



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 16, 1988

TO: Sue Linner, Permit Supervisor

FROM: Tom Munson, Reclamation Hydrologist *TM*

RE: Request to Revise H2O Monitoring Plan Frequency of Surface H2O Sampling, Hiawatha Mine Complex, U.S. Fuel Company, ACT/007/011-88A, File Folder #2, Carbon County, Utah

Synopsis

U.S. Fuel Company has been monitoring streams and springs in and around the permit area for ten years. Sampling has been conducted on a monthly basis for streams of both an intermittent and perennial nature. In 1987 the operator changed the sampling schedule to only include the months of April through October. U.S. Fuel Company would like to sample water quality on a quarterly basis and flow measurements on a monthly basis according to the requirements of the Division's guidelines. The Division received a request to this effect on March 31, 1988. This memo reviews this request.

Analysis

The Division feels that U.S. Fuel Company has been diligent in their pursuit of collecting water quality data. Based on the requirements of our guidelines and the parameters and frequencies contained in those guidelines, the Division requests that U.S. Fuel Company make the following parameter changes in their sampling program.

Table VII-7, "Abbreviated Surface Water Sampling Analytical Schedule" needs to add the following parameters:

Dissolved Oxygen (Perennial Streams only)
Total Hardness
Total Settleable Solids
Acidity
Manganese
Cation-Anion Balance

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Table VII-7A, "Comprehensive Schedule." needs to add the following parameters:

Dissolved Oxygen (Perennial Streams Only)
Total Settleable Solids
Acidity
Oil and Grease
Cation-Anion Balance
Total Combustible Solids

The operator has only collected a baseline parameter list for one month in the 1987 sampling year on Stations ST-2, ST-2A, ST-6 and ST-6A. Because they have not included any baseline data for metals prior to 1987 except for an abbreviated list in 1979, the Division feels that they must continue to sample the parameters listed in Table VII-7a plus the additional parameters mentioned in this memo, for two years during high and low flow. The high flow sample must be taken in April or May and the low flow sample taken in September or October. The Division feels enough data has been collected to date so that the operator need only sample the field parameters from the Division's guidelines during the other months.

It was noted that the operator has failed to include field data on stations ST-2, ST-3B, ST-4A, ST-4B, and ST-6A during the 1987 season. The Division feels the operator must make a conscious effort to collect all data (field and lab) in future sampling runs or risk enforcement action and the operator must collect at least two years of consistent baseline data at high and low flow using the Parameters from the modified Table VII-7a.

The Division requests that the operator change the titles of these tables to "Baseline Monitoring List" for Table VII-7A and "Operational Monitoring List" for table VII-7. The Division also would like to see a summary table indicating the length of time the station has been in existence, the months to be sampled, and the parameter table that will be followed for each sample.

Recommendations

Conditional approval with the following conditions:

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- (1) Revise Tables VII-7 and VII-7a to add those additional parameters necessary to bring these tables in line with the Division's guidelines for water quality sampling, also change the titles of these tables to "Baseline Monitoring List" for Table VII-7a and "Operational Monitoring List" for Table VII-7.
- (2) Develop a table for the PAP which includes all water sampling stations and includes the following information:
 - (a) Initial set-up date of station and years of data collection collected to date.
 - (b) Month by month schedule of when sampling will occur and by what parameter list (Table VII-7 or VII-7a) five years in the future. It must be noted that the Division's guidelines require baseline samples every fifth year.
- (3) The operator must sample the parameters listed in Table VII-7a plus the additional parameters noted in the analysis section of this memo for two years during high and low flow. The high flow sample must be taken in April or May and the low flow sample taken in September or October. The operator must collect field parameters during the remaining months. After two years of consistent sampling, the operator may sample the operational parameters in Table VII-7 plus the additional parameters noted in the analysis section of this memo. Every fifth year a set of baseline samples will be collected at high and low flow.

djh
cc: Dave Darby
9486R/31-33