

CONCLUSIONS

(1) A mine sealing program is generally considered to be risky in an area which has been highly developed, especially one developed to the extent of the watershed enveloping Chalfant Run. Mine sealing projects could result in the build-up of water level, causing a discharge which may in turn merely transfer the undesirable problem to an adjacent watershed, or other location within the watershed.

It would be unpredictable in the case of Duff Run, to establish whether or not the sealing may transfer an unacceptable discharge of acid mine water to another location. Therefore, a seal at Discharge D-5 is not recommended.

(2) The Borough of Churchill has a sewage pump station located at the foot of Collins Drive (Station 4-OS). This pump station has been observed during this study to discharge raw sewage to Chalfant Run intermittently as a result of the failure of equipment or failure of the force main transmitting flow to Alcosan. The Borough of Wilkesburg has an airejector station on McNary Boulevard near Williamsburg Place (1000 ft. upstream from Station 4OS). This air-ejector sewage lift station is rather antiquated with the resulting

failure of discharging raw sewage through the Churchill Borough storm sewer, thence to Chalfant Run.

Both lift stations intermittently, therefore, discharge raw sewage onto the property of the Blackridge Civic Association, thence to Chalfant Run. Consideration has been given to enclose the stream through the Civic Association property, but this would merely transfer the problem to Churchill Valley Country Club property at the vicinity of No. 1 tee.

(3) The acid mine discharge which creates the waterfall at Merrie Woode Drive, D-2, will require on-site treatment. It is therefore recommended that a small treatment plant be provided (near Station 10S) to neutralize the waste, effect sedimentation of the solids with the removal of solids by scavenger. This is as described under Programs P-3 and P-5.

(4) The major portion of acid mine drainage results from the discharge of acid mine water flows in the Blackridge areas, Discharge D-12 (Station 40S), and also from Park Avenue, Discharge D-19 (Station 45SF). Minor acid mine-drainage occurs at Station 49SF, Discharge D-22. It is proposed to collect this acid mine water and transport it to an area in the vicinity of No. 1 green, Churchill Valley Country Club (Station 44S) for treatment. This is described under Programs P-2 and P-4.