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James W Cook

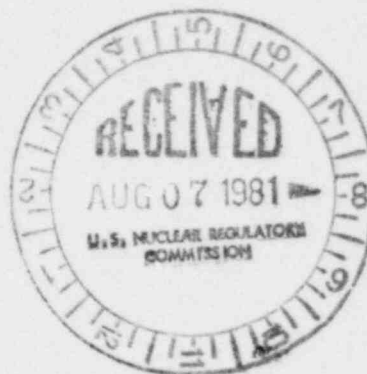
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July 31, 1981

Mr. Harold R Denton, Director
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND PROJECT
DOCKET NOS 50-329, 50-330
TEST RESULTS OF SOIL BORING AND TESTING
PROGRAM FOR DIESEL GENERATOR BUILDING
FILE: 0485.16 SERIAL: 13382



- ENCLOSURES: (1) ESTIMATES OF MAXIMUM PAST CONSOLIDATION PRESSURE OF COHESIVE FILL MATERIALS, DIESEL GENERATOR BUILDING, MIDLAND PLANT UNITS 1 AND 2, JULY 22, 1981
(2) TEST RESULTS, DIESEL GENERATOR BUILDING, SOIL BORING AND TESTING PROGRAM, MIDLAND PLANT UNITS 1 AND 2, JULY 8, 1981

Enclosed are two reports pertaining to the soil boring and testing program by Woodward-Clyde Consultants for the Diesel Generator Building. The first report dated July 8, 1981 documents the boring and sampling program and the subsequent laboratory testing program for the fill materials in the Diesel Generator Building (DGB). The results are presented in the form of logs of borings and both tabular and graphical data summaries of index property, strength and compressibility testing.

Corps of Engineers (COE) personnel continually observed the drilling and sampling operations in the field. COE personnel also visited Woodward-Clyde Consultants' soil testing laboratory at Clifton, New Jersey and observed laboratory operations, including extrusion of tubes, preparation of triaxial and consolidation test specimens and performance of index and engineering property testing.

The second report dated July 22, 1981 contains estimates of maximum past consolidation pressure of cohesive fill materials prior to and after surcharge program at the DGB. This study was performed by Woodward-Clyde Consultants (WCC). In this study, WCC estimated the maximum past consolidation pressures from both the Goldberg, Zoino, Dunnicliff & Associates (GDZ) data (1978) obtained prior to the surcharge program and WCC data from recent borings (1981) obtained after the surcharge program at DGB.

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These two reports on soil borings near the Diesel Generator Building are being supplied per the NRC request dated January 8, 1981. In addition, per our letter to the NRC dated March 23, 1981 we are calculating the stresses to which the soils in the areas of the samples were subjected during the surcharge program. We will submit the results of the calculations by August 17, 1981.

Bearing capacity analysis of Diesel Generator Building foundations using shear strength parameters contained in the enclosed report is being provided as a portion of the testimony of Dr A J Hendron, Jr which is being transmitted by separate correspondence.

James W. Cook

JWC/NR/RLT/cr

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