

SECTION II  
RECOMMENDATIONS

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### RECOMMENDATIONS

It is recommended that the content of this report be accepted by the Owner and that procedures be started to enter the preliminary design phase followed closely by a final design phase for the sludge dewatering equipment installation. An early date for receipt of bids should be established.

The professional has submitted the required determination of landfill site locations. The Solid Waste Management Division of the PA. D.E.R. has concurred with LRK that the dewatered sludge is non-hazardous, that a solids content of 12% and above is satisfactory for landfill deposition with little or no cover material, and that the sludge will not leach, so as to preclude use of a landfill lining of impermeable material.

It is recommended that the Professional proceed with designs based on continuous belt filter presses, utilizing performance specifications. It is the consensus of our opinions, that the landfill criteria will be determined early in our design period. A performance specification for belt filter presses becomes necessary because of minor proprietary aspects of each belt filter press manufacturer. To specify otherwise might severely limit the number of bidders and the resultant cost. Actual post-award performance proof runs at the site with the actual units have been recommended by three reputable manufacturers.

It is recommended that the sludge dewatering design capacity be established at 150% of present operating parameters (such as 4.5 M.G.D. of raw water, etc.) to allow for possible deterioration of mine water quality which cannot be predicted. Our E-4 weir readings since the early May cessation of plant operation indicated that so far, only on June 16th and 23rd has the flow exceeded 4.5 M.G.D. at 4.6 and 4.76 M.G.D. respectively. It is therefore felt unnecessary to provide a complete duplicate unit, that is to say 200% of present design parameters for the sludge produced historically by a 4.5 M.G.D. treatment plant of this particular raw acid mine water.