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Mr. Reynolds/mt/393

18 AUG 1975

SARRM-PO

RE: The Matter of Unauthorized Discharge of Pollutants by Shell Chemical, Inc., and/or United States Army, Rocky Mountain Arsenal, Docket No. 75LS012 Findings of Fact and Order 25-8-605, C.R.S. 1973

Edward G. Dreyfus, M.D., M.P.H.
Colorado Department of Health
Division of Administration
4210 E. 11th Avenue
Denver, CO 80220

Dear Dr. Dreyfus:

In our letter of 27 May 1975, Col. Watson, past commander, described actions planned and taken to comply with the referenced findings of Fact and Order. The purpose of this letter is to advise you of progress made to-date and to note minor changes in the activity schedule.

Actions completed:

- a. Surface Water - To preclude the flow of contaminated surface water from the only known discharge point, the bog on the northern boundary is being pumped on an intermittent basis as required to stop further out-flow.
- b. Contaminated Waste Sewage Line - The sewage line draining contaminated wastes from the Shell Chemical Plant and the Rocky Mountain Arsenal Decil Plant has been replaced with new piping to a point 800 feet from Basin "F". The effluent end of the pipe has been extended approximately 50 feet into Basin "F", to preclude possible leakage prior to the contaminated wastes entering Basin "F".

*PC 238-03 *DT 18 Aug 75
ORGANISM-RM-A-R *DC 2001
SUB UNAUTHORIZED DISCHARGE
POLLUTANTS SHELL CO

RAA014

11465

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18 AUG 1975

SARRM-PO
Dr. Edward G. Dreyfus

Work in process:

Basin "A" Activity.

a. The drainage ditch running south to north along the west side of Basin "A" is under construction and upon completion will provide a drainage bypass for surface water runoff, preventing rainwater from entering Basin "A" and causing further contamination downstream. This effort originally scheduled for completion on 1 July 1975, has been delayed until 18 August 1975 due to inclement weather and temporary non-availability of heavy equipment.

b. Contouring of Basin "A" is underway. Since Basin "A" is one of the lowest points on the Arsenal, in relation to water table elevation, two large mounds or high points will be placed in the 300 acre basin to enhance drainage of rainwater out of the area, preventing this water from draining through the aquifer. This effort originally scheduled for completion on 1 July 1975, has been delayed until 25 August 1975 due to the same problems encountered with ditching.

c. Drilling of the four wells northwest of Basin "A" into the aquifer channel created by bedrock highs on either side of the channel is intended to interrupt the aquifer flow downstream from Basin "A", thereby eliminating this source of contamination. This effort will be accomplished under contract with contract award expected by 15 August 1975, and completion of the wells by 1 September 1975. Water pumps and ancillary equipment are on-hand at Rocky Mountain Arsenal.

d. In the event the four wells are not completely effective, a bentonite dam may be constructed downstream from the wells by digging a trench to bedrock and backfilling the trench with a bentonite/mud slurry. This dam would prevent contaminated water from bypassing the line of wells. Any decision to proceed with the dam will be based upon performance of the four wells.

Surveillance Plan:

The Water Monitoring and Survey Plan has been agreed to by your office and is in effect. By mutual agreement, all agencies involved have stopped analysis for copper and chlorate since all analyses to-date have been negative.

* FC 238-03 * DR 18 Aug 75
ORGANIZATION: RMA-46 * DC 2001
SUB UNAUTHORIZED DISCHARGE
POLLUTANTS SHELL CO

RAA014

1466

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18 AUG 1975

SARRM-PO
Dr. Edward G. Dreyfus

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*PC 238-03
ORIGINATOR: OMA-46
SUB (IN ACTIVATED) DISCHARGE
POLLUTANTS: SHELL CO
*DT 18 AUG 75
*DC 2001

RAA014

1468

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SARRM-PO
Dr. Edward G. Dreyfus

Computer Modeling:

An interservice support agreement has been initiated with the Denver area U. S. Geological Survey Office to incorporate chemical transport features into their existing model, and to extend the model boundaries west to the South Platte River, north to Brighton, and east to an area of impermeable deposits. We expect this model to allow us to predict the future movement and concentration of DIMP in the aquifer. This effort is divided into Phase 1, Transport Features and Phase 2, Extend Boundaries. Phase 1 is 50 percent complete and Phase 2 is 15 percent complete.

If Phases 1 and 2 are successful, we intend to extend this agreement into Phase 3 which will provide alternate plans for measures to alleviate groundwater contamination.

The continued cooperation of your department is greatly appreciated.

Sincerely yours,

JOHN P. BYRNE
COL, CMIC
Commanding

Concur: Robert E. Boyle
ROBERT E. BOYLE
Dir of Prod & Env Assurance

Concur: George F. Donnelly
GEORGE F. DONNELLY
Dir of Facilities

*FC 238-03
ORG/STAFF/MA/DA
SUB/LIN/AUTHORIZED DISCHARGE
POLLUTANTS SHELL CO
*DT 18 Aug 75
*DC 2001

RAA014

14691