

Docket No. 50-312

Bulletin Reply 81-03



SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

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August 10, 1982

R H ENGELKEN, REGIONAL ADMINISTRATOR
REGION V OFFICE OF INSPECTION AND ENFORCEMENT
U S NUCLEAR REGULATORY COMMISSION
1450 MARIA LANE SUITE 210
WALNUT CREEK CA 94596

DOCKET NO. 50-312
RANCHO SECO NUCLEAR GENERATING STATION UNIT I
IE BULLETIN 81-03: FLOW BLOCKAGE OF COOLING WATER TO SAFETY SYSTEM
COMPONENTS BY CORBICULA SP. (ASIATIC CLAM) AND MYTILUS SP. (MUSSEL)

The subject Bulletin requires a determination whether either of the subject organisms are present in the source or receiving water bodies in the vicinity of Rancho Seco.

The response to the basic question is no. Evidence of Corbicula sp. has not been found in the Folsom South Canal (the plant water source), Rancho Seco Reservoir (an alternate source), cooling towers, condensers, plant cooling water system (including component cooling water coolers), nuclear raw water system (including nuclear service spray ponds and coolers), the plant effluent stream and various other locations which might reasonably provide a growth medium. Nearly all of these locations have been inspected as recently as February, 1981, during the most recent refueling outage.

A major study of biological organisms in water supplies was performed in 1979 as a Fish Impingement and Entrainment program required by EPA; in that study, no evidence of Corbicula sp. was found. In 1974 and 1975, examination of biological growths in the cooling tower circuit was done to develop an adequate algal control technique; there was no indication of clams in that program.

In contrast to these negative findings, the presence of Corbicula sp. is well documented in many of the major California aqueducts (California Aqueduct and Delta-Mendota Canal in particular) and recently the clam has been observed in Folsom Lake and Natomas Reservoir which are the water source of Folsom South Canal. In the opinion of biologists associated with the California Water Resources Department, it is only a matter of time for migration of the clam into Folsom South Canal; it is reported that the nutrient supply

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is very meager under current flow conditions in the Canal and, therefore, the clam intrusion will take place very slowly.

In completion of the requirements under Bulletin 81-03, a program for detection of Corbicula sp. will be prepared. It will make use of relatively frequent inspection of screens at the plant supply pump station, and regular inspections of condenser water boxes, spray ponds and heat exchangers which have open circuit cooling. The particular configuration of water supplies at Rancho Seco is not subject to low water level/high velocity intake conditions.

When this clam watch detects Corbicula sp. in the plant systems, an increased surveillance program will be initiated to insure that mitigating measures are effective and that all potentially invaded areas are controlled. Methods of reducing any clam population will include chlorination, including heavy shock treatment (which is used now occasionally to remove algal buildup), elevated temperatures, mechanical cleaning, and probably biocides, as found acceptable by the California Water Quality Control Board.

John J. Mattimoe
John J. Mattimoe
Assistant General Manager
and Chief Engineer

Subscribed and sworn to before me this

17th day of August, 1982.

Mary Alice Bay
Notary Public

