RECOMMENDED ABATEMENT MEASURES

In review of the flow data and the chemical analyses of the results collected, the results show that Chalfant Run is contaminated by an extensive amount of acid mine drainage.

The history of the area shows considerable mining occurred in this watershed during the earlier part of this century. The workings have been abandoned and there is no evidence of further mining on the watershed.

Presently, the area is a highly developed residential district.

Corrective measures are needed and we recommend those which involve treatment of the acid mine water discharges. Health hazards also exist in the watershed as a result of improper discharge of raw sewage to the water course on a continuous basis. Intermittent discharges occur from approved sewage lift stations operated by the Boroughs of Churchill and Wilkinsburg.

Project	Project Description	Recommended	Cost
Number		Abatement Measures	
P-1	Elimination of existing or suspected septic tank overflow or discahrge to mines or Commonwealth waters: a. Blackridge Area, Penn Hills Twp and Churchill Borough. b. Merrie Woods Drive, Churchill Borough. c. Jefferson Rd, Lougeay Rd, Rodi Rd, Flying Shuttle Hills, Penn Hills Township.	Sanitary Sewer Construction	Abatement by local municipal areas. See plate 500 for locations.
P-2	Collection of Mine Water Discharge rear of 9244 Van Tine Street, being location of Sta 49SF (Discharge D- 22)	Transport by pipe system to Treatment Plant at P-4.	\$75,000
P-3	Small scale AMD treatment at Merrie Woods Drive (Station 10S) referred to as the waterfall discharge. (Discharge D-2)	Small scale treatment system consisting of neutralization sedimentation.	\$50,000 Submitted for construction only annual maintenance not included.
P-4	Large AMD Treatment Plant vic No.1 Green, Churchill Valley Country Clud, junction of upper Chalfant Run and tributary to Emrose Drive, near Station 44S. Plant would handle discharges D- 12, D-19 and D-22.	Contruct sewer lines from Collins Rd. are, Blackridge section of Churchill Borough thru Country Clud to propsed plant location; also a sewer line from Park or Southern Ave. (Sta. 45SF) downstream along Chalfant Run to proposed treatment plant, vic (44S)	\$200,000 P \$120,000 S (40S) Submitted for construction only annual maint. Not inclu.
P-5	Collection lines, misc discharges, Forest Dr., Penn Hills, Chapel Hill area and Nottingham Drive, Churchill Borough. Discharge D-8.	Construction of misc. collection lines to diverst acid discharge to Treatment Plant at P-3.	\$50,000
P-6	Elimination of existing pump stations, Blackridge section of Churchill Boro and Blackridge section of Wilkinsburg Boro.	Construction of trunk sewer to Alcosan system, which has been under consideration, or alternate construction to Penn Hills sewage system. This is a local matter. TOTAL COST	Abatement by local municipal \$495,000

P-2 & P-4

Recommended abatement measures for mine acid drain age condition at Stations, 40S, 45SF and 49SF to consist of sewer construction for the transportation of the discharges to a proposed mine acid treatment plant to be located near Station 44S on Churchill Valley Country Club property. The cost of the systems are as indicated on Sheets AR-2 (P-2) and AR-3 (P-4).

P-3 & P-5

Recommended abatement measures for mine acid drainage condition at Stations 11S and 27S to consist of sewer construction for the transportation of the discharges to a proposed mine acid treatment plant to be located near Station 105. The cost of the systems are as indicated on Sheets AR-2 (P-3) and AR-3 (P-5).