



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JAN 29 2007

James M. Leach
Township Administrator
1033 Weldon Road
Lake Hopatcong, New Jersey 07849

Dear Administrator Leach:

We have reviewed the information submitted for the Township of Jefferson Stanlick School Sewage Treatment Plant Upgrade Project, pursuant to the Environmental Protection Agency's (EPA) regulations for implementing the National Environmental Policy Act, 40 CFR Part 6, and have determined that the project qualifies for a categorical exclusion (CATEX) from substantive environmental review requirements. The project, which involves the upgrading of an existing sewage treatment plant, is being partially funded through a federal Special Appropriation Act grant (Grant No. XP982846-0).

Based on our review of the supporting documentation, EPA approves a CATEX for the project. Please be reminded that EPA may revoke this CATEX if any of the following conditions occur:

- changes in the proposed action render it ineligible for exclusion;
- new evidence indicates that serious local or environmental issues exist; or
- federal, state, or local laws would be violated.

Should you have any questions regarding this decision, please address them to John Filippelli, Chief, Strategic Planning and Multi-Media Programs Branch, at the above address.

Sincerely,

A handwritten signature in cursive script that reads "Alan J. Steinberg".

Alan J. Steinberg
Regional Administrator

Enclosure

cc: John J. Scheri, PE, Hatch Mott MacDonald
Dora Mychltreest, Township of Jefferson Board of Education

ENCLOSURE

Township of Jefferson Stanlick School Sewage Treatment Plant Upgrade Project Morris County, New Jersey Special Appropriation Project No. XP982846-01

Background

In 2004, Jefferson Township was granted funding for the design, permitting, engineering and construction of the 0.86 million gallon per day (MGD) Lake Hopatcong Area Sanitary Sewer System. Shortly after this grant was offered, New Jersey adopted the Highlands Water Protection and Planning Act (August 10, 2004). This action prevented the extension of the sewers into a portion of the service area previously anticipated to be sewerred. This exclusion area currently includes the Arthur Stanlick School, which will now be required to continue to utilize a small wastewater treatment plant which is currently not capable of meeting the standards of a recently issued New Jersey Pollution Discharge Elimination System (NJPDES) permit. Accordingly, the Township proposes to use a portion of this funding to provide for the engineering and construction costs associated with the upgrade to the existing sewage treatment plant located at the Arthur Stanlick School, which is owned and operated by the Jefferson Township Board of Education.

The existing sewage treatment plant (STP) is located on school grounds off of East Shawnee Trail. The STP treats wastewater generated by the school prior to discharge to an unnamed tributary to Lake Shawnee. This discharge is regulated by the New Jersey Department of Environmental Protection (NJDEP) under NJPDES Discharge to Surface Water Permit No. NJ0021105. On August 15, 2003, the NJDEP issued a final NJPDES renewal permit for the facility that imposes stringent discharge limitations for the copper and zinc, which were not included in the previous permit. In addition, the renewed permit imposes new, more stringent limitations for the total phosphorus. The facility is required to comply with these new limits by September 1, 2008. Full scale pilot testing conducted from October 2003 to February 2004 concluded that the existing treatment facilities are not capable of meeting the new limitations without process improvements.

Proposed Action

The proposed project consists of construction of a new Membrane Bio-Reactor (MBR) activated sludge treatment facility. MBR is a process that uses membranes to separate treated wastewater from the biological activated sludge used in the treatment process. The membranes are used in place of the clarification and filtration processes traditionally used in applications where a high degree of wastewater treatment is required. Furthermore, membranes allow biological activated sludge systems to operate at higher mixed liquor concentrations, which reduces requirements for the treatment tank. Used in coordination with chemical addition, membranes are proven to be highly efficient in achieving the demanding effluent requirements imposed by the NJDEP on wastewater treatment plants discharging to either surface or groundwater. The construction of new facilities will be limited to the existing site and sewer service area. The project will include

the demolition of the existing activated sludge tank, the installation of a new trash and anoxic tank and the modification of the existing dosing, post aeration and sludge holding tank. On the location of the existing intermittent sand filters, the upgrade will provide a new treatment plant building that will include the MBR treatment tanks, chemical addition facilities, ultraviolet disinfection equipment, process aeration blowers, and electrical power and distribution equipment.

Alternatives Considered

In addition to the proposed action, two other alternatives were considered: Alternative 2, upgrade of the existing treatment facilities; and Alternative 3, no action.

Alternative 2 includes rehabilitation and modifications to the existing facility that are necessary to meet permit limits. This alternative will leave most of the existing process steps unchanged except that new chemical addition and filtration equipment will be required. While this alternative utilizes more of the existing facility, it would require a larger treatment building to house the chemical addition and filters than the MBR alternative. In addition, maintenance requirements could be significant for the 40 year old facilities that would remain in service. This alternative could also require that critical aspects of the construction be undertaken during low flow periods to allow for modifications to existing equipment. Temporary off-site disposal of wastewater would likely be required to accommodate these modifications.

Alternative 3, the no action alternative, is not a viable alternative to provide adequate and reliable future wastewater service. As demonstrated by the full scale pilot testing, the existing treatment facilities are not capable of consistently meeting the NJPDES limitations required as of September 1, 2008.

Criteria for Granting a Categorical Exclusion

The project meets the general Categorical Exclusion (CATEX) eligibility criteria found in 40 CFR 6.107(d)(1). The regulations allow CATEXs for activities involving "actions which are solely directed toward minor rehabilitation of existing facilities, functional replacement of equipment, or towards the construction of new ancillary facilities adjacent or appurtenant to existing facilities."

Additionally, the available information on the proposed action indicates that the specific criteria for not granting a CATEX, found in 40 CFR 6.505(c)(1), are not present. Specifically, the project will not result in a new or relocated discharge to surface or ground waters, will not increase the amount of pollutants discharged to receiving waters, nor will it provide capacity to serve a population significantly greater than the existing population. Furthermore, there will be no significant adverse effects on cultural resources, endangered or threatened species, environmentally sensitive areas, or other environmentally important natural resource areas.

Conclusion

The proposed action conforms to the category of actions eligible for exclusion under 40 CFR 6.107(d)(1). Accordingly, EPA approves this request for a CATEX from detailed environmental review pursuant to our procedures for implementing the National Environmental Policy Act.