

316(b) COMPLIANCE MOUNT TOM GENERATING STATION Holyoke, MA

The Mount Tom Generating Station (MTS) is a 147 MW coal-fired steam electric plant located on the Connecticut River just north of Holyoke, MA. Kleinschmidt was contracted to conduct biological studies as well as prepare documents associated with 316(b) compliance.

In 2005, Kleinschmidt prepared the Proposal for Information Collection (PIC) for the station and the 40 CFR 122.21 reports required by the 316(b) Phase II Rule. The PIC evaluated the applicability of the new rule to the station and identified possible 316(b) credits for existing measures already in place to minimize impingement mortality, such as the electric fish barrier and fish return system.

Since impingement at MTS had not been studied since the 1970's the PIC provided a scope of work to assess current annual impingement rates, as well as the potential survival of fish following impingement. The impingement scope of work was approved by EPA Region 1, and the impingement study was conducted from July, 2006 through July, 2008. Sampling was conducted weekly during the two-year period and spanned a 24-hour period, with collections made approximately every 8 hours to assess potential diel variations in impingement rates.

To further investigate the current impacts of water withdrawal at MTS, it was decided that a two year entrainment study would be conducted. Sampling began in October, 2008 and will continue through October 2010. Samples are collected weekly from March through September and bi-weekly from October through September. During the warmer months, March through September, two entrainment samples will be collected each day, one during daylight hours and the other at night to investigate diel variation in entrainment rates. In addition offshore sampling will be conducted weekly in the Connecticut River. The data generated by the entrainment and offshore samples will be used to calculate an accurate estimate of entrainment impacts at MTS.



The current National Pollutant Discharge Elimination System (NPDES) permit for Mount Tom Station expired September 1997. Since Mount Tom Station applied for a permit reissuance in a timely manner, the permit was administratively continued. Pursuant to Section 308 of the Clean Water Act (CWA), the United States Environmental Protection Agency's Office for the New England Region (EPA) requested specific information regarding the MTS in order to develop cooling water intake structure (CWIS) limits for a new permit. This information request was consistent with the EPA's Phase II Rule for CWISs under CWA §316(b). Kleinschmidt was contracted to update certain information submission requirements for MTS, related to the Station's application for reissuance of its NPDES permit, including an assessment of available technologies and operational measures with the potential to reduce station I&E impacts.

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