I. INTRODUCTION

Forest land reclamation is the reclamation of land that was forested before mining for the purpose of restoring a productive forestry postmining land use. Ideally, it is a process of creating the best possible minesoil for trees and establishing a community of plant species that will develop, without further human intervention, into a healthy forest ecosystem. If it is the landowner’s objective, the forest should be capable of timber production. In the event mined land was reclaimed as pasture or wildlife habitat with no subsequent management or maintenance, a native, productive forest should be capable of developing via natural forest succession in regions where forests are the climax vegetation.

Reclamation of disturbed land in today’s regulatory environment is a complex process involving landowners, coal operators, and regulators (Zipper, 2000, see Chapter 7). These groups have different goals, and they may have different ideas about what constitutes desirable reclamation. Since coal operators often have no long-term commitment to the land, their goal is to mine, reclaim, and achieve bond release as cost-effectively as possible. After bond release, the landowner resumes responsibility for property taxes and future environmental liabilities. Consequently, it should be the goal of the landowner to have a post-mining land-use that generates income and enhances environmental stability. Regulators have responsibility for writing and enforcing regulations.

The Surface Mining Control and Reclamation Act (SMCRA) of 1977 has provisions such that biological factors are no longer the only important factors to consider regarding the establishment of trees. In a post-SMCRA mining business, tree establishment must be integrated with many other reclamation processes. Successful forest land reclamation requires that engineering, economic, and