WHEREAS, this Regional Board has adopted policies and requirements stating its intent to protect the beneficial water uses within the San Francisco Bay Region and prohibiting the discharge of untreated or inadequately treated wastes; and

WHEREAS, conditions including process failure, power outage, employee strikes, physical damage caused by earthquakes, fires, vandalism, equipment and sewer line failures, and strikes by suppliers of chemicals, etc., or maintenance services can result in the discharge of untreated or inadequately treated wastes; and

WHEREAS, the development and implementation of contingency plans for the operation of waste collection, treatment, and disposal facilities under such conditions should insure that facilities remain in, or are rapidly returned to, operation in the event of such an incident and measures are taken to clean up the effects of untreated or inadequately treated wastes.

NOW, THEREFORE BE IT RESOLVED, that this Regional Board will require each discharger as a provision of its NPDES Permit to submit within 120 days after the adoption of the permit a contingency plan acceptable to the Regional Board's Executive Officer to include at least the following:

A. Provision of personnel for continued operation and maintenance of sewerage facilities during employee strikes or strikes against contractors providing services.

B. Maintenance of adequate chemicals or other supplies and spare parts necessary for continued operation of sewerage facilities.

C. Provisions of emergency standby power.

D. Protection against vandalism

E. Expeditious action to repair failures of or damage to equipment and sewer lines.
F. Report of spills and discharges of untreated or inadequately treated wastes including measures taken to clean up the effects of such discharges

G. Programs for maintenance replacement and surveillance of physical condition of equipment, facilities, and sewer lines.

BE IT FURTHER RESOLVED, pursuant to Section 13267 and 13268, dischargers with NPDES Permits now in effect are required to develop and submit a contingency plan as described above, by December 1, 1974.

BE IT FURTHER RESOLVED, that the discharge of pollutants in violation of an NPDES Permit where a discharger has failed to develop and implement a contingency plan as described above will be the basis for considering the discharge a willful and negligent violation of the Permit and action pursuant to Section 13387 of the California Water Code.

BE IT FURTHER RESOLVED, that it is the intent of the Regional board to eventually require all waste dischargers in the San Francisco Bay Region to develop contingency plans, and those not specifically covered by this resolution are urged to voluntarily develop and implement plans including the above named elements.

I, Fred H. Dierker, Executive officer, do hereby certify the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 16, 1974.

Fred H. Dierker
Executive Officer
ALL WASTE DISCHARGERS

Gentlemen:

Subject: Contingency Plans

The purpose of this letter is to provide guidance to municipal and industrial waste dischargers in the preparation of contingency plans for continuous operation of waste treatment facilities under various kinds of emergency conditions, as called for in Regional Board Resolution 74-10.

A variety of emergency conditions can interfere with normal operation of waste collection and treatment facilities, including natural disasters such as earthquakes; power outages; work stoppages; shortages of necessary chemicals and spare parts; and civil disorders. However, for the purposes of contingency planning the essential needs can be reduced to the following: personnel, chemicals and equipment and power. Plans should recognize that these three necessary elements may be affected singly or in combination.

Personnel

The contingency plan should include provisions for operation of waste treatment facilities when the normal work force is unavailable. Plans for personnel should include the following:

a. Modified operating procedures for waste treatment facilities using alternate or reduced personnel. This may involve deferred maintenance, shutdown of some units and overload of others to simplify operation; reduced effluent monitoring, and the like may be considered, but only as a last resort.

b. Identification of individuals capable of handling necessary tasks in keeping treatment facilities operational if normal personnel are unavailable.

c. Provision for feeding and housing personnel who may be required to work extended hours under emergency conditions, and who may find it necessary to live in the treatment plant. This may involve making funds available for cash purchase of food and other necessary commodities, and fair compensation of personnel for hours worked.

November 4, 1974

In reply, please refer to File No. 2390.00(LP)

R-14-10
Personnel plans should also consider manpower needs for maintenance of the collection system. Provision should be made for removal of line blockages and maintenance of pump stations.

Another problem to be addressed in personnel plans is strikes against contractors, supplying goods and services related to the treatment process or involved in construction activities. Where appropriate, contractors should have a separate gate, to avoid a situation in which treatment plant personnel would have to cross a picket line to enter the plant.

Chemicals and Equipment

Chlorine and chemicals used for dechlorination are the chemicals of primary concern in municipal waste treatment facilities. A variety of chemicals are used in industrial waste treatment including caustics, acids, lime and polymers. Contingency plans for necessary chemicals should include plans for purchase and transportation of chemicals if primary suppliers and haulers are unavailable.

Consideration should be given to substitution of chemicals where feasible, such as using polymers instead of lime or hypochlorites instead of a liquid chlorine. Where feasible, arrangements should be made for borrowing chemicals from other plants.

Planning for equipment should be directed towards keeping all treatment units in operable condition. This should involve the following:

a. Plans for maintenance of treatment units. The Board realizes that virtually all treatment plants have detailed maintenance plans, and these need only be summarized.

b. Plans for spare parts. This would involve identification of parts which are needed frequently, such as chains and sprockets, and making provisions for their prompt replacement when necessary. Such provisions could involve maintenance of a predetermined spare parts inventory, identification of suppliers and inventories on hand with suppliers, and identification of other plants having identical treatment units from whom spare parts could be borrowed as a last resort.

c. Protection against vandalism of treatment facilities and the collection system, including pump station. Such protection could include surveillance, locks and fences, and good lighting.

Power Supply

The analysis and need for standby power should consider the historic experience with outages of normal power supplies and the impact that these outages had on waste collection and treatment.
Contingency plans for power should include both collection and treatment facilities. For the collection system, provision should be made for operation of pump stations during power outages. This may be accomplished by arranging for availability of portable generators.

For treatment facilities an analysis should be made of the primary power supply and transmission system, to identify possible points of breakdown. Backup systems for power supply and transmission should be identified. Such systems could include portable or stationary generators. If backup systems cannot supply all power needs; plans should be made to achieve optimal performance using the power available.

**Additional Measures**

Contingency plans should address the possibility of wastes being discharged either untreated or without adequate treatment. Planning for this should include measures to minimize impact on receiving waters whenever possible. This could include plans for release of effluent at favorable times in the tidal cycles.

Plans should also include prompt notification of the Regional Board in the event inadequately treated wastes are discharged.

Please call Dr. Larry Kolb or Roger James if you have any questions.

Sincerely,

FRED H. DIERKER
Executive Officer

FMD/daw