

CHAPTER III

Affected Environment

Chapter III of the Draft First Tier EIS provided descriptions of the existing social, economic and environmental settings of the project area that may be affected by the Reasonable Strategies described in Chapter II. The project area is 199 miles (320.3 km) long and approximately 10 miles (16.1 km) wide. The descriptions provided in Chapter III established a baseline condition for the social and environmental settings of the project area and provide a basis of comparison for the determination of the impacts and environmental consequences of the Reasonable Strategies and more specifically the Preferred Strategy.

In review of the comments received from the Draft First Tier EIS and public hearings, several pieces of new information describing the affected environment were made evident that necessitate some refinements or clarifications of the descriptions or evaluations of the affected environment. The Draft First Tier EIS is referenced by this Final First Tier EIS.

A. Summary of Affected Environment

Chapter III of the Draft First Tier EIS presents a description of the social and economic characteristics of the Study Corridor and a description of the Corridor's natural environment.

B. Clarification of Draft First Tier EIS

The following issues or questions were raised during the review of the Draft First Tier EIS that warrant clarification or further elaboration:

- **Village of Innsbrook** – The Village of Innsbrook is recognized as being located within the Study Corridor within Warren County. Table III-1 presents the populations of the communities located within Warren County. Population information for the Village of Innsbrook is not available for 1990.

Table III-1: Population of Warren County Communities

| Community | 1990 | 2000 | Percent Change |
|----------------------|-------|-------|----------------|
| Warrenton | 3,962 | 5,281 | 33% |
| Truesdale | 285 | 397 | 39% |
| Wright City | 1,250 | 1,532 | 23% |
| Village of Innsbrook | | 469 | |

Source: US Census Bureau, 1990; 2000.

- **Physiography and Topography** - Relief for the 200-mile (321.9-km) corridor varies approximately 400 feet (121.9 m). The elevation at Blue Springs is approximately 950 feet (289.6 m) above sea level and the elevation at Lake St. Louis is approximately 550 feet (167.6 m).

- **Geology** - The section of the study area in Jackson County is underlain by Pennsylvanian strata of mostly horizontal limestone beds with lesser layers of shale. As the rock layers dip very slightly to the west, the limestones form broad general north-south ridges along their eastern terminating outcrops. From Jackson County to Sweet Springs, the geology is influenced by thick layers of Pennsylvanian shale with minor amounts of sandstone. Broad, rather level plains, are more characteristic of this area. From Sweet Springs to Columbia, the area is underlain by thick Mississippian Age carbonate limestones and dolomites. In selected areas, and in particular the area near Rocheport, these carbonates have been subjected to dissolution. The area near Rocheport displays a heavily Karstic landscape of sinkholes and an undeveloped surface drainage pattern. Several caves are located in this area. The entire region is susceptible to karstic conditions which should be considered during construction and planning.
- **Seismicity** - The eastern end of the study area may be affected by potential seismic sources which may require specific design considerations. Geology in terms of structure, hazards and properties will be studied during the preliminary design phase of the project.
- **Mining** - Given the geology of the study area, coal beds can be found throughout the area underlain by Pennsylvanian Age rocks. Coal resources range from insignificant scattered thin beds to beds several feet (~0.9 m) thick. The coal resources are high in sulfur content and no longer used for power production, but future shifts in economics and coal desulfurization processes may return this coal to a potential energy source in the future. Although no current mining is taking place, coal layers located in the lower Pennsylvanian strata have been mined in the past, mostly small operations dating from the late 1800s to 1940s. These mines supplied the railroads, steam ships, residential and commercial users. The only shafts related to coal mining may be encountered north of the Columbia area and are not expected to affect the location of the proposed facility.
- **Caves** - Caves in Missouri are generally found in carbonate rocks from the Mississippian to Cambrian. In the study area, only the geology in Cooper and Boone Counties is most favorable for cave development. Lesser cave development is found in the carbonate rocks in Callaway, Montgomery, Warren and St. Charles Counties. Caves are very unlikely in Jackson, Lafayette and Saline Counties. The potential for caves and karst features exist anywhere in the corridor where carbonate rocks are present.
- **Hazardous Waste Site Survey Methodology** - A hazardous material screening was conducted for the I-70 Corridor. The purpose of the screening was to identify major sites within the corridor that are contaminated, or potentially contaminated, with hazardous materials or waste that would pose a significant potential impact to the location of a transportation facility. Particular attention was given to the location of landfills and Superfund level type sites. Some of the landfills listed are not technically considered hazardous, as they are sanitary landfills that did not accept hazardous waste. Lesser sites such as service stations (underground storage tanks) and generators of designated regulated material were not included in the screening.

For the purposes of this screening, hazardous wastes and materials are defined as products or wastes regulated by the U.S. Environmental Protection Agency (EPA) or the Missouri Department of Natural Resources (MDNR). These include substances and sites regulated under the Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA).

The hazardous waste assessment for the I-70 corridor involved data collection efforts, including review of numerous government agency lists and files, as well as a limited field reconnaissance of the corridor. The review of regulatory databases was conducted by Vista Information Solutions Inc., with a report and mapped locations dated February 7, 2000. The Vista report is not included as a part of this document.

The databases searched by VISTA include:

- NPL – National Priorities List is EPA's sites identifies for remedial actions under the Superfund program.
- SPL – State Priority List – MDNR Superfund Section (SPL is nomenclature used by VISTA for data retrieved from MDNR) (SHWS – State Hazardous Waste Site - sites listed in the summary are sites provided by the MDNR).
- CERCLIS – EPA's list of sites which are either proposed to or on the NPL list, and sites which are in the process of assessment for possible inclusion on the NPL.
- NFRAP – CERCLIS sites which following an investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Superfund action.
- CORRACTS – RCRA facilities undergoing corrective action
- RCRA – TSD – facilities which transport, store, or dispose of hazardous waste.
- SWLF – MDNR Solid Waste Landfills

County governments involved in the study were also contacted for information regarding operating or closed landfills. The Missouri Department of Natural Resources was also contacted to identify both unregistered and recorded major hazardous material and landfill sites.

The databases searched by MDNR include:

- MDNR State Superfund Sites
- Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites in Missouri
- **Potential Hazardous Waste Sites** - Pursuant to the Missouri Hazardous Waste Management Law, Section 260.465(1) RSMo, any change of use at any site listed on the *Registry* will need prior approval from the program's director, following submittal of a detailed change of use request. The process for requesting such a change is outlined in Title 10, Division 25, Chapter 10 of the Code of State Regulations [10 CSR 25-10.010(3)(A)(3)].

As the proposed corridor becomes more defined and the project is closer to construction, project planners will contact MDNR for up-to-date lists of sites which may contain hazardous wastes. Site specific information may aid in protecting both worker and public safety.

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