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FINAL ENVIRONMENTAL ASSESSMENT

DENNEN STEEL LAND REQUEST AND ASSOCIATED INDUSTRIAL DEVELOPMENT- YELLOW CREEK PORT

Tishomingo County, Mississippi

PREPARED BY:

TENNESSEE VALLEY AUTHORITY

MARCH 2010

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The Proposed Decision and Need

The Tennessee Valley Authority (TVA) received a request from Dennen Steel Corporation in July 2009 to purchase 13.6 acres of TVA property located on Pickwick Reservoir, Tennessee-Tombigbee Mile 448.2 (right bank), Tishomingo County, Mississippi (Figure 1). The property is adjacent to the Yellow Creek Industrial Park (YCIP), and the applicant's intended use of the land is consistent with the current allocation for industrial use in the 2002 *Pickwick Reservoir Final Environmental Impact Statement and Land Management Plan* (TVA 2002).

Under the proposed action, TVA would authorize the sale of 13.6 acres of land at a public auction in accordance with Section 31 of the *TVA Act*. The authorization of the sale would be dependent on the understanding that the ensuing land uses would follow the proposed construction plan as provided by Dennen Steel. TVA approval of the request would constitute an action in keeping with the Industrial (Zone 5) designated use of this parcel of TVA property, and the disposal is consistent with the TVA Land Policy (TVA 2006) regarding economic development for reservoir properties.

The proposed action would include construction of a 50,000-square foot manufacturing facility, an adjacent office building, a vehicle parking area, and an access road (Figure 2), as well as installation of water and sewer service lines, and would disturb about 6 acres of the subject property. The property is in close proximity to Dennen Steel's existing customers in Decatur, Alabama, and Columbus and Bruce, Mississippi. The manufacturing process would occur entirely within the facility and would include steel coil slitting, the stamping of metal parts utilizing presses of various tonnage, and secondary operations to the stamped parts such as press brake forming or fastener insertion. The Dennen Steel facility would receive steel coils from its steel mill vendors via barge, truck, and rail.

Background

In 1974, TVA sold an industrial easement to the State of Mississippi to assist in creating the Yellow Creek Port and YCIP, retaining the underlying fee title. Yellow Creek Port is one of two state-owned ports in Mississippi and is operated by the Yellow Creek Port Authority, which was established in the early 1970s and is governed by a nine-person board appointed by the Governor of Mississippi. The U.S. Government acquired the property and surrounding area in 1937 and it has remained in federal ownership throughout

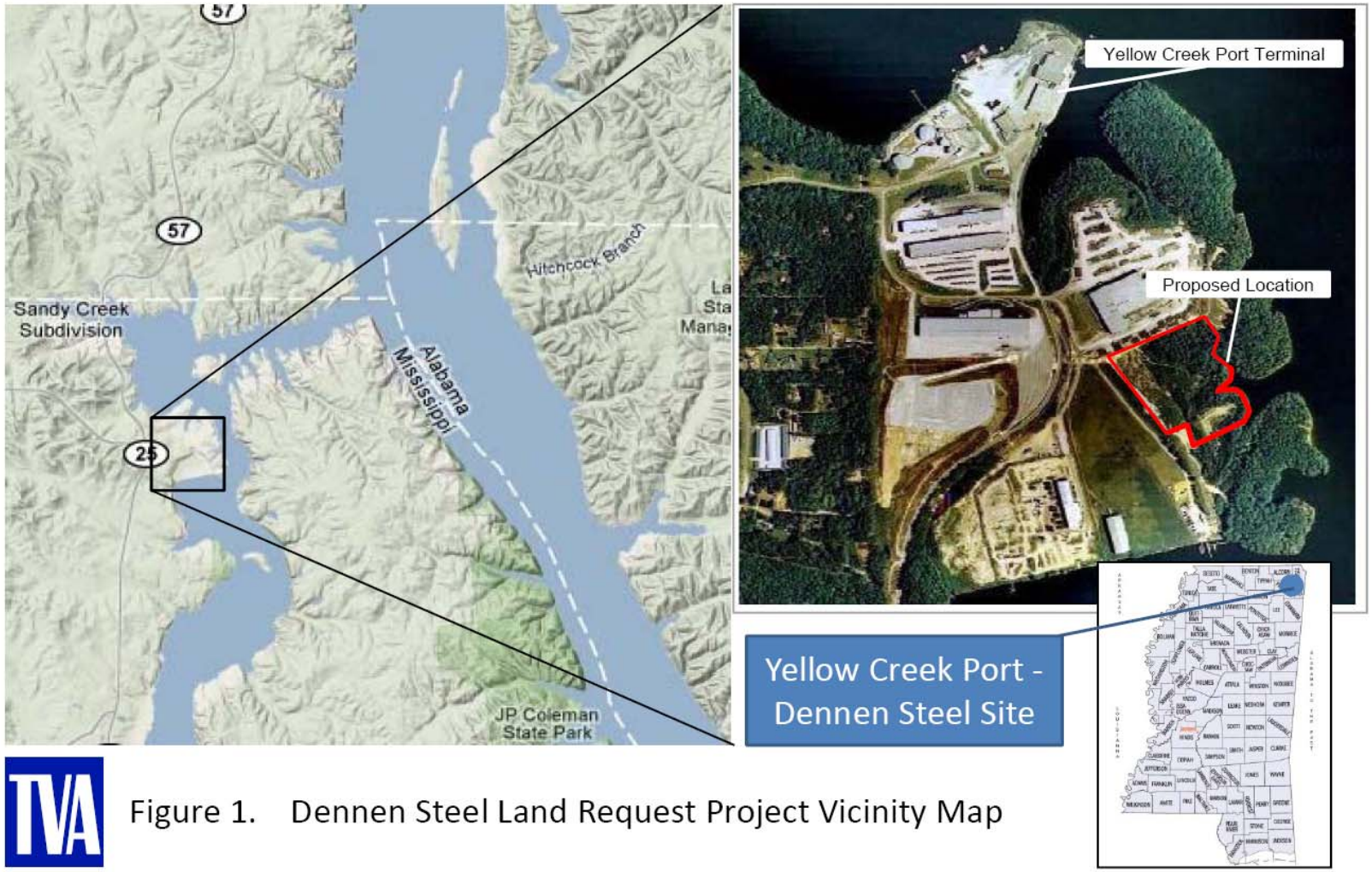

Figure 1. Dennen Steel Land Request Project Vicinity Map

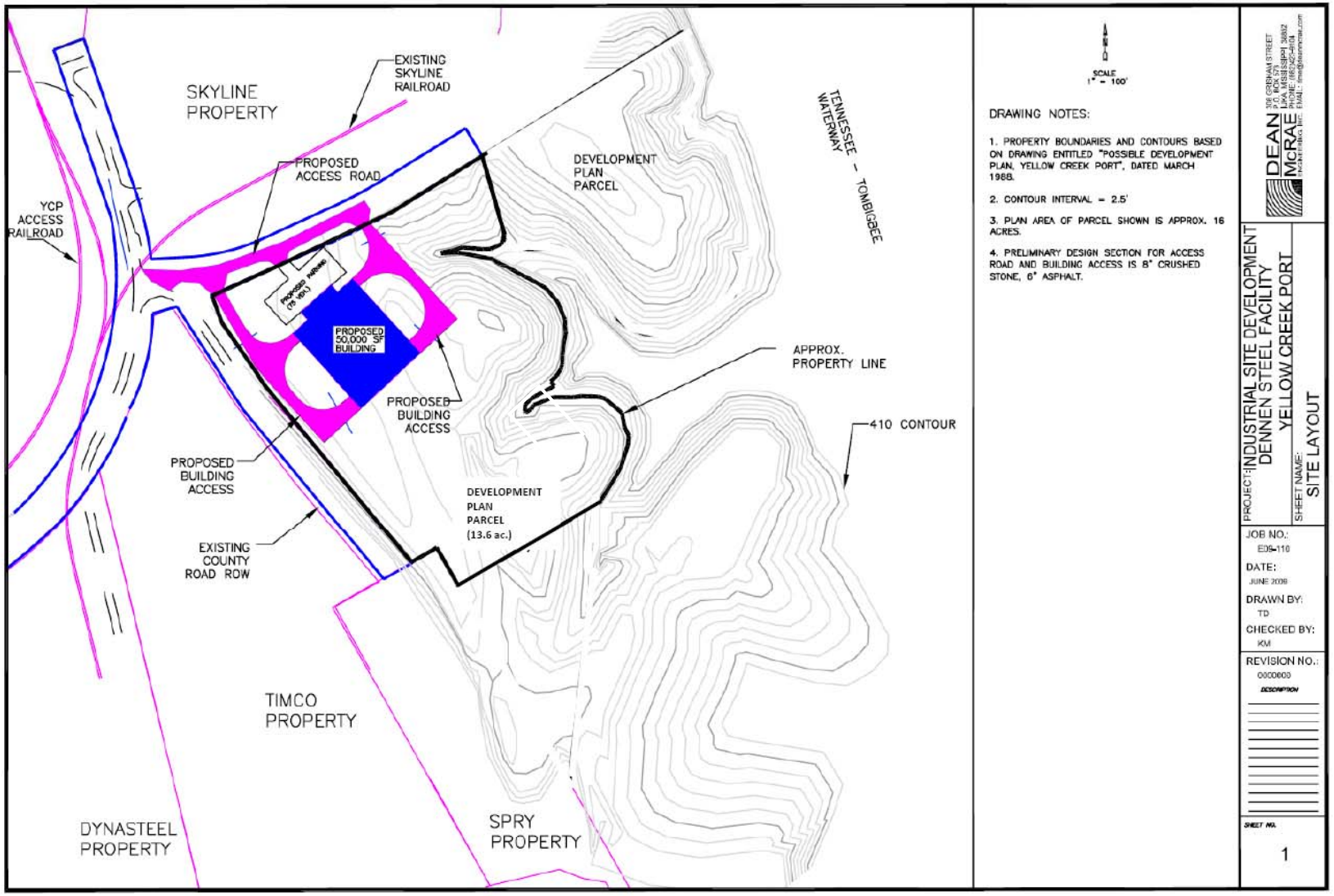

Figure 2. Proposed Layout - Dennen Steel Yellow Creek Facility

the development of the Yellow Creek Port complex. The enabling legislation that created Yellow Creek Port authorized the Mississippi Development Authority, the Tombigbee River Valley Water Management District, and TVA to participate in the planning, acquisition, financing, and construction of the port. Yellow Creek serves as the most upstream portion of the Tennessee-Tombigbee Waterway (Tenn-Tom), an inland waterway system used by commercial and recreational watercraft traffic.

Scope of Environmental Review

The proposal constitutes a federal action subject to the requirements of the *National Environmental Policy Act* (NEPA) and TVA's NEPA implementing procedures. Accordingly, TVA has prepared this EA to evaluate alternatives, to identify and evaluate potential environmental impacts, to describe any mitigation measures or commitments required, and to communicate its findings to agency decision makers and the public. Following completion of the environmental review, the TVA Board of Directors would decide whether to declare the property surplus and authorize its sale at a public auction. Approval of the land purchase is required to declare the property surplus to agency needs prior to auctioning the property. If acquired by Dennen Steel, the company would implement the planned construction of the proposed manufacturing facility.

Other Environmental Reviews and Documentation

Industrial development of Yellow Creek Port was considered in an environmental impact statement (EIS) completed by TVA in 1972. In the environmental review, TVA analyzed potential environmental impacts that would result from the construction of the Yellow Creek Port facilities and a rail spur to serve the site.

In September 1997, Lighthouse Fuels Inc. Environmental Assessment was prepared by TVA and the United States Army Corps of Engineers (USACE) assessing the environmental impacts of Lighthouse Fuels' request for 37 acres of TVA public land on Pickwick Reservoir and construction of a barge terminal with three separate areas along the reservoir waterfront. The primary purpose of this proposed facility was to procure, merchandise, and deliver wood waste to fossil fuel power plants. The EA concluded there would be no significant impacts to environmental resources and a finding of no significant impact was issued September 16, 1997.

In September 2002, TVA completed the Pickwick Reservoir Final Environmental Impact Statement and Land Management Plan (2002 Plan). This EIS updated the 1981 Pickwick Reservoir Land Management Plan (1981 Plan) for approximately 19,238 acres of TVA public land on Pickwick Reservoir in Alabama, Mississippi, and Tennessee, and allocated additional land not considered in the 1981 Plan. The 2002 Plan was prepared to reflect new information and TVA policies, and to guide land use approvals, water use facility permitting, and resource management on Pickwick Reservoir.

In July 2009, a Phase I Environmental Site Assessment (ESA) (GeoSource 2009) was completed for the proposed Dennen Steel manufacturing facility site. Phase I ESAs are needed when acquiring industrial sites in order to evaluate the historical use of the site and to determine if there is a potential for hazardous materials use and/or release from the site. The purpose of the Phase I ESA is to identify, to the extent feasible, recognized environmental conditions in connection with the property. The Phase I ESA was performed by GeoSource Inc. in accordance with Standard Designation E 1527-05 of the American

Society of Testing and Materials (ASTM) and Code of Federal Regulations (CFR), Title 40, Protection of Environment; Part 312, Innocent Landowners, Standards For Conducting All Appropriate Inquiries (40 CFR 312). The Phase I ESA results identified no evidence of current or past releases or hazardous substances or petroleum products in quantities to represent a recognized environmental condition, as defined by the ASTM standard.

Public Involvement and Necessary Permits

The proposed land sale would not require TVA to acquire any permits; any necessary permits would be obtained by the applicant. TVA is aware that the following permits would likely be necessary for Dennen Steel's proposed construction:

- A National Pollutant Discharge Elimination System (NPDES) permit would be required.

- A Storm Water Pollution Prevention Plan (SWPPP) would be required prior to any land-disturbing activity on the project site in accordance with Mississippi Department of Environmental Quality (MDEQ) 2005 guidelines.

- A notice of intent (NOI) would need to be filed for a "Large Construction Storm Water General Permit for Land Disturbing Activities of Five or More Acres," authorized under Mississippi Code of 1972, Annotated, Section 49-17-1 et seq.

- Authorization or permits would be required from the appropriate state or county agencies to install and operate a facility septic system. The State Board of Health is authorized to promulgate rules for individual on-site wastewater disposal systems under and by virtue of Sections 41-3-15(4) (a)(b)(f) and Sections 41-67-1 through 41-67-29 Mississippi Code of 1972, Annotated.

TVA sought input on this proposal from the public and interested agencies, as follows:

- The proposed action was the subject of a public notice (see Attachment A) issued by TVA in local newspapers and on TVA's Web site. The comment period ended on March 10, 2010.

- TVA issued a second public notice (see Attachment A) requesting public comments regarding TVA's determination of no practicable alternative for wetland impacts that would occur under the Action Alternative. The notice was issued on TVA's Web site March 5, 2010, and allowed for a 14-day comment period. Any comments received will be taken into account appropriately in advance of a decision on the proposed action.

- TVA has consulted with the Mississippi State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officers (THPOs) under Section 106 of the *National Historic Preservation Act*.

- TVA consulted with the USACE to comply with Section 404 of the *Clean Water Act.*

Alternatives and Comparison

Two alternatives, No Action and Action, are addressed in this EA.

No Action Alternative

Under the No Action Alternative, the TVA Board of Directors would not declare the land surplus at this time, and the land would not be sold. Consequently, the applicant would not construct the proposed industrial facility on the subject property. If TVA were to adopt the No Action Alternative, the subject property would remain in its current condition, the proposed manufacturing facility and infrastructure would not be built on the site, TVA would retain ownership of the 13.6 acres, and any anticipated minor impacts associated the proposal would not be realized. Dennen Steel's purpose and need for the project would not be fulfilled.

Action Alternative

Under the Action Alternative, the TVA Board would declare 13.6 acres surplus and would authorize the sale of the land to the highest-qualified bidder at a Section 31 public auction. During development of the 1981 Plan and the 2002 Plan, the TVA parcels in and adjacent to the YCIP were designated for Industrial (Zone 5) use in accordance with previous TVA land planning designations. The proposed sale of the subject parcel to Dennen Steel and subsequent industrial development in accordance with plans and processes as further described would be consistent with the designated land use as specified by TVA. In addition, a parking area, access roads, water supply lines, a septic system, and electrical power lines would be constructed to support the planned facility.

Under this alternative, the future landowner would construct and operate an industrial facility in accordance with the proposed methods and plans presented as described herein. If Dennen Steel successfully bids and acquires the property, it intends to initially clear and grub about 6 acres of the 13.6-acre site and construct 20,000 cubic yards of common excavation. About 6,000 cubic yards of select backfill would then be placed on the construction site to facilitate construction of its manufacturing facility. This facility would process steel coils through a series of one or more physical changes or alterations of the steel.

The facility would consist of a single, preengineered 50,000-square foot (200 feet by 250 feet) manufacturing building with a 2,500-square foot (25 feet by 100 feet) office attachment on its north side. Construction of this facility would be mainly corrugated metal siding and roofing on steel framing with an 8-inch reinforced concrete slab on an 8-inch crushed stone subbase. The office area exterior would be brick or some other decorative covering or façade. Employees and visitors would utilize a 76-vehicle parking area consisting of 6-inch asphalt over 6-inch crushed limestone.

Access roads to the facility would be constructed of crushed stone base with hot mix asphalt surfacing. Turning areas and building access points around the facility would be concrete to improve surface life. The access roads are planned on either side of the building to accommodate transportation of freight to and from loading docks with four roll-up doors at freight docks and four roll-up doors at drive-thru locations. The manufacturing process would occur entirely within the facility and would include steel coil slitting, the stamping of metal parts utilizing presses of various tonnage, and secondary operations to the stamped parts such as press brake forming or fastener insertion. These processes do not involve chemical treatment or coating applications for the steel product. No hazardous waste would be generated at this facility, and no pretreatment or discharge of wastewater, other than sanitary effluent through an adequately sized septic system would occur at this site.

The proposed construction work is anticipated to be completed in three phases consisting of site development and infrastructure, building construction, and equipment installation. In general, the following sequence would be followed:

1. Clearing and grubbing; installing temporary silt-containment devices
2. Excavating unsuitable material; constructing equipment pit
3. Constructing building pad and surrounding area
4. Beginning foundation construction
5. Installing utilities
6. Constructing access road
7. Installing permanent erosion-control measures
8. Completing foundation and constructing slab
9. Erecting structural steel; installing roofing and siding
10. Beginning equipment installation
11. Completing interior building components such as electrical, heating, ventilating, and air conditioning (HVAC)
12. Installing and testing overhead cranes
13. Completing equipment installation
14. Removing temporary silt-containment devices

The Dennen Steel facility would receive steel coils from its steel mill vendors via barge, truck, and rail. The barges would travel to the existing port, and the rail would travel on existing rail lines. It is anticipated that barge deliveries would coincide with deliveries to neighboring industries, and frequency would range from one to three deliveries per month. Initially, incremental increases in traffic would result in approximately four to six additional barges per year for the Yellow Creek Port.

Finished parts would be shipped via enclosed vans to a diverse industry base including office furniture, automotive, HVAC, container, and others. The manufacturing facility would include two overhead cranes for material handling. Truck access for material delivery and shipping would be along the east and west sides of the facility. There are no outside storage or laydown yards planned for the facility.

Shipments would be arriving and leaving the proposed facility on a planned asphalt access road that would connect to Yellow Creek Port Road. The initial daily traffic to and from the facility would be approximately three to five trucks inbound and three to five trucks outbound. The trucks would primarily be conventional 18-wheeled vehicles with closed van trailers.

Best management practices (BMPs) such as placement of silt control structures would be installed prior to any soil-disturbing activities to reduce potential adverse impacts to a minimum. All site work would be completed in accordance with the requirements contained in MDEQ 2005*,* and any additional requirements that may be contained in the NPDES permit, which would be obtained by the future property owner prior to beginning construction.

Alternative Sites Considered But Not Selected

Trinity Industrial Park – Decatur, Alabama

Dennen Steel looked at a privately owned parcel in the Trinity Industrial Park, which is owned by Nucor Steel. Dennen Steel did not come to an agreement with Nucor on the land sale. Nucor imposed conditions of the sale that were unacceptable to the objectives of Dennen Steel.

Burnsville Industrial Park – Burnsville, Mississippi

Dennen Steel determined that the Burnsville site did not have adequate utility infrastructure or barge terminal facilities. Also, the cost of obtaining rail to the site was considered to be cost prohibitive for Dennen Steel. In addition, Dennen Steel did not want to be the first industrial client to begin development on the site. Dennen Steel's customer base has indicated a preference for the company to locate in an area that already has an industrial steel cluster, such as YCIP.

Tri-State Industrial Park – Iuka, Mississippi

Dennen Steel noted several problems with logistics to and from the Iuka site to assist its operation. The major logistical obstacle was the lack of an adequate access road to and from a major two- or four-lane highway. Additionally, there was not enough local rail freight to justify a dedicated train on site. Furthermore, the existing barge terminal was not adequately equipped with the appropriate infrastructure to handle large steel coils.

Muscle Shoals Industrial Site – Muscle Shoals, Alabama

Dennen Steel immediately determined that the Muscle Shoals site was unsuitable because of the lack of barge port and rail access. The access to the nearest port terminal is 20 miles from this location, which would not feasibly support its water-based freight logistics to accept rolled steel delivered by barge.

Muscle Shoals – Existing Facility – Muscle Shoals, Alabama

Dennen Steel was offered a 50,000 to 75,000-square foot portion of the Wise Alloy building. Dennen Steel noted that this site was too cost prohibitive to renovate, based on the company's manufacturing processes. The company's determining factor in eliminating this facility from consideration was based on the age of the facility and its inability to show well to existing and future customers.

Birmingham – Existing Facility – Birmingham, Alabama

Dennen Steel chose to eliminate this facility from its site selection based on the age of the facility and its inability to show well to existing and future customers, and it would not be cost effective to renovate, based on the company's particular manufacturing process. The building was also noted as being located too far south to fit logistical requirements.

Site Description

The subject property is located in a rural area of Tishomingo County, situated adjacent to the Yellow Creek Port complex at Mile Marker 2 along the west bank of Yellow Creek. The 13.6-acre property is along the east side of County Road 481 and is partially bound to the east by land that borders Pickwick Reservoir. Land to the south and west of the proposed

Dennen Steel site is occupied by existing tenants of the Yellow Creek Port Authority (Figure 2).

The property is a vacant site designated for industrial development. It currently contains no structures, improvements, or trappings. The topography across the property generally slopes to the south and east toward and into the Pickwick Reservoir with elevations being between 430 and 450 feet above mean sea level (msl). The property is upland in character with gentle to moderate slopes that converge in swales containing ephemeral streams or slopes angling directly into Pickwick Reservoir. Approximately half of the subject property appears to have been altered by the removal of trees and soil, reportedly for excavation of shale material from a near-surface formation. This includes the area where the proposed building development would be located. The forested portion of the site is occupied by a second-growth stand of oak-pine-hickory forest.

Impacts Evaluated

Based upon a preliminary evaluation of the 13.6-acre study area, TVA concluded that certain resources would not be affected by the proposed action. These resources include aquatic ecology, threatened and endangered aquatic animals, navigation, recreation, prime or unique farmland, recreation, parks or natural areas, and wild and scenic rivers.

Resources that could be affected by the proposed request have been given further consideration in this EA and include the following: water quality and surface water, vegetation and wildlife, threatened and endangered plants and terrestrial animals, wetlands, floodplains, cultural and historic resources, visual resources, socioeconomics, environmental justice, air quality, noise, transportation, and solid waste.

The existing environmental conditions and those environmental resources that could be affected by the proposed actions are described in the following section. The affected environment descriptions below are based on field surveys conducted June and July 2009, published and unpublished reports, and personal communications from resource experts.

Affected Environment and Environmental Consequences

Water Quality and Surface Water

Affected Environment

The Tennessee River from the Alabama state line to the Tennessee state line is designated as public water supply. The MDEQ is responsible for administering the state's storm water management program through its Office of Pollution Control. Mississippi's storm water program requires that storm water be treated to the maximum extent practicable. Numeric treatment requirements specific to storm water have not been established at the state level, but water quality parameters are established on a site-by-site basis when the risk of contamination is present. MDEQ establishes permitting requirements for construction sites disturbing more than 1 acre. As previously described, prior to construction, Dennen Steel would be required to obtain a Large Construction Storm Water General Permit for Land Disturbing Activities of Five or More Acres from MDEQ.

Potable water service would be extended from the existing 6-inch water line owned by Short Coleman Park Water Association. Sanitary sewer would be disposed of via on-site

treatment and disposal, which would be located on nearby Yellow Creek Port property. No process wastewater would be generated.

Environmental Consequences

Because of soil disturbances associated with site development and construction of an access road, there is potential for impacts to reservoir water quality. Soil disturbances associated with construction activities can potentially result in adverse water quality impacts. Soil erosion and sedimentation can increase turbidity (water cloudiness) and threaten aquatic life. In addition to construction activities, improperly operated wastewater treatment systems (septic tanks) and runoff from lawn fertilizer applications could increase unhealthy nutrient additions to the adjacent reservoir. Sanitary waste matter from inadequate or improperly installed septic systems can result in discharges of fecal coli form as well as changes in water chemistry, which can threaten aquatic life.

No Action Alternative

Under the No Action Alternative, no changes in existing surface water and water quality conditions would occur. Therefore, there would be no direct, indirect, or cumulative impacts to surface water and water quality.

Action Alternative

Under the Action Alternative, soil disturbances associated with construction activities could potentially result in soil erosion and sedimentation from storm water runoff and could temporarily impact water quality in Pickwick Reservoir. However, with the implementation of prevention measures, controls, and BMPs as described in MDEQ 2005, potential impacts to water quality would be minor.

Terrestrial Ecology - Vegetation

Affected Environment

Pickwick Reservoir is located in the Tennessee River watershed within the Transition Hills ecoregion of the state of Mississippi (Chapman et al. 2004). The Transition Hills ecoregion serves as an interface between the coastal plain landforms to the south and the Western Highland Rim and Uplands of Tennessee to the north. This ecoregion is comprised of irregular plains made up of a mosaic of cropland, pasture, pine plantations, and oak-hickory-pine forest. The native vegetation of the study area (13.6-acre subject property) includes the oak-hickory-pine community type; however, portions of the area have been substantially altered by land clearing and shale removal.

A plant survey was conducted on site, and much of the study area consists of early successional habitats dominated by herbaceous vegetation. Open clearings from past disturbances occur in the western and southern portions of the site. Lists of herbaceous and woody species observed are included in Attachment B. The herbaceous plant layer of the forest includes relatively few flowering plants but is largely comprised of grasses, creeping vines, and ivies as well as seedlings of mid- and overstory tree species. There are no rare terrestrial plant communities present in the study area, and the plant communities present are common and representative of the region.

Executive Order (EO) 13112 for invasive species serves to prevent the introduction of invasive species and provides for their control to minimize the economic, ecological, and

human health impacts that invasive species potentially cause. Exotic-invasive plant species within the study area are limited to common species such as Chinese privet, Japanese honeysuckle, and mimosa.

The herbaceous plant layer of the forest includes relatively few flowering plants but is largely comprised of grasses, creeping vines, and ivies as well as seedlings of mid- and overstory tree species. A listing of flowering plant species identified during the plant survey is included in Attachment B.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, invasive plant species on site would continue to be present. There would be no direct, indirect, or cumulative impacts to the vegetative communities on the 13.6-acre or adjoining property.

Action Alternative

The terrestrial vegetation communities occurring in the proposed project area are common and representative of the region. Implementation of the Action Alternative would potentially introduce invasive plant species, but impacts would be minor. Because the vegetation communities present within and around the study area are common and representative of the region, implementation of the proposal to build a new facility and the associated access roads is not expected to result in adverse impacts to terrestrial botanical resources.

Terrestrial Ecology - Wildlife

Affected Environment

The habitats in the study area are currently disturbed and are similar to the surrounding landscape. Most of the study area consists of early successional habitats dominated by herbaceous vegetation. The remaining habitat areas are young woodland fragments. Mixed densities of understory vegetation provide increased habitat and refuge for various common species of wildlife. Species observed during field visits included a variety of songbirds and insects known to be common and representative of the area. No mammals, reptiles, or amphibians were observed during the site visits.

The forested upland and low-lying areas throughout the study area provide habitat for resident and migratory birds, mammals, reptiles, and amphibians. Unique and important terrestrial features such as bluffs, vernal pools, bogs, sink holes, caves, and heronries are not known from the study area, and none of these features were observed during field visits.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the project area would remain in its current condition, and there would be no direct, indirect, or cumulative impacts on wildlife or wildlife habitat.

Action Alternative

The habitats in the planned project area are currently disturbed by previous development activities and are similar to the surrounding landscape. Wildlife in the project area would likely be displaced, but impacts to wildlife would be minor as individuals would be able to move to other nearby habitats in the surrounding landscape. Because no recorded wading bird colonies or caves occur within 3 miles of the proposed project area, the proposed action is not expected to impact either of these resources under this alternative. Under the Action Alternative, impacts to wildlife are expected to be minor.

Endangered and Threatened Species

Species listed at the federal level as threatened or endangered are protected under the *Endangered Species Act* (ESA), which is administered by the United States Fish and Wildlife Service (USFWS). Section 7 of the ESA requires federal agencies to consult with USFWS in situations where a federal action may adversely affect federally listed species or their habitats.

Plants

Affected Environment

A review of the TVA Natural Heritage database indicated 55 state-listed plant species are known from within a 5-mile vicinity of the 13.6-acre study area (see Attachment C, Table C-1).

White fringeless orchid, a candidate for federal listing, is known from Tishomingo County and is typically found in partially shaded, flat, boggy areas at the head of streams or seepage slopes. The flower is showy, with large, white flowers and conspicuous long spurs. This species is a perennial herb that flowers from late July to early September.

Field visits conducted in July 2009 indicated neither this species nor other federally listed or state-listed plant species or their appropriate habitats occur within the study area.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the project area would remain in its current condition, and there would be no direct, indirect, or cumulative impacts on endangered and threatened plant species.

Action Alternative

Because no known populations of existing endangered and threatened plant species or habitat to support them occur within the study area, adoption of the Action Alternative would not result in any project-related impacts to these botanical resources. Therefore, under the Action Alternative, there would be no direct, indirect, or cumulative effects on endangered and threatened plant species.

Terrestrial Animals

Affected Environment

A review of the TVA Natural Heritage database indicated there are six state-listed terrestrial animal species within 3 miles of the study area and two federally listed species, gray bat and Indiana bat, known from Tishomingo County (see Attachment C, Table C-2). Additionally, a bald eagle nest occurs on Pickwick Reservoir approximately 2 miles north of the study area.

Gray bats roost in caves year-round and typically forage over streams, rivers, and reservoirs. Indiana bats roost in caves during the winter and typically form summer roosts under the bark of dead or dying trees. Their summer roosts are found in forests with an open understory and available roost trees, usually near water (Romme et al. 1995).

During field investigations, habitat was assessed for suitability of use by roosting Indiana bats in the study area. The sampling results indicate there is no suitable summer roost habitat for Indiana bats in the study area. No caves appropriate for Indiana bat hibernacula or gray bat roosts (summer or winter) were found in the study area. The nearest cave known to be used by gray bats and Indiana bats is approximately 11 miles from the study area. Furthermore, bat surveys conducted by Auburn University in 1990-91 (Best and Caesar 2000) indicated gray bats and Indiana bats no longer reside in the cave, likely due to increased amounts of human disturbance.

Bald eagles were removed from the endangered species list, but are still protected under the *Bald and Golden Eagle Protection Act* and the *Migratory Bird Treaty Act.* Both acts prohibit harm to eagles or their nests. This species typically nests in forested areas near large bodies of waters including reservoirs, rivers, and riparian wetlands. Although a bald eagle nest is known approximately 2 miles north of the study area, the eagles would not be disturbed because the nest is well beyond the 660-foot buffer zone recommended by the *National Bald Eagle Management Guidelines* (USFWS 2007). No bald eagle nests were found on or near the subject property during field investigations in July 2009. Furthermore, no suitable habitat for state-listed terrestrial animal species exists within the subject property.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the proposed tract would not be developed at this time, and there would be no direct, indirect, or cumulative impacts on endangered and threatened terrestrial animal species and their critical habitats.

Action Alternative

There is no suitable nesting habitat for bald eagles, and the study area does not have appropriate habitat for gray bats or Indiana bats. Furthermore, habitat for state-listed terrestrial animals does not occur in the study area. Therefore, because suitable habitat does not exist for federally listed and state-listed terrestrial species, adoption of the Action Alternative would have no effect on gray bat, Indiana bat, bald eagle, or any other federally or state-listed terrestrial animal species or their critical habitats. Furthermore, under the Action Alternative, there would be no direct, indirect, or cumulative impacts to endangered and threatened terrestrial species.

Wetlands

Activities in wetlands are regulated under Section 404 of the *Clean Water Act* and are covered under EO 11990, Protection of Wetlands. Under Section 404, the USACE established a permit system to regulate activities that result in the discharge of "dredge or fill material" into the "waters of the United States." This requires that authorization under either a Nationwide General Permit or an Individual Permit be obtained to conduct specific activities in wetlands. Additionally, Section 401 requires water quality certification by the state for projects permitted by the federal government (Strand 1997).

EO 11990 requires agencies to minimize wetland destruction, loss, or degradation, and preserve and enhance natural and beneficial wetland values, while carrying out agency responsibilities. The use of the Tennessee Valley Authority Rapid Assessment Method (TVARAM) for wetland delineation guides TVA's wetland mitigation decisions consistent with TVA's independent responsibilities under NEPA and EO 11990. TVARAM is a TVA-developed modification of the Ohio Rapid Assessment Method (Mack 2001) specific to the TVA region.

Affected Environment

Field surveys were conducted to determine types and locations of wetlands present within the study area. Wetland determinations were performed according to USACE standards, which require documentation of hydrophytic (i.e., wet-site) vegetation, hydric soil, and wetland hydrology (Environmental Laboratory 1987; Reed 1998). Broader definitions of wetlands, such as those used by the USFWS (Cowardin et al. 1979), and the TVA Environmental Review Procedures definition (TVA 1983) were also considered in this review. In addition, wetlands were categorized according to their ecological condition. Using TVARAM, the wetland on-site was categorized by its functions, sensitivity to disturbance, rarity, and irreplaceability.

A 1.04-acre wetland (W001) occurs within the study area. W001 is an open, emergent wetland in a shallow depression that includes roadbeds to the north and west. There are bare shale beds in the nearby vicinity, and the wetland is in a disturbed area that likely resulted from prior excavation of shale material from the site. Soil indicator features were absent in test pits dug outside the wetland boundary, but were present in the shallow soil within the wetland area. The wetland boundary is demarcated by a discernible vegetation change from wetland to upland species.

W001 exhibits some hydric soils and supports hydrophytic vegetation, but is not hydrologically connected to a course of surface flow. The larger, southern portion of the wetland is more open and pondlike due to the absence of cattails and consists of matted alligator weed, an invasive aquatic plant species, and the sporadic emergence of rush and sedge species, and small black willow saplings along the margin. No other woody species of trees or shrubs exist in the wetland area. The north portion of the wetland area is characterized by a stand of native cattail. The boundary zone of the wetland is very apparent (<1 meter) and is indicated by the immediate presence of Chinese lespedeza and partridge pea, both being upland indicator species.

W001 was evaluated using the TVARAM and scored as a Category 1 wetland, which indicates poor condition and provision of wetland function (see Attachment D). Category 1 wetlands are often hydrologically isolated and have some or all of the following

characteristics: low species diversity, no significant habitat for wildlife use, limited potential to achieve beneficial wetland functions, and/or a predominance of nonnative species.

TVA consulted with the USACE and requested an on-site preliminary jurisdiction determination for W001. In a letter dated February 25, 2010, the USACE indicated that the site does not meet jurisdictional criteria due to a lack of hydric soils and continuity with the waters of the United States (Appendix D). Therefore, a permit application to fill the wetland area would not be required, and a water quality certification from MDEQ would not be necessary.

Environmental Consequences

EO 11990 requires federal agencies to avoid to the extent practicable long- and short-term adverse impacts associated with the destruction or modification of wetlands. More specifically, the EO directs federal agencies to avoid new construction in wetlands, unless there is no practicable alternative, and where wetlands cannot be avoided, the proposed action must include all practicable measures to minimize harm to the wetlands.

No Action Alternative

Under the No Action Alternative, there would be no project-related changes to the existing environmental conditions; therefore, there would be no direct, indirect, or cumulative impacts to wetland resources.

Action Alternative

Implementation of the proposed Action Alternative would result in the clearing and fill of a 1.04-acre Category 1 wetland. The applicant has considered six other sites in Alabama and Mississippi and reconfigured facility designs on the subject property to determine if it would be practicable to avoid the wetland. Based on these considerations, Dennen Steel determined that wetland avoidance is not practicable. Modifications to the proposed site plan could preclude the suitability of the site for the proposed construction and operation of the manufacturing site. Therefore, impacts to this wetland are unavoidable due to siting requirements of the proposed facility. A description of alternate facility placement considerations and a supporting illustration are included in Attachment D.

According to the land use/land cover data, the proposed fill of the 1.04-acre wetland would affect less than 0.01 percent of overall wetland acreage in the watershed. Given the type of wetland and its condition and the extent of similar types of wetlands in the region, TVA has determined that wetland mitigation would not be required.

The loss of this Category 1 wetland would result in the loss of habitat for plants and some animals that likely use the wetland; however, loss of the wetland would not result in major impacts to the watershed or local wetland functions.

Floodplains

EO 11998, *Floodplain Management*, directs all federal agencies to take action to reduce the risk of flood loss, to minimize the impacts of floods on human safety, and to preserve the natural and beneficial values served by floodplains.

Affected Environment

The subject property is located at Tenn-Tom Mile 448.2 at approximate elevations 430 feet above msl to 450 feet above msl, and is located outside of the 100-year floodplain. The 100-year floodplain for the subject property is the area lying below elevation 419.5 feet above msl. The TVA Flood Risk Profile (FRP) elevation is 419.6 feet above msl. The FRP is used to control flood-damageable development on TVA lands. At this location, the FRP elevation is equal to the 500-year flood elevation.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the floodplains in this area would not be affected because there would be no physical changes to the current conditions found within the floodplains.

Action Alternative

Under the Action Alternative, the proposed action involves the placement of fill for construction of a manufacturing facility and associated infrastructure. However, based on the site layout, all construction activities would occur outside the 100-year floodplain and above the TVA FRP elevation, which would be consistent with EO 11988. The project would comply with the TVA Flood Control Storage Loss Guideline because there would be no loss of flood control storage. Implementation of the Action Alternative would not affect floodplain values or functions adversely and would be consistent with EO 11988.

Cultural and Historic Resources

Historic and cultural resources, including archaeological resources, are protected under various federal laws, including: the *Archaeological Resources Protection Act*, the *Native American Graves Protection and Repatriation Act*, and the *National Historic Preservation Act* (NHPA). Section 106 of the NHPA requires federal agencies to consult with the respective SHPO when proposed federal actions could affect these resources.

Affected Environment

TVA Cultural Resources staff conducted a number of assessments of TVA land holdings in the vicinity of YCIP on Pickwick Reservoir in Tishomingo County, Mississippi over the past several years. A Phase 1 Archaeological Survey was completed on the subject property and other nearby tracts of TVA property in 2006. The area of potential effect (APE) for the previous surveys include all of the property designated in Figure 3. As shown in Figure 3, TVA determined that several tracts, including the subject tract contain no sensitive archaeological resources or properties eligible for listing in the NRHP. These designated tracts are cleared of cultural resources issues, and TVA has determined that further surveys would not be necessary for potential development.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be no disturbance to the subject property; therefore, there would be no direct, indirect, or cumulative impacts to property of historic, archaeological, or architectural significance including sites on or eligible for the NRHP and the National Registry of Natural Landmarks.

Action Alternative

TVA has previously determined that there are no properties of historic, archaeological, or architectural significance, including sites on or eligible for the NRHP and the National Registry of Natural Landmarks in the proposed project area. However, if human remains were discovered during construction activities, in accordance with the *National Historic Preservation Act* and Mississippi statutes regarding human remains, work would be suspended at the site, and human remains would not be moved from their discovery location before appropriate agency and tribal representatives were consulted.

TVA previously corresponded with the Mississippi SHPO and several federally recognized tribes seeking concurrence that potential development and/or land disposal on designated tracts in the vicinity of YCIP have been "cleared" for cultural resources and would have no effect on archaeology or historic properties. This "clearance" includes the tract wherein the proposed 13.6-acre project site is located. In a letter dated July 7, 2005, the Mississippi SHPO concurred with TVA's findings. Correspondence letters from the Mississippi SHPO and the THPOs who responded to the request for concurrence regarding the subject tract are included in Attachment E. Implementation of the Action Alternative would result in no direct, indirect, or cumulative impacts to cultural and historic resources.

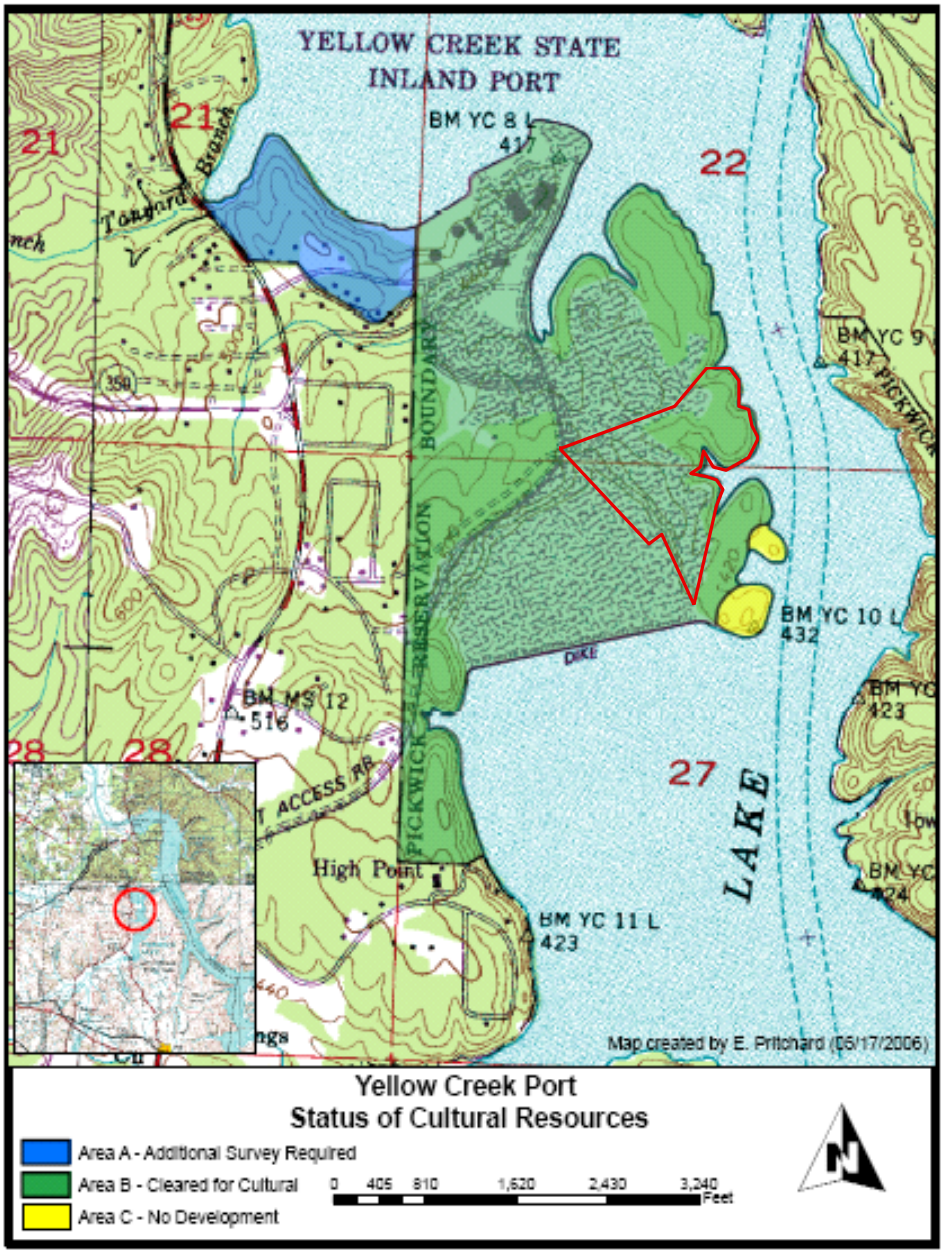

Figure 3. Yellow Creek Port – Status of Cultural Resources

Visual Resources

Affected Environment

Visual resources are evaluated based on existing landscape character, distances of available views, sensitivity of viewing points, human perceptions of landscape beauty/sense of place (scenic attractiveness), and the degree of visual unity and wholeness of the natural landscape through the course of human alteration (scenic integrity).

The landscape character of Pickwick Reservoir has changed since its impoundment in 1938. The 13.6-acre study area has also changed since the 1970s, the time when the Yellow Creek Port Authority was established. The subject property is currently vacant and is occupied by a mix of pine and hardwoods and understory plants as well as overgrown herbaceous vegetation in nonforested clearings. Views of the property from the water would be considered scenic as the natural mature forest occupies all waterfront areas adjacent to the site.

The area is sparsely populated, and there is no residential property visible from the subject property. When positioned in the western (previously altered) portion of the site, developed industrial property is within view to the south, west, and north. A narrow section of the impounded portion of Yellow Creek can be observed from the eastern edge of the property. Several barge moors can be seen from the waterfront boundaries of the property.

Within the immediate vicinity of the proposed site, the landscape character is distinctly industrial. The proposed facility would include a single industrial structure of 50,000 square feet with an interior ceiling height of approximately 40 feet. Exterior heights may approach 50 feet, and the roof and exterior portions would be painted a neutral, light color. No aerial towers, water towers, or other exceedingly tall structures are planned for the facility.

The scenic attractiveness of the proposed project area is common to minimal, and the scenic integrity is low.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes to the visual landscape would occur; therefore, there would be no direct, indirect, or cumulative impacts to visual resources.

Action Alternative

Under the Action Alternative, the proposed development would not impact scenic integrity from the east due to the existing natural stand of mature forest. Recreational water users would have only limited views of the proposed facility among other industrial facilities from the southwest, in an area of the reservoir just south of the existing Spry Marine facility. These planned project elements would remain in context with the existing industrial landscape character surrounding YCIP. The proposed construction and operation of the Dennen Steel facility would not result in major impacts to existing visual resources.

Socioeconomics

Affected Environment

According to 2000 U.S. Census Bureau estimates, the Tishomingo County population was 19,163 persons. In 2000, the population density was 45 people per square mile with about 14.1

percent living below the poverty line. Income data from the 2000 census indicated that the median household income was $28,315, and the per capita income was $15,395.

In 2009, the civilian labor force of Tishomingo County was 8,280. Of these, 990 individuals were unemployed (Mississippi Department of Employment Security 2009). The Tishomingo County unemployment rate rank is 39 of the 82 counties in Mississippi. The Labor Market Data for Mississippi reports that the unemployment rate for Tishomingo County is 11.6 percent, which is above the state level and national level of 10.3 percent and 9.7 percent, respectively (Mississippi Department of Employment Security 2009).

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the development would not occur, and there would be no direct, indirect, or cumulative impacts to socioeconomic considerations.

Action Alternative

Under the Action Alternative, minor beneficial impacts would occur during construction and operation of the proposed facility because of the addition of new jobs. The facility would initially employ approximately 50 workers. The Dennen Steel facility would represent an investment of about $7 million dollars including site preparation, construction, and equipment. Some of the employees would be from the local labor force, some would commute from nearby areas, and others would likely be transferred or hired as new employees. There would be a minimal impact on housing construction and occupancy. There would be a slight increase in local tax revenues and some local establishments (restaurants and convenience stores) could experience marginal increases in profit. Although the proposed action would benefit socioeconomics of the area, the benefits would be slight. No major impacts to socioeconomics are anticipated with the implementation of the Action Alternative.

Environmental Justice

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Under EO 12898, Environmental Justice, federal agencies are to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Affected Environment

Although Mississippi has the highest poverty rate in the U.S., Tishomingo County's poverty rate of 14.1 percent is lower than the statewide rate of 19.3 percent. According to U.S. Census Bureau 2007 estimates, minorities account for 5.7 percent of the population in Tishomingo County. This is far below the state and the national levels, which are 38.1 percent and 30.9 percent, respectively. Minority population is defined as nonwhite persons and white Hispanics (nonwhite Hispanics are included in the nonwhite figure). Poverty level estimates for 2007 are not available below the county level.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the proposed development would not occur, and there would be no direct, indirect, or cumulative impacts to minority or low-income populations. Therefore, because no effects are anticipated, no disproportionately high and adverse effects on any low-income or minority groups would occur as a result of implementation of the No Action Alternative.

Action Alternative

Overall, poverty levels in the vicinity of the proposed manufacturing facility are lower than the surrounding areas, and minority population levels are low compared to state and national levels. No concentrations of minority or low-income populations have been identified near the proposed project area, and population in the area is generally dispersed. No direct, indirect, or cumulative social, economic, or health and safety impacts to persons living in the area are anticipated. Therefore, no disproportionate impacts to disadvantaged populations are expected to occur as a result of implementation of the Action Alternative, and obligations under EO 12898 have been satisfied.

Air Quality

Affected Environment

Through its passage of the *Clean Air Act*, Congress has mandated the protection and enhancement of our nation's air quality resources. The U.S. Environmental Protection Agency (USEPA) has set primary National Ambient Air Quality Standards (NAAQS) for airborne particles including particulate matter, sulfur dioxide, carbon monoxide, ozone, nitrogen oxide, and lead to protect the public health with an adequate margin of safety. An area where any air quality standard is violated is designated as a nonattainment area for that pollutant, and emissions of that pollutant from new or expanding sources are carefully controlled.

MDEQ Office of Pollution Control data indicates Mississippi is in attainment with all federal ambient air quality standards and until recent changes and Tishomingo County continues to be in attainment with the new standards (MDEQ 2009). No major air pollutant emissions are anticipated from industrial operations at the proposed manufacturing facility. According to information supplied by Dennen Steel, permits issued by MDEQ to construct or operate air emissions equipment would not be required for the proposed facility. Potential air quality impacts would likely occur from fugitive dust generated as a direct result of the movement of construction equipment across the project area.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the Dennen Steen development would not occur, and there would be no direct, indirect, or cumulative impacts to air quality at the subject property.

Action Alternative

Under the Action Alternative, temporary fugitive emissions of dust would occur consistent with construction sites of this nature. In accordance with MDEQ Office of Pollution Control rules, the

future landowner would be required to integrate prevention and control measures for dust at the construction site. Such fugitive emissions would become negligible at the end of facility construction and successful completion of the site vegetation plan for grassed and landscaped areas.

Standard mitigation measures required by MDEQ that would minimize impacts from fugitive dust may include, but would not be limited to, the use of a water truck to minimize dust resulting from dirt stockpiles and exposed areas. Additionally, the open burning of vegetation and wood wastes, if undertaken, would be conducted in accordance with all state air pollution control and forestry commission regulations as well as local ordinances. In the event that fill material is imported from an off-site location, the haul trucks would be covered with a tarp while traveling on local, state, and federal highways to minimize potential fugitive dust. Therefore, implementation of the Action Alternative is anticipated to have minor and temporary construction-related impacts to air quality.

Noise

Noise is measured in logarithmic units called decibels, which are abbreviated as dB. Given that the human ear cannot perceive all pitches or frequencies in the sound range, noise measurements are typically weighted to correspond to the limits of human hearing. This adjusted unit of measure is known as the A-weighted decibel, or the dBA. A-scale weighting reflects the fact that a human ear hears poorly in the lower octave-bands. It emphasizes the noise levels in the higher frequency bands heard more efficiently by the ear and discounts the lower frequency bands.

Affected Environment

The proposed industrial development on Pickwick Reservoir would occur in an industrial area. Although Pickwick Reservoir is adjacent to the subject property, the property does not extend to the shoreline and there is a buffer of mature hardwood forest between the subject property and the reservoir. There are no other sensitive noise receptors in the vicinity of the subject property. The proposed construction and operation of the industrial manufacturing facility would generate noise typical of industrial sites in the immediate area. The construction of the building, driveways, and utilities would require the use of graders, dozers, compactors, and similar equipment. Electrical or battery powered tools for cutting, sawing, hammering, and fastening would be utilized throughout the construction of facilities. This type of equipment would generate noise levels ranging from 86 to 95 dBA at 50 feet.

Dennen Steel obtained noise level readings at an existing manufacturing facility reported to house similar operations as the proposed facility. Noise levels recorded in the large press room while both presses were in operation averaged 91.2 dBA. Average noise levels outside the building (approximately 40 yards from the building) were 61.0 dBA.

Environmental Consequences

<u>No Action Alternative</u>

Under the No Action Alternative, no project-related noise would be generated; therefore, no direct, indirect, or cumulative impacts from noise pollution would occur.

Action Alternative

Under the Action Alternative, there would likely be a minor noise impact associated with the delivery of materials by trucks and the operation of machinery on site, but these impacts would be infrequent and minor, as would noise impacts from construction activities. Noise generated from the operation of the facility is not expected to measurably impact areas outside of the industrial park, including adjacent areas of the Pickwick Reservoir; therefore, noise impacts from facility construction and operations would be minor.

Transportation

Affected Environment

YCIP is served by roadway, railway, and waterway modes of transportation. Tennessee Highway (Hwy) 57 and Mississippi State Routes (SR) 25 and SR 350 provide truck and automobile access to the YCIP area. These state highways are high quality, rural roadways with a shoulder.

An assessment of potential traffic impacts was completed (see Attachment F), based on the transportation planning and engineering concept of Level of Service (LOS) found in the *Highway Capacity Manual* (Transportation Research Board 2000). As seen in attachment F, there are no drops in LOS for the various routes analyzed. The increases in AADT range from approximately 2 percent to 5.5 percent of the total AADT and do not result in an increased LOS rating. According to the Highway Capacity Manual, most design or planning efforts typically maintain service rates at LOS C or D, to ensure an acceptable operating service for facility users that minimizes the inconveniences resulting from traffic delays.

An additional 20 workers, including deliveries of construction materials, would be on site during construction. Assuming an average of 1.6 persons per vehicle with a trip to and from the site each day, 25 trips would be generated to accommodate the construction workers. In addition, approximately 25 to as many as 50 employees over a 36 month period are anticipated to be on site. Again, assuming an average of 1.6 persons per vehicle with a trip to and from the site each day, a maximum of 63 trips would be generated after 36 months of operation. Therefore, no more than 73 vehicle-trips per day would be generated and added to the existing roadway network.

The Dennen Steel facility would receive steel coils from its steel mill vendors via barge, truck, and rail. The barges would travel to the existing port, and the rail would travel on existing rail lines. It is anticipated that barge deliveries would coincide with deliveries to neighboring industries, and frequency would range from one to three deliveries per month. Initially, incremental increase in traffic would result in approximately four to six additional barges per year for the Yellow Creek Port.

Shipments would be arriving and leaving the proposed facility on a planned asphalt access road that would connect to Yellow Creek Port Road. The initial daily truck delivery traffic to and from the facility would be approximately three to five trucks inbound and three to five trucks outbound. The trucks would primarily be conventional 18-wheeled vehicles with closed van trailers.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes to the roadway traffic density, waterway navigation density, or railway traffic density, would occur; therefore, there would be no direct, indirect, or cumulative impacts to truck, barge, or railway traffic.

Action Alternative

Under the Action Alternative, slight increases to road use would occur along the SR 25 corridor as well as traffic in the vicinity of the YCIP. These traffic additions are not be expected to overburden the existing road infrastructure or create considerable traffic congestion in the vicinity of the subject property. The roadways in the area are fully capable of absorbing the additional traffic. The low frequency of barge and train traffic needed would not have measureable impacts to waterway or railway traffic. Therefore, adoption of the Action Alternative would not result in major impacts to roadway, waterway or railway transportation.

Solid Waste

Affected Environment

Dennen Steel is not registered with the U.S. EPA as a generator of hazardous waste, and no significant quantities of hazardous waste would be generated at the proposed facility. A number of chemical products containing hazardous constituents would be used in process or incidentally at the proposed facility. These chemicals are typically consumed in their intended uses; however, their containers may be discarded with general garbage. A complete list of chemicals expected to be used at the proposed facility is presented in Attachment G.

The proposed facility would generate scrap steel from slitting operations as well as a small amount of excess or used machining oil. The proposed facility operation would create an estimated 70 tons per year of solid waste, much of which is recyclable.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, no solid waste would be generated by the applicant and no direct, indirect, or cumulative impacts to the site or regional solid waste disposal facilities would occur.

Action Alternative

Under the Action Alternative, approximately 70 tons of solid waste would be generated annually at the proposed facility. Based on this information, there would be no storage, handling, treatment or disposal of hazardous waste at the site. No bulk containers (tanks or vats), above-ground or buried, would exist at the site. Lubricants in quantities of up to 55 gallons would be stored in drums inside the facility. No waste materials would be deposited on or disposed of on the land. Scrap steel would be stored in large metal dumpsters that would be moved outside the facility the day of metals recycling pick-up. Paper waste would be bundled and kept inside the facility and picked-up by the recycling company. Oil residue from the manufacturing process would be contained and stored in the process area. Excess or used oil would be placed into metal drums and stored inside the facility until picked-up by the recycling company. All solid

waste would be managed in compliance with Mississippi's *Nonhazardous Solid Waste Management Regulations and Criteria.*

Standard mitigation measures for solid waste management such as recycling all recyclable materials and requiring the construction contractor to comply with all federal, state, and local laws would be implemented. Therefore, with the implementation of solid waste standard mitigation measures, adoption of the Action Alternative would not result in major impacts from solid waste.

Cumulative Impacts

Impacts from cumulative effects of the Action Alternative would be greatly limited to the surrounding communities of Tishomingo County. As stated above, adoption of the Action Alternative would result in temporary and minor effects to wildlife, socioeconomics, air quality, and traffic; however, impacts to water quality, wetlands, and traffic would likely be ongoing. As the area in Tishomingo County grows, more industrial developments are likely to be constructed in and near the YCIP. Some of the developments may be subject to Section 26a approval, and TVA would likely impose appropriate stipulations as conditions of approval to protect environmental resources. Water quality would continue to be affected by general growth in the area and continued development of the industrial occupants in the area. While not proposed to be constructed along the waterfront portions of the property, the Dennen Steel facility would be in close enough proximity to Pickwick Reservoir that appropriate considerations are warranted to ensure the protection of water quality. Cumulative impacts analysis of wetlands takes into account wetland loss and conversion at a watershed-level scale, in this case the Pickwick Reservoir watershed. According to the land use/land cover data, the proposed fill of a 1.04-acre nonjurisdictional wetland would affect less than 0.01 percent of overall wetland acreage in the watershed. Therefore, cumulative wetland impacts would be absent or minor. Slight increases to road use would occur along the SR 25 corridor as well as to traffic in the vicinity of the YCIP. These traffic additions are not expected to overburden the existing road infrastructure or create major cumulative transportation and traffic impacts. Although the proposed development would have a somewhat greater impact than the No Action Alternative, implementation of the Action Alternative would result in a minor impact on the environment upon completion of facility construction and operation. Therefore, TVA has determined that cumulative impacts of the proposed action would be minor, given the applicant's adherence to the previously mentioned standard conditions and mitigation measures.

Mitigation Measures

No specific nonroutine environmental commitments or mitigation measures were identified to reduce potential environmental effects. Implementation of the routine conditions and BMPs outlined below during facility construction and operation will minimize potential environmental effects associated with the construction and operation of the proposed manufacturing facility and the associated infrastructure.

Water Quality

A. General Standard Control Measures

    1) Applicant will make every reasonable effort to construct and operate the facility in a manner to minimize any adverse impacts on water quality, aquatic life, wildlife, vegetation, and natural environmental values.

2) Applicant will not use or allow the use of the premises, facilities, or structures for any purposes that would result in draining or dumping into Pickwick Reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.

3) Disturbed sites must be promptly stabilized with seeding, vegetation planting, erosion-control netting, and/or mulch material.

B. Surface Water Control Measures

1) Applicant will comply with applicable environmental laws and regulations.

2) Applicant will implement control measures to prevent the discharge or loss of potential pollutants to the reservoir and to contain and properly dispose all wastes, accidental spills, surface runoff, or other potential contaminants.

3) Applicant will comply with Mississippi state requirements for septic systems.

Cultural Resources

1) If human remains are discovered during construction activities, in accordance with the *National Historic Preservation Act* and state statutes regarding human remains, work should be suspended at the site and human remains should not be moved from their discovery location before appropriate agency and tribal representatives are consulted.

Solid Waste

1) Construction contractor shall comply with all federal, state, and local laws

2) All recyclable materials would be recycled.

Air Quality

1) Standard mitigation measures may include, but would not be limited to, the use of a water truck to minimize dust resulting from dirt stockpiles and exposed areas.

2) Open burning of vegetation and wood wastes, if undertaken, would be conducted in accordance with all state air pollution control and forestry commission regulations as well as local ordinances.

Preferred Alternative

TVA's preferred alternative is the Action Alternative, under which the TVA Board of Directors would declare surplus and authorize the sale of the 13.6 acres of land at a Section 31 public auction. Under this alternative, the future landowner would construct and operate an industrial facility in accordance with the proposed methods and plans presented as described herein. Approval of the request would allow TVA to dispose of the property in accordance with the *TVA Act* and in keeping with the specified land use classification as described in the 2002 Pickwick Reservoir Final Environmental Impact Statement and Land Management Plan.

Attachments

Attachment A TVA Public Notices

Attachment C List of Plant Species Observed in the Study Area

Attachment C List of Plant and Animal Species of Conservation Concern

Attachment D Wetland Assessments and Correspondence

Attachment E Cultural Resources Correspondence

Attachment F Assessment of Potential Vehicle Traffic Impacts

Attachment G List of Chemicals Planned for Use at Dennen Steel Facility

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Outside Agencies Consulted

Mississippi Natural Heritage Program (Department of Wildlife, Fisheries, and Parks)

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United States Army Corps of Engineers

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