

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

PARADISE FOSSIL PLANT DISPOSAL OF COAL WASH FINES

Proposed Action and Need

Use of washed coal has been an important part of the air pollution control strategy for reducing emissions from Paradise Fossil Plant (PAF). Washing coal improves coal's environmental and operational characteristics by removing a substantial percentage of the impurities in coal and improving its combustibility. Washing coal reduces the sulfur content of coal and other elements that when combusted result in higher levels of emissions. Currently there are approximately 720,000 tons of coal fines and 600,000 tons of coarse and medium refuse generated each year from coal washing operations at PAF. These coal wash fines are presently handled in on-site disposal ponds.

Once the existing disposal ponds for coal wash fines have reached their projected maximum capacity in the fall of 2004, TVA would need to cease coal wash plant operations at PAF, and therefore affect plant operations. TVA proposes to implement Alternative C as described and evaluated in the Environmental Assessment (EA).

Background

In October 1986, an Environmental Assessment (EA) and Finding of No Significant Impact were completed for "Purchase and Development of Land for Disposal of Coal Wash Fines and Miscellaneous Dredge Materials." Since that time, Paradise Fossil Plant (PAF) has utilized 360 of the 500 acres identified in the EA for the disposal of coal wash fines. Of the remaining 140 acres, 45 acres are occupied by a radio tower and a cemetery and 95 acres are undeveloped. The Tennessee Valley Authority (TVA) has prepared a supplemental environmental assessment (EA) to update the environmental consequences of using the remaining undeveloped 95 acres for coal wash fines storage, address other environmental issues, and to assess alternatives to utilizing the remaining undeveloped 95 acres.

Alternatives

There are three alternatives analyzed in this Supplemental EA: (1) the No Action Alternative (Alternative A), i.e., continue to operate the coal wash plant and implement TVA's preexisting plan to expand the coal fines disposal pond area, (2) retire the coal wash plant and close associated coal refuse and fines disposal areas (Alternative B), and (3) idle the coal wash plant and preserve the ability to restart it in the future (Alternative C). Under the latter two alternatives, TVA would have to purchase coal that has already been washed before it is shipped to PAF. Coal suppliers have substantial capabilities to provide washed coal, and TVA would be able to purchase sufficient supplies of washed coal to serve the plant on a long-term basis. Based on current economic data, idling the coal wash plant and purchasing washed coal would save TVA approximately \$17 million over the first three years. Permanently shutting down the wash plant would result in similar savings minus the cost of securing the actual plant facility and closing the disposal area. TVA's preferred alternative is to idle the coal wash plant (Alternative C) because it: (1) preserves the ability to restart it in the future, (2) is the most

economically feasible alternative; (3) has about the same environmental impacts as shutting down the coal wash plant, and (4) has fewer environmental impacts than continuing to operate the coal wash plant and expanding the coal fines disposal pond area.

Impacts Assessment

A TVA interdisciplinary team reviewed the proposed project for potential direct, indirect, and cumulative effects as a result of expanding the coal fines disposal pond area by utilizing 88 of the 95 undeveloped acres (No Action Alternative), shutting down the coal wash plant and associated coal refuses and fines pond disposal areas (Alternative B), and idling the coal wash plant and interimly managing the associated coal refuse and fines pond disposal areas (Alternative C). The potential impacts from any of the alternatives on floodplains, land use, transportation, managed areas, socioeconomics, environmental justice, noise, visual, and cumulative effects would be minor and insignificant. Because the coal fines pond was previously stripped-mined, there is no potential to affect historic properties.

Under Alternative C, TVA would continue to operate the coal wash plant for the time frame that existing storage capacity would allow, and, then, due to the lack of coal wash fines storage capacity, PAF would be required to idle coal wash plant operations. TVA would secure the coal wash plant and interimly manage the coal refuse and fines disposal areas. TVA evaluated these activities for potential environmental effects. For the media areas that had potential effects, mitigation commitments were put into place to ensure the environmental effects would be insignificant.

Under Alternative C, there would be the potential for:

- Surface water, air quality, solid waste issues from construction activities;
- Positive coal refuse areas impacts from interim management and permanent closure;
- Coal refuse area issues from excavating the coal fines from fines pond #3 With the commitments identified below (see Mitigation Commitments), impacts to air quality, surface water, aquatic ecology, groundwater, wetlands, solid waste, and coal refuse areas would be insignificant.

Mitigation Commitments

The following environmental commitments for Alternative C (idle the coal wash plant), the proposed action, were identified as necessary to ensure that environmental impacts are insignificant:

Compliance and Routine Measures

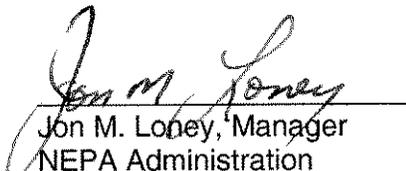
- (1) If more than 1 acre of land would be disturbed, a construction storm water permit would be obtained.
- (2) TVA would implement standard BMPs for erosion control like hay bales, silt fencing, and soil stabilization and fugitive dust suppression like the use of a binding agent or soil (or other material) and vegetative cover during construction and operation of the coarse and medium refuse and coal fines pond complex areas and during excavation activities from coal fines pond # 3.

Special Measures

- (1) During interim management for the coarse and medium refuse area and applicable fines pond areas, 1-foot-thick layer of scrubber sludge or other suitable material would be placed on the surface for cover.
- (2) During interim management for the fines pond complex, a binding agent would be applied once per year to areas 1 and 3.
- (3) During interim management for the coarse and medium refuse area and fines pond complex, routine inspections would be performed for adequate vegetative cover, evidence of erosion, standing water, sloughing or subsidence of cover soil and resulting cracks, water material exposed, animal or rodent activity causing damage to cover, evidence of intruders with off-road vehicles, evidence of spontaneous coal combustion, and binding agent crust intact.
- (4) For permanent closure, 4 feet cover of suitable material would be place over applicable surfaces of the course and medium refuse and fines pond areas. .

Conclusion and Finding

Environmental Policy and Planning's National Environmental Policy Act (NEPA) Administration staff reviewed the Paradise Fossil Plant Disposal of Coal Wash Fines Supplemental EA and determined that the potential environmental consequences of Alternative C, idling the coal wash plant, have been addressed and is not a major federal actions significantly affecting the quality of the environment. Accordingly, an environmental impact statement is not required.



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Date