

## **6.0 SECONDARY AND CUMULATIVE EFFECTS AND LONG-TERM ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION**

### **6.1 SECONDARY EFFECTS**

Secondary, or indirect, effects caused by actions are effects that occur later in time or farther removed in distance, but which are reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate. The project, as proposed, considers effects associated with product fuel utilization and employment increases at the Tulsa Port of Catoosa. No other secondary effects would be expected.

### **6.2 CUMULATIVE EFFECTS**

A cumulative impact, as defined by the CEQ (40 CFR 1508.7) is the “impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

Cumulative noise impacts in the proposed plant area may result from continued development of the Port. While the proposed project would be limited by lease criterion to a maximum increase in property line noise levels of 4 dB, which is the human limit of discernable difference, reasonably foreseeable and unrestricted development of nearby tracts could progressively increase this background noise level over time. While additional development is possible in the future, the Port’s guidelines and lease provisions for property line noise limits would address this issue.

### **6.3 LONG-TERM ENVIRONMENTAL CONSEQUENCES**

The proposed action, if supported, would result in establishing a plant with the capability to produce about 70 bpd of GTL ultra-clean liquid fuels. Upon completing the anticipated 6-month, DOE-sponsored operating program to produce fuels for the engine and fleet vehicle demonstration programs, Syntroleum could continue operating the GTL plant. Under those circumstances, the scale of operations would not be expected to change. Capacities would be limited by the established equipment sizes, and the lease arrangement with the Tulsa Port of Catoosa would be restricted to the 10-acre site, which would be substantially developed to accommodate the project as proposed. For long-term operation of the proposed plant, no new environmental consequences would be anticipated.