

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 77-47

WASTE DISCHARGE REQUIREMENTS
FOR
LUCERNE VALLEY HYDROPONIC FARM
Lucerne Valley - San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. California Best Hydrofarms Cooperative (hereinafter also referred to as the discharger) 3401 Katella Ave., Suite 103, Los Alamitos, California 90720, submitted a Report of Waste Discharge, dated April 8, 1977.
2. The discharger is discharging approximately 20,000 gallons of wastewater once a month from a total of 26 hydroponic farm greenhouses. The wastewater consists of the recycled nutrient solution remaining in the 2,000 gallon storage tank of each greenhouse at the end of a one month period. Due to plant consumption and evaporation only about 800 gallons-per-month is discharged from each greenhouse tank into earthen basins for final disposal by infiltration and evaporation. Each basin is approximately 2' deep by 10' wide by 110' long and is situated adjacent to a greenhouse. The discharge area is located within the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 14, T4N, R1W, SBB&M. An additional five (5) greenhouses are to be constructed for operation within a year. This would result in an additional discharge of 4,000 gallons-per-month.
3. The discharge of this hydroponic farm operation has been subject to waste discharge requirements adopted in Board Order No. 72-28. The discharger states that there has been a significant reduction in the volume of wastewater discharged.
4. Well logs in the vicinity of the earthen basins show tightly cemented strata near the surface, which results in artesian pressure of the local groundwater at a well depth of approximately 40 feet.
5. The Water Quality Control Plan for the West Colorado River Basin (7A) was adopted by the Board on April 10, 1975. The Basin Plan contains water quality objectives for the Lucerne Hydrologic Unit.

Decided
11/18/87

6. The beneficial uses of the groundwaters of the Lucerne Hydrologic Unit are:
 - a. Municipal supply
 - b. Agricultural supply
 - c. Industrial supply
7. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
8. The Board in a public meeting heard and considered all comments pertaining to the discharge.
9. This hydroponic farm constitutes an ongoing project in accordance with provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and the State Guidelines because the governmental approvals on or after April 5, 1973, do not involve a greater degree of responsibility or control over such activity than the governmental approvals received prior to that date.

IT IS HEREBY ORDERED, the discharger, shall comply with the following:

A. Discharge Specifications

1. Neither the treatment nor the discharge of wastewater shall create a pollution or a nuisance as defined in the California Water Code.
2. There shall be no surface flow of wastewater away from the discharge facilities.
3. Wastewater discharged to basins shall be limited to process wastewater and shall not contain sewage or toxic materials.
4. A minimum freeboard depth of six inches shall be maintained at all times in each basin.
5. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
6. There shall be no discharge of wastes to any surface waters and/or drainage channels.

7. The discharger shall remove and relocate any wastes which are discharged contrary to the requirements contained in this Order.

8. There shall be no discharge of wastewater within 200 feet of any water supply well.

B. Provisions

1. The discharger shall notify the Board at least 30 days prior to any modification in this facility which could result in material change in the quality, quantity, or location of this discharge.
2. In the event of any change in operation, or in control or ownership of the land upon which the discharge facilities are located, the discharger shall notify the succeeding owner in writing of the existence of this Order, and also forward a copy of said communication to the Regional Board.
3. The discharger shall comply with the "Monitoring and Reporting Program 77-47", and future revisions thereto, as specified by the Executive Officer.
4. This Order supersedes Board Order No. 72-28.

I, Arthur Swajian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on July 13, 1977.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 77-47
FOR

LUCERNE VALLEY HYDROPONIC FARM
Lucerne Valley - San Bernardino County

MONITORING

Wastewater discharged from hydroponic greenhouses to earthen basins shall be monitored as follows:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Volume of waste-water discharged to basins	Gallons	Total monthly discharge	Quarterly

REPORTING

Quarterly monitoring reports shall be submitted to the Regional Board by the 15th day of January, April, July and October.

In the event of non-operation of facilities, the discharger shall state in the quarterly monitoring report that there is no discharge of wastewater. Planned extended periods of non-operation may be reported in one report which states the expected period of non-operation. Submittal of monitoring reports shall resume on commencement of operations.

Forward monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

Ordered by

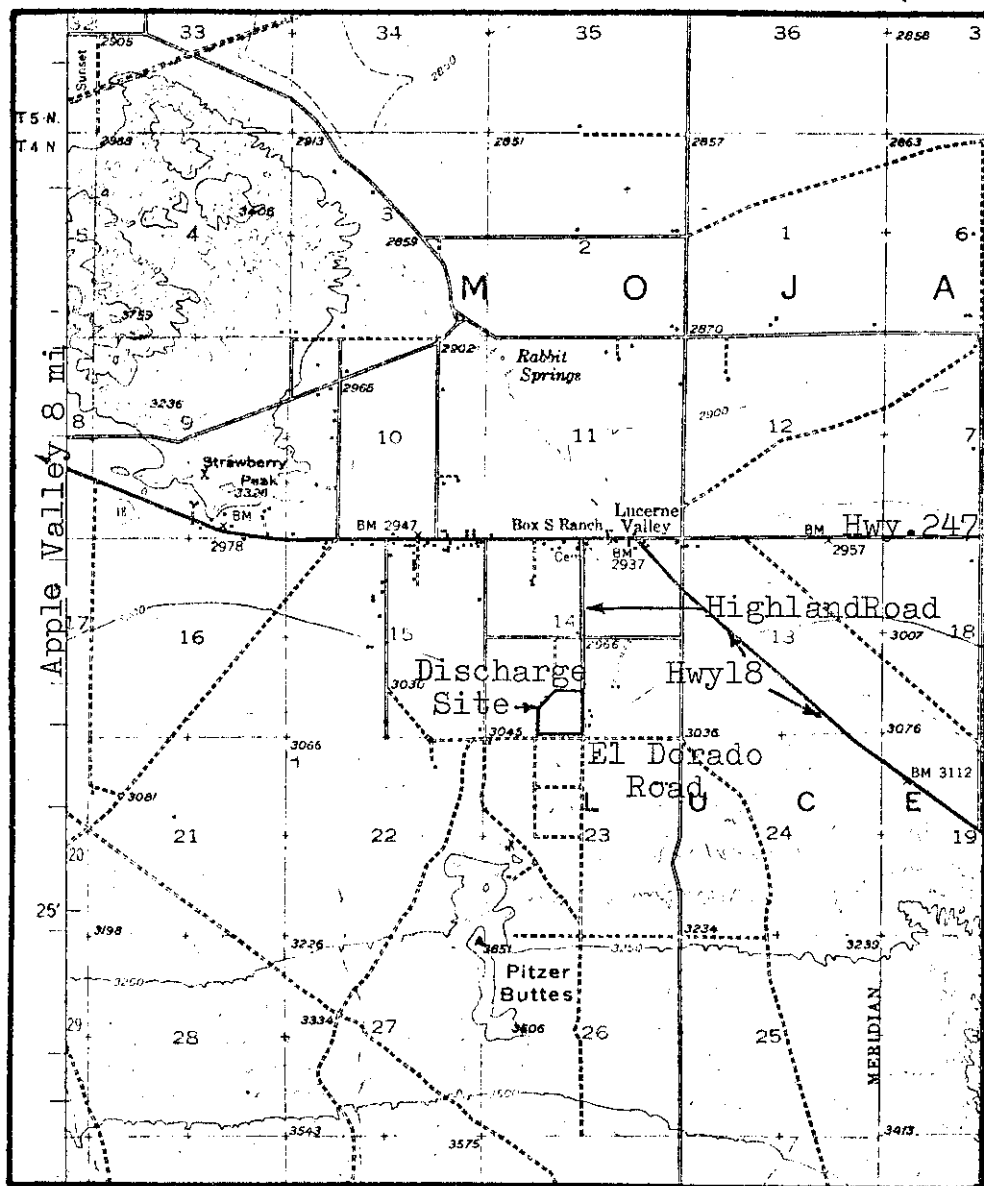
Arthur S. S. S.

Executive Officer

July 13, 1977

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD-7



Scale:
1" = 1 mile

SITE MAP - No. 1

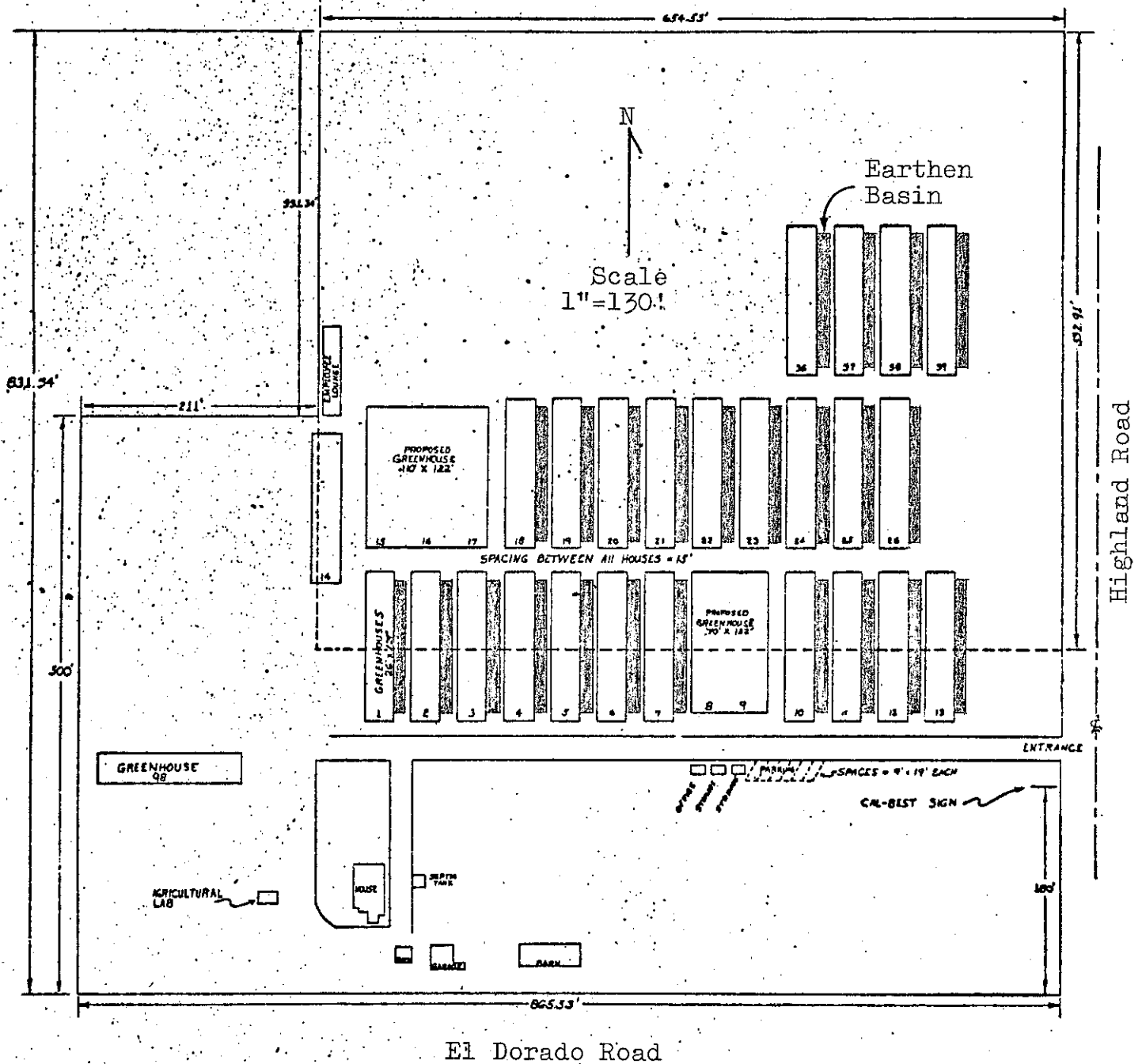
LUCERNE VALLEY HYDROPONIC FARM
 Lucerne Valley - San Bernardino County
 SE¼, SW¼ of Section 14, T4N, R1W, SBB&M
 U.S.G.S. Lucerne Valley 15 min. Topographic Map

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD-7

SITE MAP No. 2

LUCERNE VALLEY HYDROPONIC FARM PLOT PLAN
Lucerne Valley - San Bernardino County



Order No. 77-47

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

GENERAL MONITORING AND REPORTING PROVISIONS

DATE: July 13, 1977

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

Water quality analysis shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency, or as approved by the Executive Officer.

Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health. In the event a certified laboratory is not available to the discharger, the executive officer may accept analyses performed by a noncertified laboratory until June 22, 1977, provided that the laboratory has applied for certification.

Effluent samples shall be taken downstream of any addition to the treatment works and prior to mixing with the receiving waters.

The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period. The volume of each individual sample is proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

GENERAL PROVISIONS FOR REPORTING

For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

By January 30 of each year, the discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record

and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

The discharger shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; date analyses were performed, analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Monitoring results shall be submitted on forms provided by the Board.

Monitoring reports shall be signed by:

- a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

DATE: July 13, 1977

REPORTING REQUIREMENTS

1. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.
- *2. The discharger shall file a written report with the Board within 90 days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.

The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(b), and 13268, California Water Code.)

- **3. The discharger shall notify the Board not later than 180 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge and appropriate filing fee.
- *4. The discharger shall notify the Board of (a) new introduction into such works of pollutants from a source which would be a

*Publicly owned facilities only

**For nonpublic facilities only

new source as defined in Section 306 of the Federal Water Pollution Control Act, or amendments thereto, if such source were discharging pollutants to the waters of the United States, (b) new introductions of pollutants into such works from a source which would be subject to Section 301 of the Federal Water Pollution Control Act, or amendments thereto, if it were discharging such pollutants to the waters of the United States, (c) a substantial change in the volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time the waste discharge requirements were adopted. Notice shall include a description of the quantity and quality of pollutants and the impact of such change on the quantity and quality of effluent from such publicly owned treatment works. A substantial change in volume is considered an increase of ten percent in the mean dry-weather flow rate. The discharger shall forward a copy of such notice directly to the Regional Administrator.

5. The discharger shall file with the Board a report on waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

- **6.** This Board requires the discharger to file with the Board within 90 days after the effective date of this Order, a technical report on his preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

Evaluate the effectiveness of present facilities and procedures and state when they become operational.

Describe facilities and procedures needed for effective preventive and contingency plans.

Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational. (Reference: Sections 13267(b) and 13268, California Water Code.)

****For nonpublic facilities only.**

This Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger.

- **7.** The discharger shall submit to the Board, by January 30 of each year, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiling water treatment and which are discharged.

****For nonpublic facilities only.**

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STANDARD PROVISIONS

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
2. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- *3. The discharger shall require any industrial user of the treatment works to comply with applicable service charges and toxic and pretreatment standards promulgated in accordance with Sections 204(b) 307, and 308 of the Federal Water Pollution Control Act or amendments thereto. The discharger shall require each individual user to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Water Pollution Control Act or amendments thereto. The discharger shall forward a copy of such notice to the Board and the Regional Administrator.
4. The discharger shall permit the Regional Board:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept;
 - b. Access to copy any records required to be kept under terms and conditions of this Order;
 - c. Inspection of monitoring equipment or records, and
 - d. Sampling of any discharge.
5. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.

*Publicly owned facilities only.

6. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
7. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Division 7.5 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a regional water quality control board and which is in full compliance therewith.
8. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
9. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
10. There shall be no discharge of harmful quantities of oil or hazardous substances, as specified by regulation adopted pursuant to Section 311 of the Federal Water Pollution Control Act, or amendments thereto.
11. In the event the discharger is unable to comply with any of the conditions of this Order, due to:
 - a. breakdown of waste treatment equipment;
 - b. accidents caused by human error or negligence; or
 - c. other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.