



**PUBLIC SERVICE COMPANY OF NEW MEXICO**

ALVARADO SQUARE ALBUQUERQUE, NEW MEXICO 87158 \_ \_ \_ \_

November 19, 1984

Ms. Ann Claassen  
New Mexico Environmental  
Improvement Division  
Post Office Box 968  
Santa Fe, NM 87504-0968

RECEIVED

NOV 21 1984

HAZARDOUS WASTE SECTION

Dear Ms. Claassen:

Subject: Public Service Company of New Mexico,  
Person Generating Station--Phase V  
Investigation: Revised Schedule  
(November 8, 1984)

As discussed at our meeting on November 2, 1984, Public Service Company of New Mexico (PNM) is preparing to initiate Phase V groundwater investigations at Person Generating Station. During October, PNM and its consultants have determined that certain modifications to the Phase V schedule are required to ensure continued integrity in the water quality sampling effort. These modifications involve rescheduling aquifer testing (i.e., well pumping) at the tank area and down gradient well cluster area to occur after water sampling is completed. This rescheduling of activities will enable collection of water quality samples before performing aquifer tests, which might alter the groundwater flow system in the test area. For a similar reason, any continued pumping of monitor wells in the waste tank area is rescheduled until both water quality sampling and pump tests are completed. Additionally, a water disposal plan needs to be approved by appropriate agencies before pump testing and continued pumping can be implemented.

These changes affect the timing of Tasks 2 through 11 (see enclosed revised schedule). However, the overall time required to accomplish the new monitor well sampling and aquifer testing is not affected by rescheduling (i.e., these tasks would still be completed by week 15 as originally planned). Additional information on Tasks 2 through 11 follows:

TASK 2

Test Monitor Wells to Determine Aquifer Properties. Well testing to determine aquifer characteristics will occur after water quality sampling at the new monitor wells has been completed. Thus, well testing is scheduled to be performed during week 9 through 14 (i.e., January 1 through February 8, 1985). At each well a single-hole, 4-hour pump test will be performed. In the tank area, a 72-hour pump test will also be performed at PSMW-3. Nearby monitor wells (e.g., PSMW-1 and PSMW-2) will be used as observation wells for this test in the tank area. Information on aquifer properties in the vertical direction will be obtained by

Ms. Ann Claassen

-2-

November 19, 1984

4-hour pump tests at well clusters (i.e., a well in the cluster will be pumped and water levels monitored in wells screened at different depths).

### TASK 3

Well Cluster at Down Gradient Property Line and Sampling. The initial well will be constructed and installed in a manner similar to that used for the monitor wells installed in Phase IV. That is, a rotary rig will be used to drill through the unsaturated zone, and drilling fluids will be removed from the hole. To ensure penetration of the well screen into the water table, the top 20 feet of the saturated zone will be drilled with air rotary, but no drilling fluids will be used. A 20-foot length of 2-inch diameter stainless steel screen with 0.010 inch slots will then be pushed into the top 20 feet of the saturated zone. Stainless steel pipe will be used for the blank casing between the well screen and the ground surface.

For wells to be screened in an interval below the top 20 feet of the saturated zone, an additional procedure will be used to complete the well in the desired zone. Rotary drilling will again be used to advance the hole to the top of the zone that will be screened. This hole will be steel cased, and the annular space cemented. The well screen will then be placed at the desired depth using the previously described procedure. Drilling will start November 13, 1984, and the first well at the down gradient property line is scheduled for sampling on November 20, 1984. Samples will be analyzed for PCE, TCA, and 1,1-DCE. Assuming that three wells will be required to define vertical contamination distribution at the down gradient property line, well installation, development, and sampling is scheduled to take four weeks (i.e., Task 3 is scheduled to be completed on December 7, 1984).

### TASK 4

Data Submitted to NMEID and Meeting. After completing the sampling at the down gradient property line, results will be submitted to NMEID along with any proposed Phase V revisions that might be appropriate based on findings made in Task 3.

### TASK 5

Soil Retardation Evaluation. PNM's consultants are reviewing the literature on retardation of PCE, TCA, and DCE by saturated geological materials. If available information strongly indicates that little, or no, retardation of these solvents occurs (i.e., most conservative scenario for modelling contaminant movement is no retardation), then no laboratory experiment would be performed (i.e., a conservative assumption of no retardation will be made). However, if the literature review leads to uncertain conclusions regarding retardation, or to a conclusion that retardation might be significant, then a laboratory study would be designed and performed using geological material from the site. NMEID will be informed of the conclusions made from the literature review. If any lab study is

Ms. Ann Claassen

-3-

November 19, 1984

performed, the NMEID will be provided with the study design prior to initiating the experiment.

#### TASK 6

Well Cluster at Tank Area and Sampling. The same well installation techniques that were used in Task 3 will be used in the tank area. The additional wells for evaluating vertical distribution of the contaminants will be installed near monitor well PSMW-3 (i.e., about 30 feet north of tank). Well installation and sampling for Task 6 is scheduled for completion by December 28, 1984. The exact dates of these activities cannot be specified at this time; however, as soon as dates are identified, PNM will notify NMEID.

#### TASKS 7A THROUGH 8

Modelling and Report. The schedule for these tasks are unchanged. As aquifer characteristics are determined in Task 2, modelling runs will begin. Modelling will be used as a tool to describe contaminant distribution and to assess aquifer response to hypothetical pumping. Once specifics of the modelling effort are identified, the NMEID will be notified. It would then be advantageous to have a meeting to discuss the technical details of the modelling effort.

#### TASKS 9A, 9B, AND 10

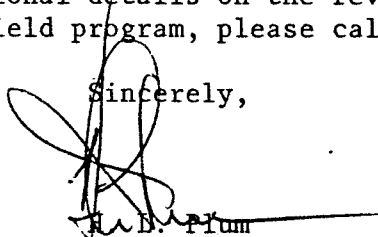
Continued Pumping of Monitor Wells in Tank Area. To allow confident water quality sampling and aquifer testing, any continued pumping of monitor wells in the tank area is rescheduled to occur after sampling and testing have been completed. Such pumping is rescheduled for initiation during week 17 of Phase V (i.e., end of February 1985). A water treatment and/or disposal plan also needs to be approved by appropriate agencies before this pumping could be initiated.

#### TASK 11

Meeting With NMEID on Tasks 9 and 10. Due to the rescheduling of Tasks 9 and 10, the meeting to discuss the performance of continued pumping also is rescheduled to occur about week 20 or 21 of Phase V (i.e., about mid-March 1985).

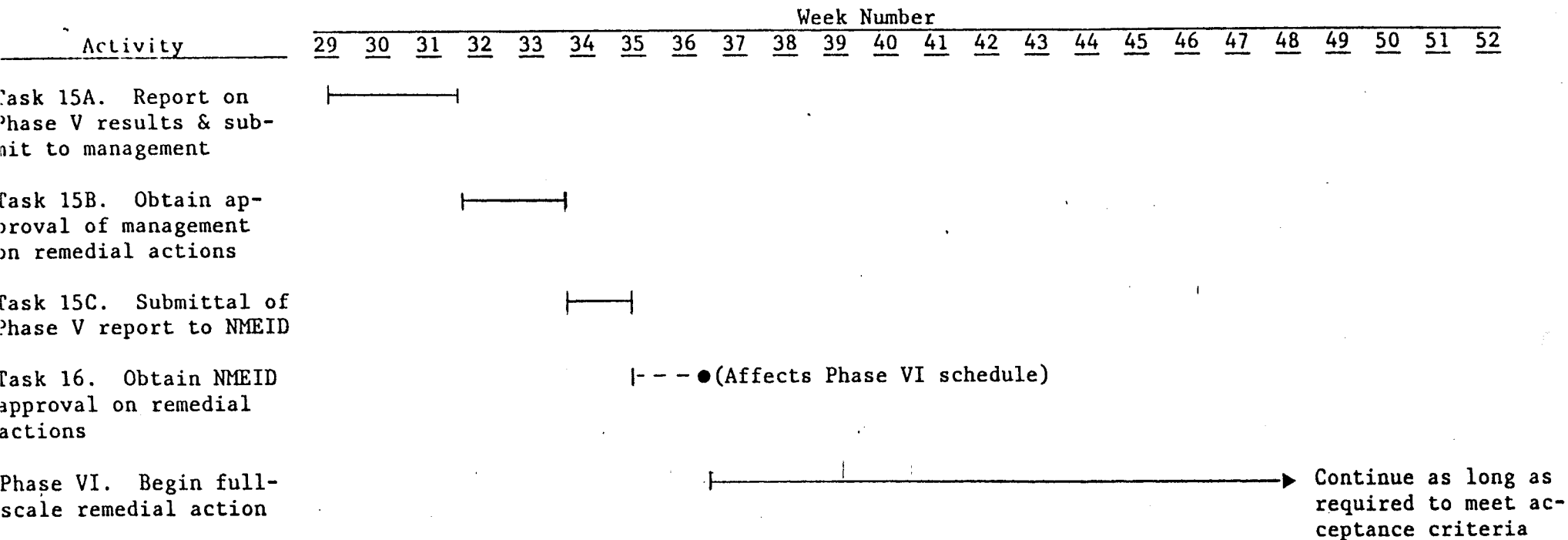
If the NMEID would like additional details on the revised schedule or on technical components of the field program, please call me at 848-2216.

Sincerely,



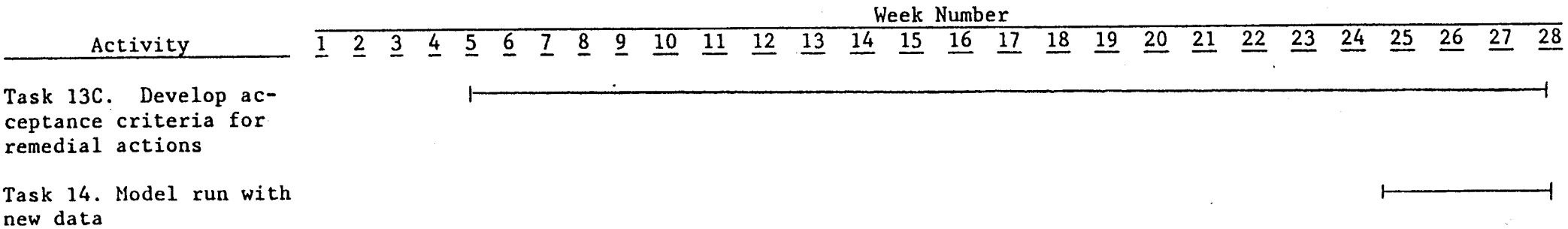
R. D. Plum  
Regulatory Coordinator

KK:wp  
Enclosure

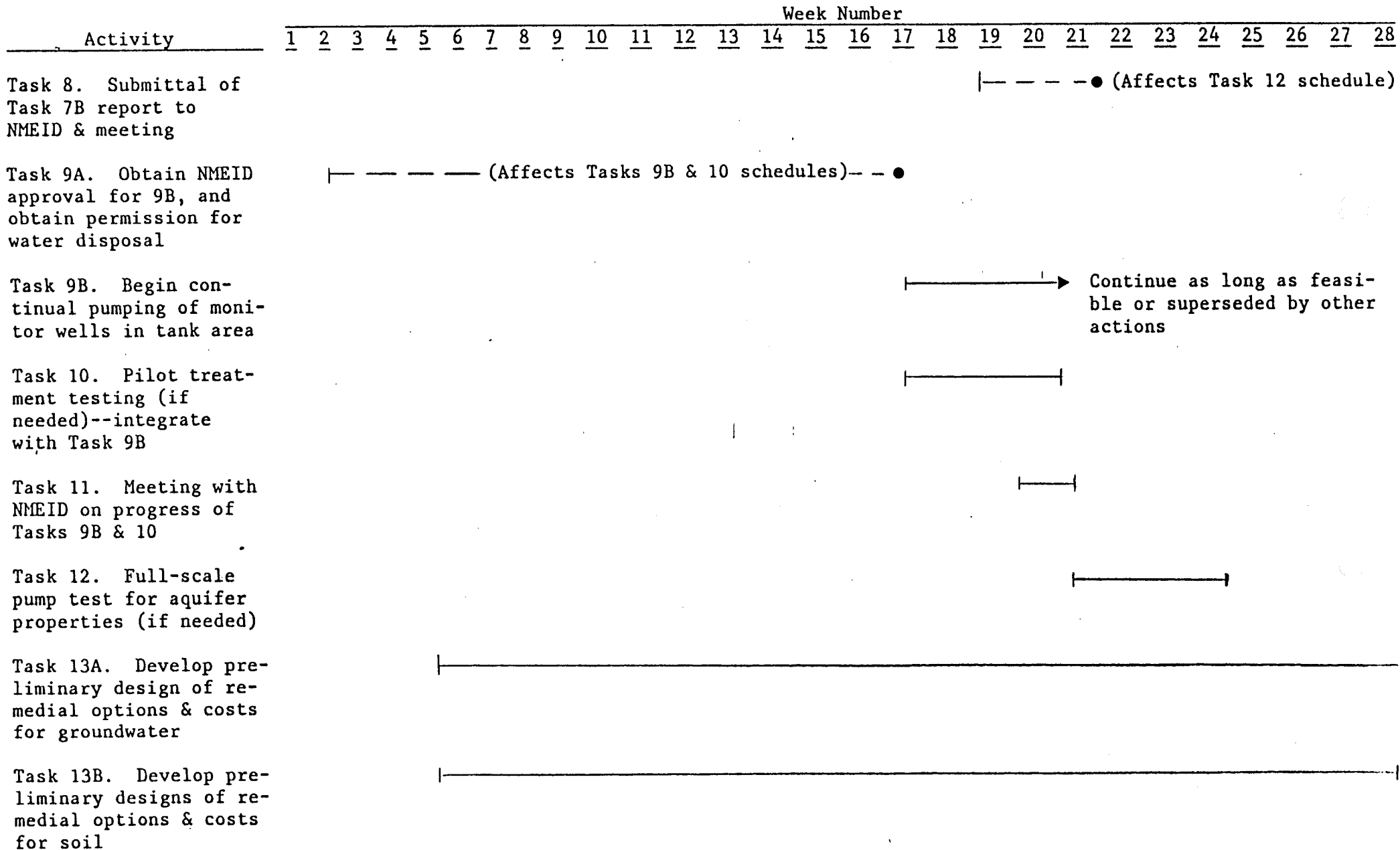


- Will not proceed until NMEID approves
- Reevaluation point for PNM if data indicate unexpected problems

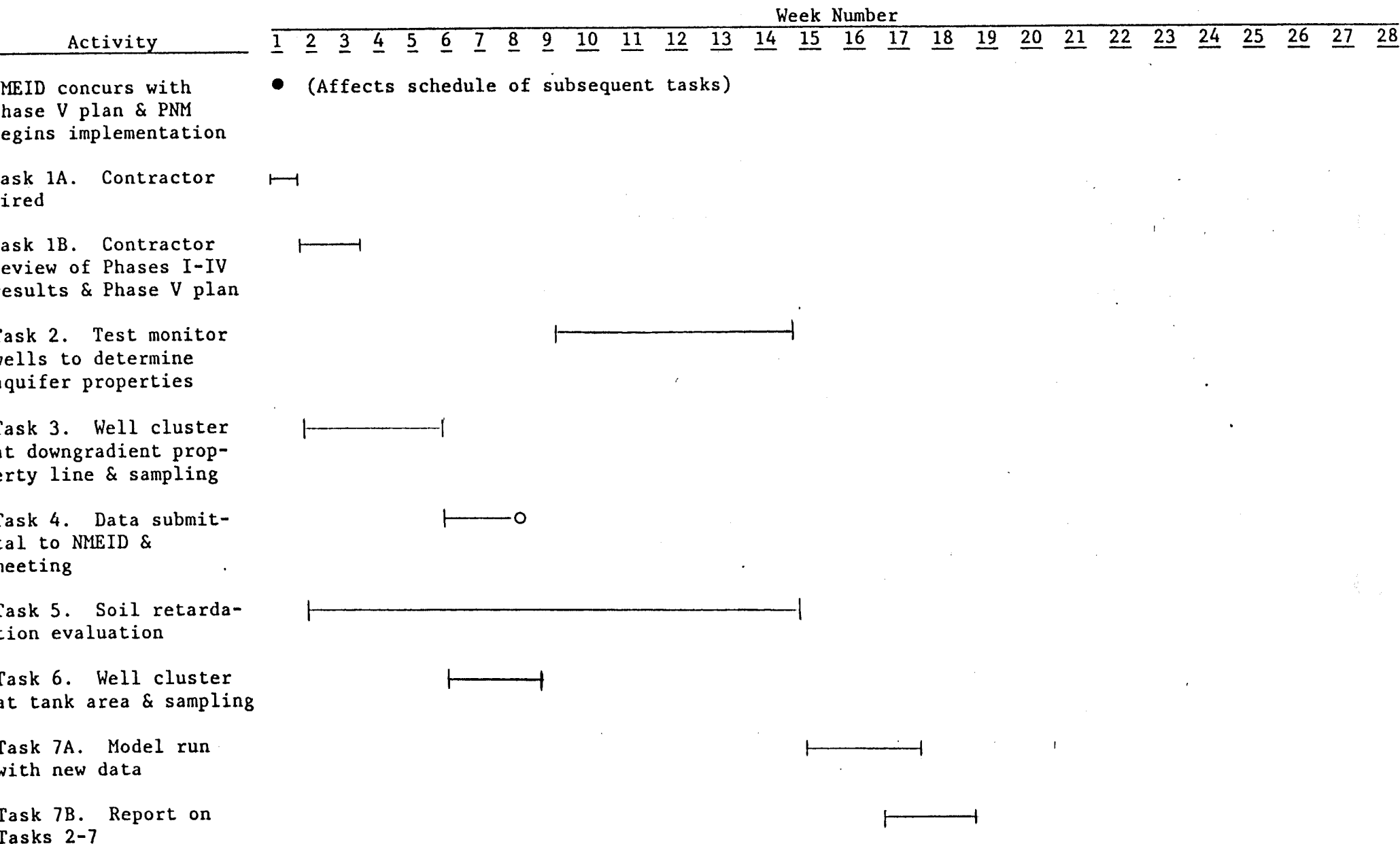
Phase V: Definition of Groundwater Contamination and  
Preliminary Design of Remedial Actions



Phase V: Definition of Groundwater Contamination and Preliminary Design of Remedial Actions



Phase V: Definition of Groundwater Contamination and Preliminary Design of Remedial Actions



-Draft-

PROJECT PERCOLL STATION WASTE TANK  
COMPONENT REMEDIAL ACTION PLAN - PHASE V

SHEET 1 OF 4  
DATE 8/24/84  
FILE BY KWK  
CHECKED BY

PHASE V. DEFINITION OF GROUNDWATER CONTAMINATION AND PRELIMINARY DESIGN OF REMEDIAL ACTIONS.

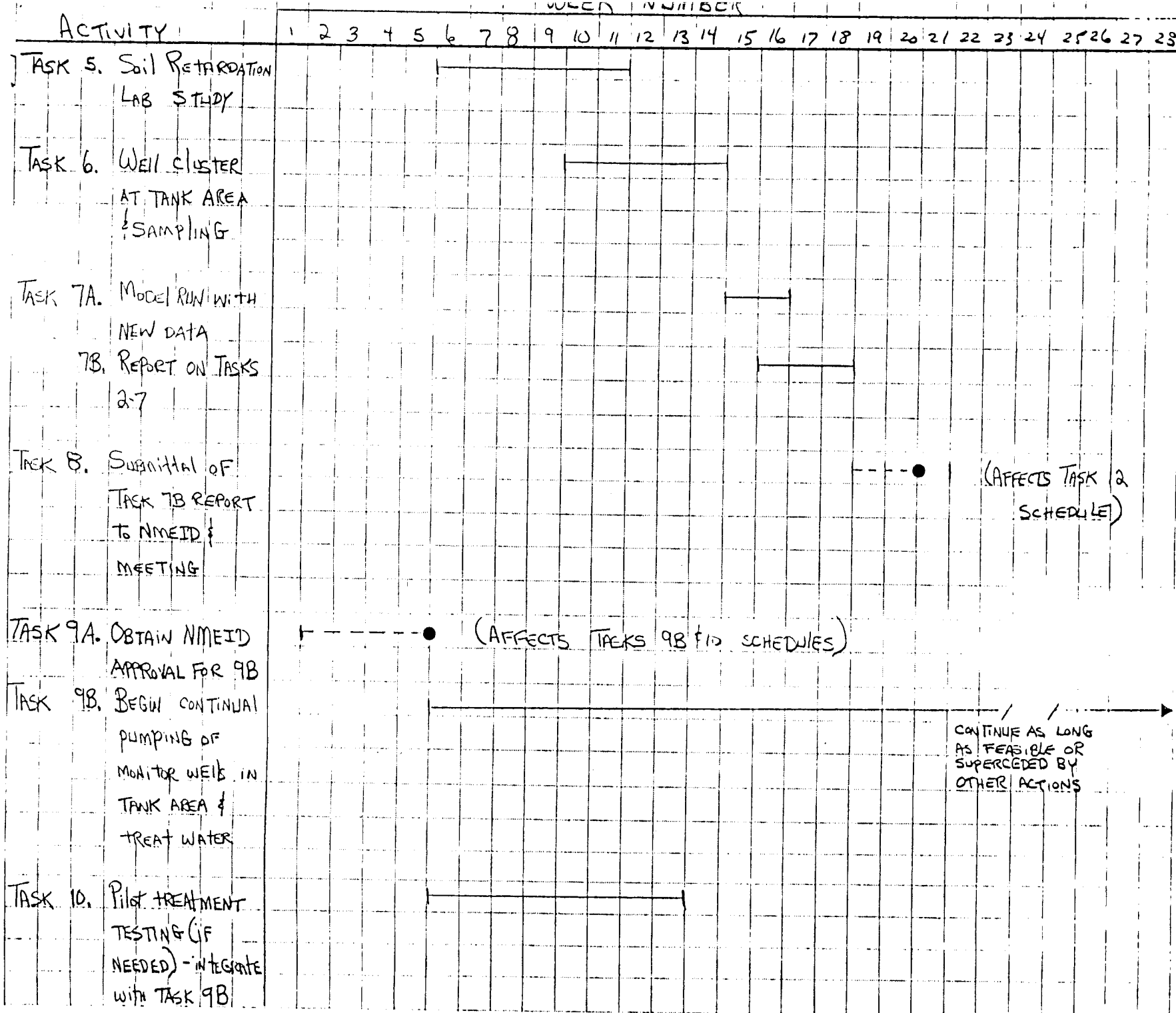
WEEK NUMBER

ACTIVITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
NMEID CONCURS WITH PHASE V PLAN AND PNM BEGINS IMPLEMENTATION	● (AFFECTS TASK 2 SCHEDULE)																											
TASK 1A. A/E CONTRACTOR HIRED																												
TASK 1B. A/E REVIEW OF PHASES I-IV RESULTS AND PHASE V PLAN																												
TASK 2. FIELD STUDY FOR PRELIMINARY DEFINITION OF AQUIFER PROPERTIES NEAR THE TANK	-----																											
TASK 3. WELL CLUSTER AT DOWNGRADIENT PROPERTY LINE & SAMPLING	-----																											
TASK 4. DATA SUBMITTAL TO NMEID & MEETING	-----○ (AFFECTS TASK 6 SCHEDULE)																											

● WILL NOT PROCEED UNTIL NMEID APPROVES  
○ RE-EVALUATION POINT FOR PNM IF DATA INDICATE UNEXPECTED PROBLEMS



PROJECT	SHEET	DATE	DATE
	8 OF 4		
COMPONENT	FILE	BY	CHECKED BY



● WILL NOT PROCEED UNTIL NMEID APPROVES

PROJECT	FILE	SHEET	3 OF 4
	BY	DATE	DATE
COMPONENT	CHECKED BY		

ACTIVITY	WEEK NUMBER																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
TASK 11. MEETING WITH NMEID ON PROGRESS OF TASKS 9B & 10																												
TASK 12. FULL-SCALE PUMP TEST FOR AQUIFER PROPERTIES																												
TASK 13A. DEVELOP PRELIMINARY DESIGN OF REMEDIAL OPTIONS/COSTS FOR GROUNDWATER																												
TASK 13B. DEVELOP PRELIMINARY DESIGN OF REMEDIAL OPTIONS & COSTS FOR SOIL																												
TASK 13C. DEVELOP ACCEPTANCE CRITERIA FOR REMEDIAL ACTIONS																												
TASK 14. MODEL RUN WITH NEW DATA																												

(AFFECT TASK 11 SCHED)

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

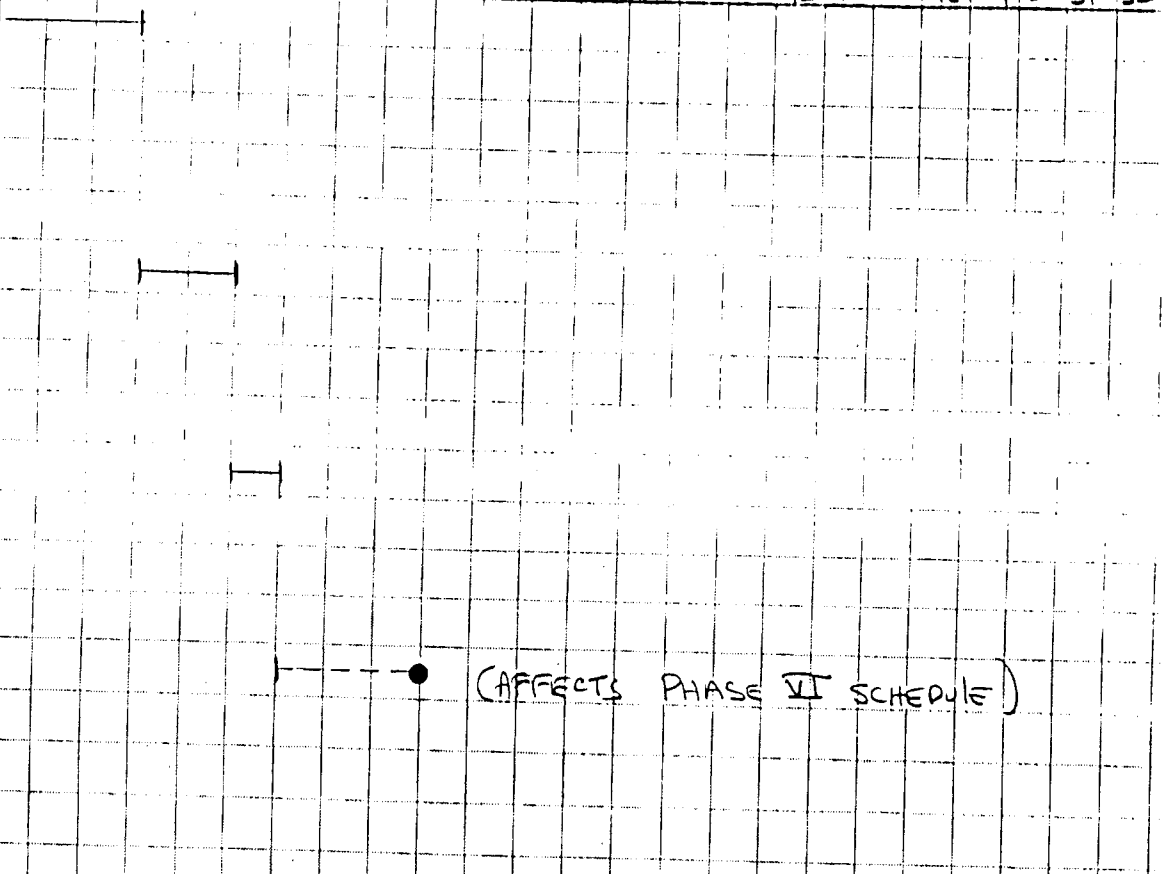
ACTIVITY

TASK 15A. REPORT ON PHASE I RESULTS AND SUBMIT TO INSURANCE CARRIER.

TASK 15B. OBTAIN APPROVAL OF INSURANCE CARRIER ON REMEDIAL ACTIONS

TASK 15C. SUBMITAL OF PHASE I REPORT TO NMEID

TASK 16. OBTAIN NMEID APPROVAL ON REMEDIAL ACTIONS



PHASE VI  
BEGIN FULL-SCALE  
REMEDIAL ACTION



CONTINUE AS LONG AS REQUIRED TO MEET ACCEPTANCE CRITERIA

● WILL NOT PROCEED UNTIL NMEID APPROVES

SHEET 4 OF 4  
DATE  
FILE  
BY  
CHECKED BY

PROJECT  
COMPONENT