placed in the cell. The cell was designed as a totally containing structure, and no outlet structures exist for the cell.

Use of the cell was suspended until the refuse pile reached an elevation ensuring a higher stability factor for the Cell. The refuse pile has attained this elevation. The Cell requires a 10-foot deep ditch prior to initiating additional use of the Cell. Sunnyside has no plans to use the Cell for slurry dewatering, but instead intends to use the area for additional coarse refuse disposal. Plans for incorporation of this area into the coarse refuse disposal area will be submitted to the Division.

The West cell today captures only the surface water runoff from its own disturbance area. The total watershed area of the pond is conservatively approximated at 34.8 acres and the flat bottom of the pond is approximately 14.7 acres, resulting in a large flat area for storm water accumulation. Consequently, a 10-year, 24-hour storm event will leave less than 4-inches of water in the bottom of the cell; the 100-year, 24-hour storm approximately 5-inches.

Sunnyside is perplexed as to the best course of action for this cell. Pumping of extremely large storm events is an option. However due to a large plain of little water accumulation, pumping minor precipitation events is not viable. Construction of a open channel discharge in the top of the impoundment would allow discharge after containing approximately 172 acre-feet of water, far in excess of the 100-year, 24 hour storm event requiring 6.1 acre feet. This structure, when not in use, truly provides total containment of any anticipated storm.

POND TABLE

POND	NPDES NO.	AS-BUILT CAP'Y AC-FT	10YR/24HR VOLUME AC-FT	25YR/6HR FLOW CFS	DISCHARGE CAP'Y CFS				
TWINSHAFT MINE WATER	001	4.5	NA	2.3	35.1				
OLD WHITMORE MINE WATER	002A	2.8	NA	1.6	5.2				
NEW WHITMORE MINE WATER	002B	5.7	NA	2.0	16.0				
CLEARWATER	004	4.6	0.33	0.93	3.16				
MANSHAFT SEDIMENT	006	1.1	0.28	0.9	10.6				
RAILCUT SEDIMENT	007	13.2	3.8	16	124				
OLD COARSE REFUSE HAUL ROAD SED.	008	1.1	0.52	3.9	21				
PASTURE SEDIMENT	009	0.47	0.21	0.72	14				
#2 CYN LOWER SEDIMENT	010	0.67	0.25	0.19	42				
#2 CYN UPPER SEDIMENT	011	0.27	0.14	0.97	6	SUNNYSIDE RAINFALL EVENTS (INCHES)			
						10 YR	1.33	1.84	
#3 HOIST HS SEDIMENT	013	0.8	0.16	0.72	180	25 YR	1.62	2.20	
						50 YR	1.82	2.49	
						100 YR	2.05	2.66	