



Department of Environmental Protection

Jeb Bush
Governor

David B. Struhs
Secretary

August 10, 1999

RECEIVED BY
T. A. SMITH

AUG 10 1999

Mr. Ted A. Smith, P.E.
IMC-Agrico Company
Post Office Box 2000
Mulberry, Florida 33860-1100

FILE _____
REFERRED TO _____
COPIES TO Selwyn
 Dee Greg
 Bryant Denver
 Ron Hall

Re: Flood Evaluations for Ona Mine Tract, Hardee County and Pine Level Mine Tract, Manatee and Desoto Counties for IMC-Agrico Company prepared by Ardaman & Associates, Inc.

Dear Mr. Smith:

The Technical Support Section of the Bureau of Mine Reclamation received the above referenced flood evaluations on May 6, 1999 for review. The flood evaluations were prepared on your companies' behalf by Ardaman & Associates, Inc. The flood evaluations analyzed streams within the Ona and Pine Level Mine Tracts. The report contained the results and methodologies used to determine flood level elevations and floodplain extent for the mean annual, 25 year and 100 year flood events along the stream systems.

IMC-Agrico Company is proposing to construct and operate phosphate mines at both the Ona and Pine Level Mine Tracts. Through a current team permitting process IMC-Agrico has entered into a coordinated effort with the Florida Department of Environmental Protection, as well as with other federal, state, and local government agencies along with interested members of the general public. Through this coordinated effort, IMC-Agrico will file one Consolidated Development Application for these two proposed phosphate mines. The above referenced report supports the application with respect to floodplain delineation's for primary surface water conveyance systems within the Ona and Pine Level tracts.

The report predicts flood levels for the Pine Level tract for the mean annual, 25 and 100 year storm events, within the tract boundaries, for Horse Creek, Brandy Branch, Buzzard Roost Branch, Buzzard Roost Branch Tributary, and Big Slough Canal including Bud Slough and Wildcat Slough. Peak flood discharges and elevations along Horse Creek, Brandy Branch and Buzzard Roost Branch were computed, using the HEC-RAS methodology. Peak flood discharges and elevations along Big Slough Canal watershed were computed, using the CHAN methodology. Calibration of the methodologies used was provided and demonstrated by the consultant in Table 16, 17 and 18 of the report. Comparisons of modeled versus measured quantities for discharge were performed for Horse Creek at State Road 72.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Ona/Pine Level Floodplain Letter
August 10, 1999
Page Two

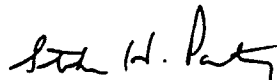
Comparisons of modeled versus measured quantities for water elevations were performed for Horse Creek at State Road 72 and Brandy Branch at State Road 70. The comparative results are either identical or within such values to be considered negligible.

The report predicts peak flood discharges and elevations for the Ona tract for the mean annual, 25 and 100 year storm events, within the tract boundaries, for Horse Creek, West Fork Horse Creek, Brushy Creek and Oak Creek. Peak flood discharges and elevations along Horse Creek and West Fork Horse Creek were computed, using the HEC-RAS methodology. Peak flood discharges and elevations along Brushy Creek and Oak Creek were computed, using the CHAN methodology.

The data gathering, flood discharge computations, flood profile determinations and the documentation of results were found to be performed in an acceptable manner. The Bureau of Mine Reclamation therefore accepts the flood evaluation study performed by Ardaman & Associates for both the Ona and Pine Level Mine Tracts.

If I can be of further assistance, please contact me at Tel. (850) 488-8217.

Sincerely,



Stephen Partney, P.E.

Professional Engineer Administrator

SP/tb

cc: Mr. John Garlanger, Ardaman & Associates
Mr. Brian Sadt, Central Florida Regional Planning Council
Ms. Dawn Turner, SWFWMD
Mr. Orlando Rivera, DEP