

plant. Land that is currently used for agricultural purposes, primarily for growing corn and soybeans, would need to be purchased or leased for the new wells near Lake Fork Creek, access roads to the wells, and rights-of-way/easements to the plant site for well water and natural gas delivery lines.

Operations at the Turriss Mine would continue in a normal manner following initiation of power plant construction and operation. Permits for the Turriss Mine would continue to be required from the Illinois Department of Mines and Minerals, the Illinois Environmental Protection Agency, the Illinois Department of Transportation, the Mine Safety and Health Administration, the Illinois Department of Natural Resources, and the Bureau of Alcohol, Tobacco, and Firearms.

4.15 ENVIRONMENTAL JUSTICE

The analysis in Section 4.10 (Human Health) indicates that no adverse health effects to any individuals or households present in the vicinity of the proposed power plant would be expected. In addition, because the percentages of minorities and low-income households in Elkhart are less than those in Logan County and Illinois (Section 3.14), no disproportionate adverse effects on low-income or minority populations would be expected.

4.16 POLLUTION PREVENTION MEASURES

The proposed power plant would include pollution prevention measures that would be developed and implemented as part of the plant design or in response to potential or actual impacts identified during construction and operation of the plant. Pollution prevention measures are discussed in Sections 2.0 and 4.0 and summarized in Table 4.16.1.

Table 4.16.1. Pollution prevention measures developed for the LEBS power plant

Environmental issue	Pollution prevention measure
Aesthetics	<ul style="list-style-type: none"> • Dust suppression measures (i.e., watering) would be used to minimize the occurrence of fugitive dust during construction period excavation and earthwork.
Air quality	<ul style="list-style-type: none"> • The proposed power plant would demonstrate improvements in pollutant reduction levels compared with current coal-fired electric power generation. Concentrations of SO₂, NO_x, and PM₁₀ in exhaust gases would be below applicable standards for pollutant emissions. • Dust suppression measures (i.e., watering) would be used to minimize emissions of particulate matter during construction period excavation and earthwork.
Water use and quality	<ul style="list-style-type: none"> • The proposed power plant would result in no net consumption of non-potable water from the mine's recirculating water distribution system, which draws water from ponds fed by storm water runoff. • During operation of the proposed power plant, most on-site water, whether originating from groundwater or precipitation, would continue to be recycled for use in coal processing or would be used in power plant operations.

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Groundwater withdrawal	<ul style="list-style-type: none"> • The implementation of an erosion and sedimentation control plan, a spill prevention and control plan, and standard engineering practices would minimize potential impacts to surface waters and groundwater. • Land occupied by and immediately surrounding the proposed power plant would be appropriately sloped to promote drainage away from structures. • Groundwater monitoring, which currently occurs at the mine site, would continue, and the effects of operating new wells developed for the proposed power plant would be monitored. • Groundwater quality at the Elkhart municipal well would continue to be monitored by the village in accordance with state regulations. • The effects of aquifer drawdown would be minimized or avoided by using field drainage runoff collected in a retention pond, and groundwater obtained from up to 6 new wells would be used to support power plant operations, especially during periods of extended drought. • With the monitoring program in place, warning indications of lowering water levels or deterioration in groundwater quality would result in implementation of measures to avoid adverse impacts. If potential for an adverse effect on groundwater levels supporting nearby private or municipal water supply wells should be determined to exist as a result of groundwater pumping for the proposed power plant, deepening or replacement of wells and/or replacements of pumps would be used to avoid occurrences of any impacts. Prompt action in response to adverse trends observed during monitoring would be expected to allow sufficient time to implement protective measures, since water levels would drop gradually. • Pumping of groundwater at the existing Turris Mine's wells and at the proposed wells would set up a zone of capture to entrain any seepage from surface impoundments. The zone of capture would minimize impacts to the village of Elkhart's municipal groundwater well from activities occurring at the mine and the power plant.
Solid waste management	<ul style="list-style-type: none"> • Fly ash from the electrostatic precipitator would be recycled to the combustor to maximize ash discharge in the form of vitrified bottom ash, which would be a marketable by-product for use in road construction. • Gypsum waste and any fly ash that could not be sold commercially would be transported for disposal as solid waste at an appropriately permitted landfill site at the Turris Mine or on CBEC property.
Aquatic ecosystems	<ul style="list-style-type: none"> • The existing outfall at the Turris Mine, through which new drainage from the proposed power plant would be discharged, would continue to be monitored.

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Environmental issue	Pollution prevention measure
Traffic	<ul style="list-style-type: none">• Discharge limitations and monitoring requirements of the existing National Pollutant Discharge Elimination System permit would continue to be enforced for protecting the off-site aquatic environment.• If necessary, a conveyor would be installed to move vitrified ash from the proposed power plant to the waste disposal ponds, which would reduce on-site traffic and traffic crossing Township Road 600N.
Applicable permits and regulations	<ul style="list-style-type: none">• Carpooling would be encouraged.• Compliance and consultation requirements pertaining to the proposed power plant would help to ensure that potential impacts would be minimized or avoided (e.g., U.S. Fish and Wildlife Service consultation, work stoppages if cultural resources should be discovered, and compliance with all applicable Federal, state, and local environmental regulations).