



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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August 2, 1988

TO: File Copy

FROM: Mike DeWeese, Reclamation Hydrologist *MD*

RE: Draft Submittal of Peak Flows on Mud Creek, North American Equities, Blazon #1 Mine, ACT/007/021, Folder #2, Carbon County, Utah

SUMMARY

The July 19, 1988 preliminary submittal of the estimated 50 year, 24 hour peak flow on Mud Creek has been reviewed. The estimated peak flow does not include runoff from the Little Snyder Drainage. The submittal does not include a sediment pond or channel design.

ANALYSIS

The applicant utilized the SEDIMOT II Computer package to derive peak flow values on Mud Creek. Curve number and precipitation values were previously approved by the Division. SEDIMOT II calculates peak flow by the Muskingum Routing method. Program input values calculated by the Division were compared to the applicant's values with no significant differences. However, the unrouted peak flow estimated by the Division was significantly higher than the applicant's peak flow which was routed through the watershed. To accurately evaluate the program, an unrouted sub-basin peak flow by SEDIMOT II was used for comparison. Again, values calculated by the division were significantly higher.

RECOMMENDATIONS

Although peak flows calculated by the Division were higher than the applicants', the applicant used a valid analytical technique. Program input values and routing procedures were correct. The Division currently lacks the capacity to evaluate peak flows derived by standard routing techniques. Therefore, the Division accepts the applicants' peak flow values.

MD/cl

cc: S. Linner
R. Smith
R. Harden

WPP47/1