



The State of New Hampshire
Department of Environmental Services



Clark B. Freise, Assistant Commissioner

Notice of Environmental Review Determination

The City of Manchester, New Hampshire has applied for Clean Water State Revolving Loan Funds (CWSRF) through the State of New Hampshire Department of Environmental Services in accordance with provisions of Chapter Env-Wq 500 rules of the department.

As the proposed project is a minor project, with all construction taking place within the existing wastewater treatment facility, it has been determined by the Department that the proposed project qualifies for a Categorical Exclusion (CE).

Questions regarding this project can be directed to Robert Robinson, P.E., Wastewater Treatment Plant Operator, City of Manchester at (603) 624-6526 or 300 Winston Street, Manchester, NH 03103.

Please address any comments to the following locations:

Robert Robinson, P.E.
Department of Public Works
Environmental Protection Division
300 Winston Street
Manchester, NH 03103

and

Tracy Wood
NHDES
Wastewater Engineering Bureau
PO Box 95
Concord, NH 03302

The deadline for submitting comments is ten (10) days from the date this notice was published.

CLEAN WATER SRF ENVIRONMENTAL REVIEW

I. PROJECT APPLICANT

CITY OF MANCHESTER
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROTECTION DIVISION

ADDRESS

300 WINSTON STREET
MANCHESTER, NH 03103

PROJECT

WASTEWATER TREATMENT FACILITY -
BOILER UPGRADE PROJECT

SRF PROJECT NUMBER

CS-330192-40

II. INTRODUCTION

The City of Manchester, New Hampshire has applied for Clean Water State Revolving Loan Funds (CWSRF) through the state of New Hampshire Department of Environmental Services in accordance with provisions of Chapter Env-Wq 500 rules of the department. These rules prescribe procedures for the application process concerning the CWSRF of the department. This document will discuss the requirements of Part Env-Wq 509 of these rules, the environmental review.

III. BACKGROUND

The City of Manchester owns and operates an activated sludge secondary wastewater treatment facility (WWTF) that serves the City and three adjacent communities; Bedford, Goffstown, and Londonderry. The WWTF originally commenced operation in 1976 and was designed to provide secondary treatment for an average daily flow of 26 million gallons per day (mgd).

The WWTF was significantly expanded and upgraded in the early 1990s to treat an average flow of 34 mgd. Subsequent to the completion of the 1994 upgrade, a number of plant facilities have been upgraded, modified, or added to the WWTF to increase efficiency of the treatment plant, increase wet weather capacity, reduce odors and to replace worn equipment. The WWTF was also upgraded in 2016, which included a new aeration system with fine bubble aeration to promote enhance biological phosphorous removal. Capacity was increased to 42 mgd through our secondary system.

The following documents concerning the Wastewater Treatment Facility have been developed as part of the planning process for the Boiler Upgrade Project, and are available for public review:

Waste Water Treatment Plant – Boiler Upgrade Project Basis of Design is on file at the City of Manchester Environmental Protection Division

Facility Plan prepared for the City by AECOM in 2010 is on file at the office of NHDES.

IV. PURPOSE and NEED

The Boiler Upgrade project is intended to replace the existing 1970s vintage oil fired steam boilers. The existing boilers are at the end of their useful life and are in need of replacement. The upgrade will provide new efficient natural gas boilers that are also more environmentally friendly in their emissions.

V. ALTERNATIVES ANALYSIS

The scope of work for the proposed project included the consideration of alternatives; the alternative analysis is documented in the Waste Water Treatment Plant – Boiler Upgrade Project Basis of Design that is on file at the City of Manchester Environmental Protection Division. The preferred alternative is explained in the following section.

VI. DETAILS of PROJECT

The Boiler Upgrade Project will involve removing and replacing a three-unit 1970s vintage oil-fired steam heating plant with a new four-unit gas fired hydronic heating plant. This project includes replacement of all associated zone pumps, piping, tanks and other equipment as required for a new system. The project also includes the refurbishment of the existing HV air handling units as well as replacing the existing pneumatic controls with a new building management system. The new control system will be integrated to an existing SCADA system. Modifications to the existing electrical system may be required to power all the new systems.

All construction will occur within the existing WWTF Operations Building. Only equipment will be removed or modified; no removal of or modifications to existing structures are planned. Site impacts will be limited to temporary disturbances (4,050 sf) from the construction laydown areas. Loaming and reseedling will be done as needed to restore the site to pre-existing conditions.

The total project cost is estimated to be \$2,500,000.00.

VII. ENVIRONMENTAL CONCERNS and MITIGATION

The environmental concerns of the project are minimal. No adverse environmental impacts are anticipated from the project. The primary impacts are short-term impacts which will affect the area only during the period of construction.

Air: Air impacts will be limited to some dust created during the construction portion of the project. Dust will be prevented and controlled through the use of water or dust retardant chemicals. No long-term air impacts are anticipated; mitigation measures will be employed if needed.

The new boilers will release cleaner emissions due to combustion of natural gas instead of heating oil. The City is proceeding with a minor permit modification application with the Division of Air Resources for approval of this change.

Noise: The noise from construction activities will be limited to the hours of 7:00 a.m. to 7:00 p.m. No long-term noise impacts are anticipated.

Surface Water, Groundwater and Wetlands: No groundwater impacts are anticipated and there are no wetlands located on-site. As the project is located within the existing WWTF, NPDES Construction General and Dewatering Permits will not be required. Consultation with the NHDES Shoreland program is underway to ensure a permit will not be required for the temporary construction laydown area.

Wildlife: No negative impacts on area wildlife are anticipated from this project. No tree removal or trimming will occur.

Social and Economic: The social impact of this project is favorable due to the improved air quality. Economic impact is favorable due to the anticipated cost savings from increased operational efficiency and the use of natural gas instead of oil. There are no sewer rate increases planned for this project through the use of the State Revolving Loan Fund.

Recreation and Historic: No impacts to recreational or historic areas are anticipated; a file review conducted on January 9, 2017 showed no historic resources are in the project area.

Whereas this project constitutes only a minor project and all work will take place within the existing WWTF and on the existing site, a Categorical Exclusion (CE) is proposed.

VIII. INTERGOVERNMENTAL REVIEW

A package has been submitted to the NH Department of Energy and Planning (OEP) by the City of Manchester for review.

IX. PUBLIC REVIEW

Manchester's Mayor and Board of Alderman voted to authorize funding in the amount of \$2,500,000.00 for the proposed project on June 28, 2016.

A public notice will be published by the City of Manchester and a thirty-day public comment period will be held in accordance with the CWSRF rules.