MARIN MUNICIPAL
WATER DISTRICT

220 Nellen Avenue Corte Madera CA 94925-1169
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September 10, 2010
File No. D10021

Mr. Richard Corey, Division Chief
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812

Dear Mr. Corey:

This concerns the Marin Municipal Water District (MMWD) Soulajule Reservoir pump station located at 1425 Marshall Petaluma Road in Marin County. This pump station contains two water pumps driven by 900 horsepower diesel engines. The diesel drivers have been designated BAAQMD Plant No. 19683 and their operation is permitted under the terms assigned to Application No. 20650.

Soulajule Reservoir, completed in 1979, serves as a reserve water supply for the almost 200,000 residents of MMWD. When full it contains about 13% of the stored water available to MMWD. To use water from the reservoir in times of drought water must be pumped over an almost 800 foot high ridge into the watershed of another District reservoir, Nicasio reservoir. However, Soulajule Reservoir is located in a rather remote area of Marin County where electric power infrastructure is minimal.

When the reservoir was constructed, MMWD investigated the possibility of reinforcing the electrical energy delivery system in the area so that the primary motive power for the pumps could be electricity, as is the case at the District's other 100 pump stations. However, the costs of such a plan were unacceptably high. Consequently the existing diesel powered system was installed in 1979. In the 31 years since then, the District has needed to operate the system only once, between May and November 1990. During that drought event, the two diesels operated a total of about 4,000 hours.

As we have discussed with BAAQMD staff, the diesel engines here are beyond the end of their usable service lives. MMWD is currently in the process of planning for their replacement by the December 31, 2011 deadline in their current operating permit. As a part of that process, MMWD has asked PG&E, once again, to consider reinforcing the electrical delivery system in the area. The results of their study were, as in 1979, not encouraging.

PG&E estimates that the cost of providing the required power to the site at almost $5.7 million...exclusive of the costs of the transformers and 900 HP electric motors that would be necessary. In addition, since current and projected future average annual power usage at the site and in the surrounding area is so low, MMWD would have to pay the entire cost of the project. This amount is far in excess of the funds available to replace these engines.

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While it appears that diesel engines are still the only feasible source of primary power at this facility, annual average power usage will remain so low that the diesel operation at the station will have the characteristics of an emergency standby engine, as opposed to a prime engine. Indeed, the average of 130 hours per year these units have run over the past 31 years is less than the hours currently allowed at MMWD's large stationary emergency standby unit in Novato in Marin County.

Accordingly, we have asked the Rule Development Manager at BAAQMD to consider amending Regulation 9, Rule 8, Section 9-8-231 to include another definition of "Emergency Use". That definition would include pumping of water for municipal use during a drought emergency, in areas where electric power is not readily available.

We believe that such a designation would be in keeping with the past and future operating characteristics of this facility and would have little if any impacts on air quality in this quite remote area, where the only structure within a half mile of the emission source is the MMWD resident Ranger residence.

MMWD hopes that both you and the BAAQMD will give favorable consideration to this request. The District is moving forward with plans to upgrade this seldom used but still very important facility. We believe that favorable consideration would allow a simpler, more cost effective engine replacement project, commensurate with the expected future use of the facility, without any appreciable adverse impact to air quality in the area.

If you have questions or need more information on this subject, please call me at 415-945-1590 or E-mail me at droxon@marinwater.org or Jon LaHaye at 415-945-1589 and jlahaye@marinwater.org.

Very truly yours,

Dana F. Roxon

Dana F. Roxon, P.E.
Assistant Manager
Environmental and Engineering Services Division

cc Ms. Kathleen Truesdell
BAAQMD