

7 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The management of solid waste has become, in recent times, one of the more significant environmental issues facing local communities. The current standard of living many people enjoy, results in the generation of a variety of wastes in large quantities, and these must be disposed of while at the same time protecting environmental quality and public health. Consequently, techniques to reduce the overall amount of waste generated, as well as improve the methods of handling and disposing of waste are being researched. Even when waste reduction and recycling is possible, there remains a large portion of the waste stream which must be disposed of through landfilling in state-of-the-art landfill facilities. There are presently no methods of waste management that can completely exclude landfilling as a part of the process. Although landfill development and operation are a necessary part of solid waste management, there are typically irreversible and irretrievable commitments of resources associated with this process.

The development of the Project will cause certain irreversible and irretrievable commitments of natural, man-made, and financial resources. Although a full range of engineering design features and environmentally-sound mitigation measures will be implemented to minimize these commitments to the greatest extent possible, some resources will become unavailable for future use.

7.1 Natural Resources

Certain natural resources will be committed, and unavailable for future use as a result of the development and operation of the Landfill Expansion components.

The Landfill Expansion will encompass a total of approximately 260 acres of the Project Area. The development of the Landfill Expansion will result in the permanent taking of approximately 71 acres of wetlands, 15 acres of agricultural land, 3 acres of non-wetland, ponded areas, and 26 acres of upland vegetation, as described in Section 4.4 of this DGEIS. The majority of this area (145 acres) consists of land that has already been developed for landfill area, soil mine area, and other uses in connection with the Existing Facility operations. Vegetation will be replaced on the closed, capped landfill in accordance with detailed closure and landscaping plans to be developed for the Project Area. In addition, as described in Section 2.4.2 of this DGEIS, over 585 acres of new and enhanced wetland and upland areas will be created to mitigate for the above noted

wetlands taking. In addition, another 350 acres of wetland enhancement within a zone required for floodwater conveyance along the Black Brook corridor on the SMI Property is proposed. These new and enhanced wetland areas will serve to enhance ecological diversity, surface water quality and wildlife habitat in the Black Brook watershed.

Another natural resource impacted is the soil that will be necessary for use as daily, intermediate, and final cover material as part of the operation of the proposed expansion areas. The use of natural soils will be minimized to the extent possible by the use of BUD materials and tire chips in construction and operational applications. Although soils from on-site sources will be utilized in the development of the Landfill Expansion, some of the soils required for the operation of the Expansion areas will be obtained from permitted off-site sources. These soils will be used to fulfill cover material requirements, and as a component of the baseliner system and other construction elements. Once incorporated into the developed landfill areas, these soils will be considered as permanently committed to the Project.

7.2 Energy Consumption and Man-Made Resources

The use of fuels will also be required in the construction and operation of the Project. Non-renewable fossil fuel, in the form of gasoline and diesel fuel, will be consumed by the machinery required to construct the landfill baseliner and ancillary facilities associated with the construction of the proposed expansion components. Additional non-renewable fossil fuel will be consumed by the equipment used in conjunction with the operation of the Landfill Expansion areas over the course of its anticipated 14-year life span.

Human resources will also be committed in order to develop the proposed Project. In order to construct and operate the facility, labor, building materials, and equipment will be necessary. Various workers employed in connection with the construction of the proposed Landfill Expansion will be unavailable for other construction projects during the same time frame. The building materials and equipment utilized during the construction/operation of the Project (i.e., the soils, both on-site and imported; liner and piping materials; and other associated construction materials) will be committed to the development of the expansion areas and therefore will not be available for use in other development projects.

7.3 Financial Resources

Financial resources are those funds that are expended before, during, and after the development of the proposed expansion project. These resources include development capital as well as operational, closure, post-closure, and monitoring costs.

Development capital refers to the costs associated with constructing the expansion project and includes engineering, financial, legal and other professional services, labor and materials, and project financing. Included in these costs are the premiums for insurance and other risks that are part of any type of construction/development venture. This project also requires of the applicant a long-term financial commitment with respect to the facility closure and post-closure care (i.e., maintaining facility monitoring for groundwater, leachate, LFG and surface water; removal and treatment of liquid from primary and secondary collection systems; maintaining and repairing, as necessary, the leachate management system and stormwater management system; inspection of the final cover system; and operation and maintenance of the LFG management system). The commitment of these resources for the proposed expansion development project makes them unavailable for other uses.

There will also be costs associated with the daily operations of the Landfill Expansion. The commitment of these monetary resources to operate and maintain the facility renders them unavailable for other uses.