FILE II POLLUTION

Regional Manager Marine Resources Region, Long Beach May 13, 1971

Marine Resources Laboratory, Menlo Park

State Lands Environmental Statement, Novato and Ignacio Outfall

We have been requested by April 27, 1971 memorandum from Chief of Operations to review the subject and submit comments to Region 3 for their use in preparing a reply for the signature of Director to DWR. Therefore a copy of this memorandum is being sent to Region 3.

The Novato Sanitary District proposes to construct a sewerage works improvement project designated as the NOVATO AND IGNACIO OUTFALL FORCE MAIN which will consist of land and submarine sections of pipeline and outfall channel in San Pablo Bay at a location approximately 1.8 miles south of the mouth of Novato Creek.

At the present time, wastewater effluent from two of the District's treatment works discharge directly into Novato Creek. The State of California, Regional Water Quality Control Board, San Francisco Bay Region, prescribed revised requirements for discharge into Novato Creek with the intention to protect the beneficial water uses of the creek.

This project together with a companion project for improvements at the District's wastewater treatment plants will (1) provide for removal of all wastewater discharge from the confined tidal waters of Novato Creek, (2) provide for improved treatment of the wastewater effluent, and (3) provide discharge of the treated wastes upon State lands in San Pablo Bay consisting of tidal mud flats.

The treatment of the effluent is designed to meet the discharge requirements set forth by the State Regional Water Quality Control Board for discharge into San Pablo Bay. The proposed level of treatment will not meet standards for unrestricted recreational use now required for discharge into Novato Creek.

Boating and sport fishing are recreational uses of both Novato Creek and the San Pablo Bay area in this vicinity. However, the area of the outfall line in San Pablo Bay is (1) adjacent to the firing range (small arms) for Hamilton

AFB, (2) in close proximity to the aircraft landing strips of Hamilton AFB, and (3) an area of shallow and often no water (being above MLLW). In addition, land access to the tidal flat area for recreational activities or non-military oriented activities is prohibited.

While this particular vicinity is not considered as attractive for water oriented activities when compared with nearby Novato Creek, Petaluma River, and deeper areas of the Bay, effort should be made for its enhancement rather than for its further degradation. Shallowness of water is not in itself detrimental to all recreational uses. Current military use and restrictions are being modified in other parts of the State as public demand for these values increases.

Healthy mud flats are important. Water oriented and marshland bird life frequent the tidal flat area. Although no nests are located on the mud flats the area is used by birds for feeding and resting.

Fish habit the area, following the tides in and out, feeding upon biota of the tidal waters. Benthic organisms including ribbed horsemussels and macoma clams reside in the bay mud.

The area has potential for oyster culture, however, problems including water quality would have to be overcome. Further degradation would compound the problems. San Francisco Bay oysters, cockles, soft shell clams and mussels harvested in Alameda, Contra Costa and Marin Counties are bacteriologically contaminated by domestic sewage and are therefore presently unfit for human consumption.

It is recognized by the applicant that there will be adverse effect on the environment due to the actual construction and installation of the facility, both at the Novato Creek site and the San Pablo Bay site. The excavation and dredging will involve dislodgement and removal of benthic organisms, and the general construction activity will create noise and turbidity likely to discourage bird and aqueous activity from the area during the period of construction. Similarly, water oriented recreational activities will be temporarily limited during the presence of the equipment. These effects would be temporary. Of more serious consequence would be the long-term degradation of environmental quality in the vicinity of the outfall.

Waste discharge requirements have been established by the state to limit toxicity and other adverse effects of wastewater discharge. The applicant will be constructing simultaneously along with the outfall project improvements to the wastewater treatment facilities at Novato and Ignacio. These improvements will be completed and in operation prior to the proposed introduction of discharge into San Pablo Bay. The level of treatment, however, will not avoid degradation of adjacent waters and the effluent will add to the overall waste assimilation load of the Bay.

Provision has been incorporated into the design of the project whereby the effluent is diluted with pumped tide waters into the line prior to final discharge into the Bay to lessen the sharp impact of the injection of a dissimilar liquid material into the tidal water matrix.

The following measures have been incorporated into the design and construction requirements: (1) a requirement that all excavated material in the mud flats is to be placed on barges and transported from the site to a designated dumping ground approved by the Corps of Engineers and BCDC, thus avoiding burial and probably destruction of benthic organisms adjacent to the channel; (2) a requirement for restoration of the marshland to reasonably approximate preexisting conditions; (3) a requirement to limit turbidity and disturbance of bay bottom material and avoid unnecessary or indiscriminate excavation; (4) a prohibition of hydraulic or other sediment fluidizing equipment.

The environmental statement considers three alternatives to the proposed works:

Alternatives to the Lease

(1) the alternative of no action; (2) the alternative or discharge into deeper waters of San Pablo Bay and (3) the alternative of discharge at a different location along the shoreline of the bay.

The alternative of no action would place the District in direct violation of prescribed discharge requirements and is therefore unacceptable.

The reason for the elimination of the longer outfall line is based upon the strong possibility that the District's wastewater discharge will be intercepted and collected by a future regional effluent conduit, thus eventually eliminating the San Pablo Bay discharge.

The alternative of discharge at a different location along the shoreline of the bay provides no solution.

We suggest a fourth alternative to the lease:

Provide a level of treatment which will meet standards for unrestricted recreational use and continue to discharge into Novato Creek. We believe it offers the following advantages.

- 1. Recreational uses of both Novato Creek and San Pablo Bay will be protected present and future.
- 2. Tidal flats, needed to conserve fish and wildlife and to abate existing air and water pollution would not be further degraded.

- 3. Adverse effects from construction and installation of the facility, both at the Novato Creek site and the San Pablo Bay site would be avoided.
- 4. Dredging and spoil disposal would be avoided.
- 5. By discharging water of suitable quality into Novato Creek rather than discharging directly into San Pablo Bay would avoid the sharp impact of the injection of a dissimilar liquid material into the tidal water matrix.
- 6. Tie-in with a regional collection facility would not be needed.
- 7. Water quality standards for Novato Creek would be met without increase degradation of San Pablo Bay.

H. G. Orcutt

cc: Region 3

PGS:nw