APPENDIX 11-L

NORTH POND EXPANSION - CELL A2

(06/27/94)

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Due to reformatting of the Navajo Mine PAP, the following references in this appendix have been changed:

NM-0003C Reference	NM-0003D Reference
Exhibit 29-1J	Exhibit 11-24
Exhibit 29-1K	Exhibit 11-49

(06/27/94)

Cell A 2 Expansion Pond

The cell A 2 expansion pond is adjacent to the presently existing ponds in the North pond system near 20071200N, 313500E. The North pond 1 system consists of four (4) distinct cells namely A, A 2, B, and C. These ponds are linked by overflow spillways protected by an oil skimmer located at the outlet from cell A. The ponds in conjunction with Pond 5 are designed to catch and contain all runoff from the north office, shop, and coal handling facility. At present, the capacity of these ponds when cells B and C are empty, contains the 100 - yr., 6-hour storm event. The addition of the cell A 2 pond provides an operating buffer of storm capacity for those times when the ponds are not empty.

Location of cell A 2 , as well as design and construction details can be seen on the accompanying maps and diagrams, see EXHIBIT 11-12 to 11-25. As-Builts for North Pond 1 (North Cells) can be found on EXHIBIT 11-49a and 11-106.

Design

The Pond

The cell A 2 Pond provides approximately 5 additional acre feet of capacity, to the present total capacity of approximately 29 acre feet available in the Pond 1 system. The slope of the sides of the pond were constructed at least 3:1.

The Spillway

A level spillway at an elevation of 5329.5 feet allows water to flow between cells A and A2. The Spillway is lined with 6" of concrete. The spillway is 50' wide at the base with sides sloping up at 2:1.

Operation Sequence

The pond 1 drainage system is designed to deliver all runoff to cells A and A2. For this reason, cells A and A2 can be considered primary cells. Once either of these cells is filled to and elevation of 5329.5, it will overflow through the spillway into the other primary cell. Only when both cells are filled to an elevation of 5330 will water flow from cell A through the oil skimmer to cell B. Once cell B is filled to an elevation of 5330 ft. will water flow into cell C. Cell A 2 will be kept at an appropriate depth to allow for containment of the 100 - yr. 6 - hr. storm event, in conjunction with cells B and C.

Pumping Plan

Water and sediment levels are maintained at a level which will ensure that the designed capacity is available. Cleaning of the pond will be performed as needed. Water levels will be pumped to below design capacity within ten working days of a significant runoff event.