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Investigation of Ground-Water Conditions at Goretown, in Eastern Horry County, South Carolina

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ABSTRACT

Two coquina mines operating near Goretown in eastern Horry County, South Carolina, have been suspected of causing or contributing to reported water level declines in domestic wells in the surrounding area. An investigation of the reports included inventorying wells in the study area, measuring water levels in observation wells and domestic wells, and determining the ground water conditions at each mine.

Ground-water withdrawals by the mines have lowered water levels sufficiently to affect some of the domestic wells adversely. The area northwest of the mining activity and the Daisy Scarp has the greatest number of reported well problems. A recharge trench designed to maintain normal ground-water levels outside the perimeter of the southeastern mine, known as the No. 9 Mine, is of questionable effectiveness.

Recommendations include: (1) installation of additional observation wells the north and west of the mines, where the majority of well problems have been reported and observation wells are sparse; (2) placement of staff gages in each mine, to monitor the depth to which water is lowered; and (3) continued monitoring of ground-water usage, including the quantities of water pumped and discharged off the site.

Copies of this report are available in the SCDNR's Columbia office.