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August 14, 2019

Mr. Jim McAdoo
Permit Section, Inter-Basin Water Transfer Documentation
TDEC- Water Resources Division
William R. Snodgrass, TN Tower
312 Rosa Parks Ave, 11th Floor
Nashville, TN 37243

RE: Inter-Basin Water Transfer Permit Renewal Application
NPDES Permit No. IWT000007
Cleveland Utilities
Cleveland, TN

Dear Mc. McAdoo:

Enclosed is Cleveland Utilities' renewal application for an individual permit for inter-basin water transfer in the amount up to 125,000 gallons per day from the Lower Tennessee River basin to the Conasauga River basin. Our previous permit was renewed on March 1, 2015 and expires on February 29, 2020.

Please let us know if you need additional information. You can reach me directly at 423-478-9377 or gclark@clevelandutilities.com.

Sincerely yours,
CLEVELAND UTILITIES

Greg Clark, P.E.
Wastewater Rehabilitation Manager

Enclosures

Cc: Mr. Craig Mullinax, Vice-President of Water and Wastewater
Mr. Tim Henderson, President/CEO, Cleveland Utilities

INTERBASIN WATER TRANSFER APPLICATION
FOR
CLEVELAND UTILITIES WATER AND WASTEWATER DIVISION
A DEPARMENT OF THE CITY OF CLEVELAND, TN

(A) The volume of the proposed withdrawal and the proposed transfer stated in gallons per day that the applicant seeks to be authorized.

The proposed renewal application is for the continued amount not to exceed 125,000 gallons per day. By letter dated January 17, 2001, Cleveland Utilities was approved for a pre-existing transfer of 181,000 gallons per day. The total approved amount of the transfer is 306,000 gallons per day.

(B) Identification of all of the withdrawal, return, and transfer points

The withdrawal point for the proposed transfer is the Hiwassee River at river mile 22.85 through the Cleveland Raw Water Pumping Station. The transfer points are the Sunset Trail Booster Station (1200 Sunset Trail NE) and the Springbrook Booster Station (South Blythe Avenue)

(C) The volume of water that will be returned to the basin of origin or a downstream basin

There is presently no sewer system in this part of Cleveland Utilities' service area. Therefore, it is not reasonably foreseeable that any significant amount of water would be returned to the basin of origin.

(D) The peak capacity of each major component in the proposed withdrawal and transfer facilities

The Cleveland Raw Water Pumping Station and Cleveland Water Treatment Plant have a peak capacity of 10 MGD. They are the primary source of water for the Cleveland Utilities' service area. The Sunset Trail Booster Station has a peak capacity of 300 gpm and the Springbrook Booster Station has a peak capacity of 1000 gpm.

(E) Engineering and economic justification for the capacity of each major component of the proposed withdrawal and transfer facilities

These are not proposed facilities. These are existing facilities that have been in place for 35 to 55 years. No additional facilities or upsizing is required for the additional transfer.

(F) An assessment of the hydraulic and environmental impacts of the withdrawal of the losing river

The 7Q10 average low flow for the Hiwassee River is 970 cubic feet per second, or 435,394 gallons per minute or 627 MGD. The flow in the river exceeds the 7Q10 over 99% of the time. The flow equals or exceeds 2,700 cubic feet per second (1,745 MGD) 90 percent of the time. The peak capacity of the existing withdrawal facility is 10 MGD, or less than 1.6 percent of the average low flow. The existing withdrawal facility is presently utilized at about 50% of peak capacity. The transfer is within existing withdrawal approvals. The impact on the losing river of the transfer is very minor at 0.08% of low flow.

(G) An engineering, environmental, and economic assessment of the feasibility of utilizing alternate water sources by the water system in the receiving basin

The proposed transfer is through existing treatment facilities, existing pumping stations and existing distribution system for an existing service area. There are no new facilities required for this transfer. The distribution system could be reconfigured to provide water from a source within the receiving basin. This would require the addition of two new pump stations and two new storage tanks. The cost for these additional facilities would be approximately $2,000,000, plus annual operating expenses.

(H) A listing of the conservation programs or practices occurring or proposed of the system in the receiving basin

Cleveland Utilities encourages conservation and wise use of water through radio and news advertisements, bill stuffers and classroom presentations in local schools.

(I) The proposed date upon which the water transfer is to commence

The proposed transfer is an addition to an approved pre-existing transfer. The proposed transfer increase resulted from normal customer growth during the period of October 2000 and 2001, and was revealed during the annual reporting process. Since this period approximately 25 new customers have been added in the receiving basin service area generating an increase of 18,000 gallons per day of new water transfer.

(J) The purpose and justification of the proposed transfer

The purpose of the proposed transfer is to furnish domestic water service for new customer growth in two existing service areas. The service areas are more than 90% developed.