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Cristian Rios* (crios@math.ucalgary.ca), Department of Mathematics, University of Calgary, 2500 University Dr. NW, Calgary, AB T2N1N4, Canada, and **Eric T Sawyer** and **Richard Wheeden**. *Regularity of Quasilinear Equations with Infinite Vanishing Ellipticity*.

We consider a class of degenerate elliptic equations with non-isotropic ellipticity which might vanish to infinite order. We prove a-priori estimates for continuous weak solutions. As a consequence we obtain existence and regularity for solutions of the Dirichlet problem.

In two dimensions these results may be applied to show regularity for Monge-Ampere equations with infinite vanishing right hand side. (Received January 26, 2010)