



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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July 12, 1990

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Tom Munson, Sr. Reclamation Hydrologist 

RE: Water Monitoring Plan and Revised Parameter List, Cyprus-Plateau Mining Company, Starpoint Mines, ACT/007/006-88C, Folder #2, Emery County, Utah

## Synopsis

The initial Plateau Spring Monitoring Program review occurred in April 1987. Springs were picked to be removed or added to the current monitoring program because of location outside or inside the areas of potential hydrologic impact.

Since April 15, 1987, Plateau has been attempting to drop parameters from the monitoring plan based on statistical analysis of data collected. On October 3, 1988, a revised parameter and frequency schedule, Table 80 and 81 of the Permit Application Package, was approved and inserted. On December 8, 1988, the initial request to delete parameters was denied and the Division requested that the operator obtain baseline data on every station before approval was granted. This request was sent to the operator on January 3, 1989. Another request to delete parameters was filed with the Division in November of 1989 after an additional year of baseline data collection on all approved sites. This information was reviewed during the spring of 1990 and was found to be complete and accurate.

## Analysis

The Division verbally approved Plateau's request to revise their water monitoring list at the end of May, prior to the spring data collection, based on the complete submittal of data and adequate justification to modify the parameter list with statistical justification. Attached is the revised parameter list which is currently in effect. The revised parameter list went into effect in the spring of 1990.

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Memo to P. Grubaugh-Littig  
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Recommendation

A copy of the revised parameter list be incorporated into the permit and the operator be required to do the original extended parameter list whenever new springs are identified. The newly identified springs will be sampled for a duration of two years to verify approval of deleted parameters. Forest service be notified of these changes through updates to their plan.

djh  
Attachment  
AT46/36-37

Table 1

Constituent	Surface Water		Ground Water	
	Baseline	Operational	Baseline	Operational
Acidity	-	Delete	-	Delete
Aluminum, diss.	Delete	-	Delete	-
Arsenic, diss.	Delete	-	Delete	-
Barium, diss.	Delete	-	Delete	-
Bicarbonate	Retain	Retain	Retain	Retain
Boron, diss.	Delete	-	Delete	-
Cadmium, diss.	One year*	-	One year	-
Calcium, diss.	Retain	Retain	Retain	Retain
Carbonate	Retain	Retain	Retain	Retain
Cation/Anion	Retain	Retain	Retain	Retain
Chloride	Retain	Retain	Retain	Retain
Chromium, diss.	Delete	-	Delete	-
Copper, diss.	Delete	-	Delete	-
Oxygen, diss.	Delete	Delete	-	-
Fluoride, diss.	Delete	-	Delete	-
Hardness, total	Retain	Retain	Retain	Retain
Iron, diss.	Retain	Retain	Retain	Retain
Iron, total	Retain	Retain	Retain	Retain
Lead, total	-	-	One year	-
Magnesium, diss.	Retain	Retain	Retain	Retain
Manganese, tot.	Retain	Retain	Retain	Retain
Mercury, diss.	Delete	-	Delete	-
Molybd., diss.	Delete	-	Delete	-
Nickel, diss.	Delete	-	Delete	-
Ammonia, diss.	Delete	-	Delete	-
Nitrate, diss.	Delete	Add**	Delete	-
Nitrite, diss.	Delete	Add**	Delete	-
Oil & Grease	Retain	Retain	-	-
Phosphate, diss.	Delete	-	Delete	-
Potassium, diss.	Retain	Retain	Retain	Retain
Selenium, diss.	Delete	-	Delete	-
Solids, diss.	Retain	Retain	Retain	Retain
Solids, settle.	Delete	Delete	-	-
Solids, susp.	Add	Retain	-	-
Sodium, diss.	Retain	Retain	Retain	Retain
Sulphate, diss.	Retain	Retain	Retain	Retain
Sulphide, diss.	One year	-	One year	-
Zinc, total	Delete	-	Delete	-

\* Sample for year (1989), if no change from past data: delete

\*\* Add for station in Mudwater Canyon (51MW) and on Miller Creek (ST1) only