

SOILS BASED PRODUCTIVITY EVALUATION¹

by

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Abstract. Since the passage of SMCRA, reclamation success on agricultural lands has been determined by long-term yield testing. This required a long bond release period lasting ten years or more. Recently, landowners, mine operators, and regulators have voiced a need for methods to expedite the bond release process. The financial burdens of annual cropping and field maintenance by mine operators and monitoring by regulators are of major concern. Landowners need to have the land returned to their production operations instead of being locked in the bond release process for a decade or more. A soils based formula could relieve these financial burdens and ensure the most efficient process to return the productive soil resource to the landowner. In addition, this method will also identify problem fields immediately after reclamation. Currently, some fields undergo ten years of testing before a problem becomes evident. Once a problem is identified and remediation occurs, another period of testing is required. A soils based productivity index, currently being developed in Illinois, will be presented. This will include the basic concepts and findings from earlier research. The needs, benefits, and limitations will also be discussed.

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