

Kansas Administrative Regulations

Kansas Department of Agriculture—Division of Water Resources

Article 40.—Design of Earth Dams

5-40-40. Geotechnical investigation of all dams.

(a) Each applicant shall ensure that a sufficient geotechnical investigation is performed on the proposed site for each dam to design the dam in accordance with the regulations of the chief engineer and with sound engineering principles and commonly accepted engineering practices. The materials under the proposed dam, open-channel spillway, and borrow area shall be investigated before design and submission of the application for a permit to construct a dam. If unusual or unexpected foundation conditions are encountered in the investigations required in this regulation, additional geotechnical investigation and soil mechanics testing shall be performed as necessary to design and construct the dam in accordance with the regulations of the chief engineer and with sound engineering principles and commonly accepted engineering practices.

(b) The geotechnical investigation specified in these regulations shall be designed by a licensed professional competent in geotechnical investigation and analysis for dams.

(c) The geotechnical information specified in these regulations shall be included in the engineering design report and submitted with the proposed construction plans. The report shall contain a general description of the geotechnical investigation, including the method used for sampling.

(d) The soils sampled in all of the geotechnical investigations shall be classified by using field classification methods and the uniform soil classification system.

(e) The dam design shall make appropriate accommodations for the geology discovered in the investigation.

(f)(1) The foundation of the dam shall be investigated to a depth of not less than one-half the height of the dam at the location of the test hole plus five feet.

(2) If unweathered bedrock is encountered before reaching the sampling depth required in paragraph (f)(1), the sampling shall be done to the unweathered bedrock.

(g) The static water level in each test hole shall be recorded.

(h) A sufficient number of test holes shall be made in each open-channel spillway to determine the stability of the spillway crest and the outlet channel down to the streambed elevation.

(i) A sufficient number of test holes in the borrow area shall be made to determine the amount of suitable material available and to classify the soil to be used in the embankment.

(Authorized by and implementing K.S.A. 2006 Supp. 82a-303a; effective May 18, 2007.)

***** Authenticated Kansas Administrative Regulation *****