

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 88-105

WASTE DISCHARGE REQUIREMENTS  
FOR  
PIMA GRO SYSTEMS, INC.  
Imperial Hydrologic Unit of Imperial County

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

1. Pima Gro Systems, Inc. (hereinafter also referred to as the discharger), 2305 Ruthrauff Road, Tucson, Arizona 85705, submitted a Report of Waste Discharge, dated January 6, 1988, to operate a program for beneficial agricultural use of sewage sludge.
2. The discharger proposes to utilize stabilized wastewater treatment plant sludge through agricultural land application at agronomic rates. The plan of operation has been formulated to meet anticipated requirements of this Regional Water Quality Control Board and guidelines contained in the California Department of Health Services Manual of Good Practice for Land Spreading of Sewage Sludge.
3. Air dried sludge and mechanically de-watered digested (stabilized) sludge would be handled as a bulk material using dump trucks and loaders. Sludge would be transported to designated land application sites and stock-piled for spreading. Field stockpiling would be restricted to limited time durations to prevent nuisances and to eliminate the potential for water pollution. Sludge would be distributed on the application sites with a box-type spreader. Following distribution of sludge on a field, applied material would be soil incorporated within 24 hours with tillage equipment. Incorporation would be done directly by the discharger. A sludge management plan for each field would be submitted to the Regional Board prior to any sludge application thereon.
4. The discharger states that sludge transportation would be achieved with semi-dump trailers. These units would be in good condition and would be equipped with water-tight end gates. A manifest system would be maintained whereby the date, time, quantity, source and destination of each load would be recorded. Such records would provide one of the bases for the monitoring program.
5. The crops under consideration for sludge application would include bermuda grass, small grain, sugar beets, alfalfa and cotton. Produce crops such as lettuce would be avoided due to California and Federal food chain crop restrictions, where resting periods are mandated when a crop in direct contact with the soil is consumed raw.

*Cancelled  
6/28/89*

*Rescinded  
89-058  
6-28-89*

6. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Board on November 14, 1984. The subject sludge application sites occur within the Imperial Hydrologic Unit. The beneficial uses of groundwaters of the Imperial Hydrologic Unit are:

- a. Municipal supply
- b. Industrial supply
- c. Agricultural supply

However, in the principal agricultural area of Imperial Valley, the ground waters are saline and are not beneficially used.

7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for these operations.
8. The Board in a public meeting heard and considered all comments pertaining to the proposed discharge.
9. These waste discharge requirements govern discharge operations which cause minor alterations to land, and therefore are exempt from the provisions of the California Environmental Quality Act in accordance with Section 15304 of Title 14, Chapter 13 of the California Code of Regulations. Nevertheless, the Regional Board, acting as lead agency, processed and approved Negative Declaration SCH No. 88052508.

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

A. Discharge Specifications

1. The discharge operations shall not create pollution or nuisance as defined in Division 7 of the California Water Code.
2. Land application of the sludges shall be done at agronomic rates and be limited to agricultural sites in the Imperial County portion of the Imperial Hydrologic Unit which are used for production of the following types of crops:
  - a. Non-food chain crops.
  - b. Processed food chain crops as defined in the Manual of Good Practice for Landspreading of Sewage Sludge, California Department of Health Services, Sanitary Engineering Branch, April 1983, and subsequent amendments thereto.
  - c. Animal feed other than that consumed by dairy animals grazing on the site.
3. Sludge request forms signed by both the farm operator and the land owner shall be submitted to the Regional Board stating the crops intended to be grown on the subject acreage, in accordance with Specifications No. 2 and No. 9 of this Order.
4. Land application shall be restricted to only those sites and sources of sludge(s) receiving prior written approval by the Executive Officer of this Regional Board. The following factors will be used to determine land application suitability:

- a. Single application and lifetime limits of all constituents as described in both 40 CFR Part 257, Criteria for Classification of Solid Waste Disposal Facilities and Practices, U.S.E.P.A., September 1979, and Manual of Good Practice for Landspreading of Sewage Sludge, California Department of Health Services, Sanitary Engineering Branch, April 1983.
- b. Soil Cation Exchange Rate.
- c. Soil pH.
- d. Nitrogen Loading Rates.
- e. Phytotoxicity.

Also, the land application suitability will be continually reviewed as new data is received.

5. Sludge shall be applied only one time per harvested crop in accordance with the design for any given site and the sludge management plan.
6. Sludge shall be land spread and incorporated within 24 hours of arrival on site.
7. Sludge shall not be applied on areas exceeding 8% in slope.
8. Sludge stockpiles will be limited to approved sites in accordance with Department of Health Services guidelines; and stockpiles shall not be located in the following locations:
  - a. 25 feet from property lines unless permission is obtained from the adjacent landowner.
  - b. 500 feet from drinking water wells.
  - c. 50 feet from public roads.
9. Resting periods for public access, livestock grazing and avoidance of unprocessed direct consumption human food chain crops shall be as follows:
  - a. Public access shall be controlled for 12 months after sludge application.
  - b. Grazing by animals whose products are consumed by humans shall be prevented for one month after sludge application.
  - c. If pasture is subsequently converted into a dairy pasture, grazing by milking animals shall be prevented for at least 12 months after the latest sludge application. No grazing shall be allowed in instances where the milk is not to be pasteurized.
  - d. There shall be no planting of unprocessed food chain crops for three years after sludge application.
10. The maximum sludge application rate shall not exceed 12 tons per acre per crop, unless written approval of the Executive Officer is received for each additional application at each particular site.

11. Sludges shall not be applied if any of the constituents of that sludge could cause phytotoxicity.
12. If constituent levels in either the sludge to be applied or in a field that previously received sludge are considered unacceptable by the Executive Officer, then the operation shall cease immediately and in the case of the sludge that has already been applied, remedial action shall be taken as approved by the Executive Officer in advance.
13. The discharger shall submit to the Regional Board an annual screening test which shall include all metals and organics that are prescribed by the California Assessment Manual on all sludge sources which the discharger intends to use as soil amendments.
14. The discharger shall submit to the Regional Board monthly results of analyses of sludge tested at the wastewater treatment plant, showing the following: (Documented treatment plant results may be permitted)

| <u>Determination</u>        | <u>Unit</u> |
|-----------------------------|-------------|
| A. Arsenic                  | mg/kg       |
| B. Chromium                 | mg/kg       |
| C. Cadmium                  | mg/kg       |
| D. Lead                     | mg/kg       |
| E. Zinc                     | mg/kg       |
| F. Copper                   | mg/kg       |
| G. Nickel                   | mg/kg       |
| H. Mercury                  | mg/kg       |
| I. Selenium                 | mg/kg       |
| J. Total Nitrogen           | %           |
| K. Plant Available Nitrogen | lbs/dry ton |
| L. Solids                   | %           |

15. The following discharge specifications shall be complied with, in addition to the above, in those instances where in the opinion of the Executive Officer, the sludge source is from a community sewerage system that has significant industrial waste contributions:
  - a. Not more than 25% of the lifetime limit, as defined by 40 CFR, Part 157, U.S. EPA, 1979, of any metal shall be spread on any field, unless prior written approval is received from the Executive Officer, following demonstration by the discharger of successful compliance with operating conditions.
  - b. The discharger shall institute "level two" monitoring as described in Monitoring and Reporting Program No. 88-105, and with future revisions thereto, as specified by the Executive Officer.
16. The discharger shall report to the Regional Board, for a period of 3 years after the last sludge application to a particular field, what crops are being grown on that field. The reported crops shall conform to those allowed under Discharge Specification No. 2, above.

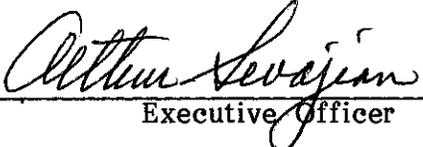
17. Sampling techniques for CAM testing shall be done in accordance with Section I of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" SW-846, 2nd Edition, U.S. EPA 1982.
18. The discharger shall, in advance, report to the Executive Officer any proposed use or transport of sludge containing greater than 35% solids, and shall utilize precautionary measures required by the Executive Officer.

B. Provisions

1. The discharger shall submit to the Regional Board a screening test, which includes all metals and organics that are prescribed by the California Assessment Manual, on all sludge sources which the discharger intends to use as soil amendments.
2. The discharger shall comply with "Monitoring and Reporting Program No. 88-105" and future revisions thereto, as specified by the Executive Officer.
3. Prior to any material modifications in any aspect of the sludge management plan, the discharger shall report in writing to the Regional Board allowing sufficient time for Board consideration and action.
4. This waste discharge requirement shall immediately be subject to review and revision when the U. S. Environmental Protection Agency issues any technical criteria regulations or guidance affecting sludge disposal currently being developed under authorities provided under Section 405(d) of the Clean Water Act.

IT IS FURTHER ORDERED that Board Order No. 88-39 be superseded by this Order.

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 JUN 30 1988.

  
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Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 88-105  
FOR  
PIMA GRO SYSTEMS, INC.  
Imperial Hydrologic Unit of Imperial County

MONITORING

Pima Gro Systems, Inc. (discharger) shall monitor and report to the Regional Board concerning the following:

LEVEL ONE MONITORING

- I. The discharger shall submit to the Regional Board monthly reports as follows:
  - A. Samples shall be taken monthly from each field where sludge is being applied:
    1. Number of tons applied that month and number of tons of sludge applied to the field total and crop to be grown.
    2. Pounds, per acre, of copper, zinc, cadmium, nickel and lead that has been applied that month and pounds per acre that have been applied of each metal in the lifetime of the field and theoretical maximum amounts as described by 40 CFR, Part 257, U.S. E.P.A., Sept. 1979.
  - B. Samples shall be taken monthly from the sludge applied to each field:
    1. Total Kjeldahl nitrogen, ammonia-nitrogen, nitrate-nitrogen from a composite of the sludge being applied.
    2. Total percent solids from a composite of the sludge being applied.
    3. Polychlorinated biphenyls (PCBs) in mg/kg from a composite of the sludge being applied.
- II. The discharger shall submit to the Regional Board the results of analyses of a composite soil sample from each field prior to any sludge application to that field, showing the following data:

|    | <u>Determination</u> | <u>Unit</u> |
|----|----------------------|-------------|
| A. | Chromium             | mg/kg       |
| B. | Cadmium              | mg/kg       |
| C. | Lead                 | mg/kg       |
| D. | Zinc                 | mg/kg       |
| E. | Copper               | mg/kg       |
| F. | Total Nitrogen       | %           |
| G. | pH                   | -           |

| <u>Determination</u>        | <u>Unit</u>   |
|-----------------------------|---------------|
| H. Cation Exchange Capacity | meg/100 grams |
| I. Selenium                 | mg/kg         |
| J. Silver                   | mg/kg         |
| K. Mercury                  | mg/kg         |

III. The discharger shall submit to the Regional Board an annual screening test which shall include all metals and organics that are prescribed by the California Assessment Manual on all sludge sources which the discharger intends to use as soil amendments.

IV. The discharger shall submit to the Regional Board monthly results of analyses of sludge tested at the wastewater treatment plant, showing the following: (Treatment plant results are permitted)

| <u>Determination</u>        | <u>Unit</u> |
|-----------------------------|-------------|
| A. Arsenic                  | mg/kg       |
| B. Chromium                 | mg/kg       |
| C. Cadmium                  | mg/kg       |
| D. Lead                     | mg/kg       |
| E. Zinc                     | mg/kg       |
| F. Copper                   | mg/kg       |
| G. Nickel                   | mg/kg       |
| H. Mercury                  | mg/kg       |
| I. Selenium                 | mg/kg       |
| J. Total Nitrogen           | %           |
| K. Plant Available Nitrogen | lbs/dry ton |
| L. Solids                   | %           |

V. The discharger shall submit to the Regional Board an annual report stating the crops being grown on each field where sludge had been applied for a period of 3 years after the last sludge application.

#### LEVEL TWO MONITORING

Level two monitoring includes the entire level one monitoring program and also includes the following:

- I The discharger shall submit to the Regional Board a quarterly annual screening test on the sludge at the source which shall include all metals and organics that are prescribed by the California Assessment Manual.
- II One field receiving the sludge shall be selected for crop tissue sampling where the harvested portion of the crop will be sampled and analyzed for lead, copper and cadmium. A control area in the same field shall be established where no sludge shall be applied and parallel sampling and testing shall be conducted for comparative purposes. Thereafter, crop tissue testing shall continue on at least one field for each subsequent annual addition of the sludge.

The above monitoring program shall be implemented and maintained immediately upon adoption of Order No. 88-105.

REPORTING

Monthly reports shall be submitted to the Regional Board by the 15th day of the following month. Annual reports shall be submitted to the Regional Board by the 15th day of January for the previous year. Copies of the reports submitted to the Board pursuant to this Monitoring and Reporting Program shall be maintained at the operations site, and shall be made available to staff of the Regional Board upon request.

Mail 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 Sevajan  
Executive Officer  
July 15, 1988  
Date

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

INITIAL STUDY

SCH NO. 88052508

FOR

ORDER NO. 88-105

FOR

Pima Gro Systems, Inc.

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- II. Environmental Setting
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I. Description of Project

Pima Gro Systems, Inc., proposes to utilize stabilized wastewater treatment plant sludge through agricultural land application at agronomic rates. The plan of operation has been formulated to meet the requirements of the California Regional Water Quality Control Board as outlined by the California Department of Health Services Manual of Good Practice for Land Spreading of Sewage Sludge.

Air dried sludge and mechanically de-watered digested (stabilized) sludge would be handled as a bulk material using dump trucks and loaders. Sludge would be transported to designated land application sites and stockpiled for spreading. Field stockpiling would be restricted to limited time durations to prevent nuisances and to eliminate the potential for water pollution. Sludge would be distributed on the application sites with a box-type spreader. Following distribution of sludge on a field, applied material would be soil incorporated within 24 hours with tillage equipment. Incorporation would be done directly by the discharger.

The crops under consideration for sludge application would include bermuda grass, small grain, sugar beets, alfalfa and cotton. Produce crops such as lettuce would be avoided due to California and Federal food-chain crop restrictions, where resting periods are mandated when a crop in direct contact with the soil is consumed raw.

II. Environmental Setting

The air dried sludge and mechanically de-watered digested (stabilized) sludge would be applied to farm lands entirely within the Imperial Hydrologic Unit which encompasses a significant portion of Imperial County.

III. ENVIRONMENTAL IMPACTS

|  | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|--|------------|--------------|-----------|
| 1. <u>Earth.</u> Will the proposal result in:  |            |              |           |
| a. Unstable earth conditions or in changes in geologic substructures?  | —          | —            | <u>X</u>  |
| b. Disruptions, displacements, compaction or overcovering of the soil?   | —          | —            | <u>X</u>  |
| c. Change in topography or ground surface relief features?   | —          | —            | <u>X</u>  |
| d. The destruction, covering or modification of any unique geological or physical features?  | —          | —            | <u>X</u>  |
| e. Any increase in wind or water erosion of soils, either on or off the site?  | —          | —            | <u>X</u>  |
| f. Changes in deposition or erosion of beach sands, or changes in siltation, depositions or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake? | —          | —            | <u>X</u>  |
| g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?  | —          | —            | <u>X</u>  |
| 2. <u>Air.</u> Will the proposal result in:  |            |              |           |
| a. Substantial air emissions or deterioration of ambient air quality?  | —          | —            | <u>X</u>  |
| b. The creation of objectionable odors?  | —          | <u>X</u>     | —         |
| c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?  | —          | —            | <u>X</u>  |

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\* See Part IV

|   | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|---|------------|--------------|-----------|
| 3. <u>Water.</u> Will the proposal result in:   |            |              |           |
| a. Changes in currents, or the course or direction of water movements, in either marine or fresh water?   | —          | —            | <u>X</u>  |
| b. Change in absorption rates, drainage pattern, or the rate and amount of surface water runoff?  | —          | —            | <u>X</u>  |
| c. Alterations to the course or flow of flood waters?   | —          | —            | <u>X</u>  |
| d. Change in the amount of surface water in any water body?   | —          | —            | <u>X</u>  |
| e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?         | —          | <u>X</u>     | —         |
| f. Alteration of the direction or rate of flow of ground waters?  | —          | —            | <u>X</u>  |
| g. Change in quantity or quality of ground waters, either through direct additions or withdrawals, or through interception of the aquifer by cuts or excavations? | —          | —            | <u>X</u>  |
| h. Substantial reduction in the amount of water otherwise available for public water supplies?  | —          | —            | <u>X</u>  |
| i. Exposure of people or property to water related hazards such as flooding or tidal waves?   | —          | —            | <u>X</u>  |
| 4. <u>Plant Life.</u> Will the proposal result in:  |            |              |           |
| a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)?                 | —          | —            | <u>X</u>  |
| b. Reduction of numbers of any unique, rare or endangered species of plants?  | —          | —            | <u>X</u>  |

\* See Part IV

|   | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|---|------------|--------------|-----------|
| c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?   | —          | —            | <u>X</u>  |
| d. Reduction in acreage of any agricultural crop?   | —          | —            | <u>X</u>  |
| 5. <u>Animal Life.</u> Will the proposal result in:   |            |              |           |
| a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)? | —          | —            | <u>X</u>  |
| b. Reduction of the numbers of any unique, rare or endangered species of animals?   | —          | —            | <u>X</u>  |
| c. Introduction of new species of animals into an area, or result in barrier to the migration or movement of animals?   | —          | —            | <u>X</u>  |
| d. Deterioration to existing fish or wildlife habitat?  | —          | —            | <u>X</u>  |
| 6. <u>Noise.</u> Will the proposal result in:   |            |              |           |
| a. Increases in existing noise levels?  | —          | —            | <u>X</u>  |
| b. Exposure of people to severe noise levels?   | —          | —            | <u>X</u>  |
| 7. <u>Light and Glare.</u> Will the proposal produce new light or glare?  | —          | —            | <u>X</u>  |
| 8. <u>Land Use.</u> Will the proposal result in a substantial alteration of the present or planned land use of an area?   | —          | —            | <u>X</u>  |
| 9. <u>Natural Resources.</u> Will the proposal result in:   |            |              |           |
| a. Increase in the rate of use of any natural resource?   | —          | —            | <u>X</u>  |
| b. Substantial depletion of any nonrenewable resource?  | —          | —            | <u>X</u>  |

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\* See Part IV

|  | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|--|------------|--------------|-----------|
| 10. <u>Risk of Upset.</u> Does the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset condition? | —          | —            | <u>X</u>  |
| 11. <u>Population.</u> Will the proposal alter the location, distribution, density or growth rate of the human population of an area?  | —          | —            | <u>X</u>  |
| 12. <u>Housing.</u> Will the proposal affect existing housing, or create a demand for additional housing?  | —          | —            | <u>X</u>  |
| 13. <u>Transportation/Circulation.</u> Will the proposal result in:  |            |              |           |
| a. Generation of substantial additional vehicular movement?  | —          | —            | <u>X</u>  |
| b. Effects on existing parking facilities, or demand for new parking?  | —          | —            | <u>X</u>  |
| c. Substantial impact upon existing transportation systems?  | —          | —            | <u>X</u>  |
| d. Alterations to present patterns of circulation or movement of people and/or goods?  | —          | —            | <u>X</u>  |
| e. Alterations to waterborne, rail or air traffic?   | —          | —            | <u>X</u>  |
| f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?   | —          | —            | <u>X</u>  |
| 14. <u>Public Services.</u> Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:   |            |              |           |
| a. Fire protection?  | —          | —            | <u>X</u>  |
| b. Police protection?  | —          | —            | <u>X</u>  |
| c. Schools?  | —          | —            | <u>X</u>  |

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\* See Part IV

|  | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|--|------------|--------------|-----------|
| d. Parks or other recreational facilities?   | —          | —            | <u>X</u>  |
| e. Maintenance of public facilities, including roads?  | —          | —            | <u>X</u>  |
| f. Other governmental services?  | —          | —            | <u>X</u>  |
| 15. <u>Energy.</u> Will the proposal result in:  |            |              |           |
| a. Use of substantial amounts of fuel or energy?   | —          | —            | <u>X</u>  |
| b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?  | —          | —            | <u>X</u>  |
| 16. <u>Utilities.</u> Will the proposal result in a need for new systems, or substantial alterations to the following utilities:   |            |              |           |
| a. Power or natural gas?   | —          | —            | <u>X</u>  |
| b. Communications systems?   | —          | —            | <u>X</u>  |
| c. Water?  | —          | —            | <u>X</u>  |
| d. Sewer or septic tanks?  | —          | —            | <u>X</u>  |
| e. Storm water drainage?   | —          | —            | <u>X</u>  |
| f. Solid waste and disposal?   | —          | —            | <u>X</u>  |
| 17. <u>Human Health.</u> Will the proposal result in:  |            |              |           |
| a. Creation of any health hazard or potential health hazard (excluding mental health)?   | —          | <u>X</u>     | —         |
| b. Exposure of people to potential health hazards?   | —          | <u>X</u>     | —         |
| 18. <u>Aesthetics.</u> Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view? | —          | —            | <u>X</u>  |

|  | <u>YES</u> | <u>MAYBE</u> | <u>NO</u> |
|--|------------|--------------|-----------|
| 19. <u>Recreation.</u> Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?  | —          | —            | <u>X</u>  |
| 20. <u>Archeological/Historical.</u> Will the proposal result in an alteration of a significant archeological or historical site, structure, object or building?   | —          | —            | <u>X</u>  |
| 21. <u>Mandatory Findings of Significance.</u>   |            |              |           |
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | —          | —            | <u>X</u>  |
| b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)   | —          | <u>X</u>     | —         |
| c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)  | —          | —            | <u>X</u>  |
| d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | —          | —            | <u>X</u>  |

IV Discussion of Environmental Evaluation (as asterisked on previous pages)

- 2b. The sludge has the potential to create objectionable odors. This will be mitigated by requiring that the sludge be incorporated into the soil within 24 hours of arriving at the field and will be further mitigated by requiring trucks which are carrying sludge with solids greater than 35% be covered.
- 3e. If the sludge is used at greater than agronomic rates, excess nitrates and nitrite could impact surface waters. This will be mitigated by requiring the sludge to be applied at not greater than agronomic rates.
- 17a. The sludge could create a potential health hazard due to the possibility of bacteria and viruses in the sludge. This will be mitigated by requiring resting periods for public access, livestock grazing and avoidance of unprocessed direct consumption of human food chain crops as described in United States Environmental Protection Agency and California Department of Health Services guidelines.
- 17b. Same as 17a.
- 21b. The project has the potential of long term impacts to the soils of the various agricultural fields to which the sludge is applied. These potential impacts will be mitigated by requiring single application and lifetime limits of all constituents as described in both 40 CFR Part 257, Criteria Classification of Solid Waste Disposal Facilities and Practices, U.S.E.P.A., September 1979, and Manual of Good Practice for Landspreading of Sewage Sludge, California Department of Health Services, Sanitary Engineering Branch, April 1983.

V Compatibility with Existing Plans and Zoning

This project is in accordance with existing County and Regional Plans, including the Water Quality Control Plan for the Colorado River Basin Region of California.

VI Preparer's Certification

On the basis of this initial evaluation:

- I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described above have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.
- I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

May 18, 1985  
Date

*Orlino Swazian*  
Signature

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLOARDO RIVER BASIN REGION

NEGATIVE DECLARATION

SCH# 88052508

Draft

Final

PROJECT TITLE:

Pima Gro Systems, Inc., Imperial Hydrologic Unit, Imperial County

PROJECT LOCATION:

Imperial Hydrologic Unit, Imperial County

PROJECT PROPOSAL:

Pima Gro Systems, Inc., proposes to utilize stablized wastewater treatment plant sludge through agricultural land application at agronomic rates. The plan of operation has been formulated to meet the requirements of the California Regional Water Quality Control Board as outlined by the California Department of Health Services Manual of Good Practice for Land Spreading of Sewage Sludge.

Air dried sludge and mechanically de-watered digested (stabilized) sludge would be handled as a bulk material using dump trucks and loaders. Sludge would be transported to designated land application sites and stockpiled for spreading. Field stockpiling would be restricted to limited time durations to prevent nuisances and to eliminate the potential for water pollution. Sludge would be distributed on the application sites with a box-type spreader. Following distribution of sludge on a field, applied material would be soil incorporated within 24 hours with tillage equipment. Incorporation would be done directly by the discharger.

The crops under consideration for sludge application would include bermuda grass, small grain, sugar beets, alfalfa and cotton. Produce crops such as lettuce would be avoided due to California and Federal food-chain crop restrictions, where resting periods are mandated when a crop in direct contact with the soil is consumed raw.

THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, COLORADO RIVER BASIN REGION, HAS DETERMINED THAT THE PROPOSED PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT FOR THE FOLLOWING REASONS:

1. This project is in accordance with existing County and Regional plans, including the Water Quality Control Plan for the Colorado River Basin Region of California.
2. No significant adverse impact upon fish, wildlife, or natural vegetation is indicated.
3. No significant adverse impact to rare or endangered species as a result of this project is indicated.
4. No significant adverse impact to aesthetics, air quality, noise levels, land forms, or nonrenewable resources is indicated.
5. No significant secondary impact resulting from growth inducement or limits to potential uses is indicated because of the limited effects and purposes of the project.
6. No significant adverse impact to historic or archaeological sites is indicated.
7. No significant adverse impact to beneficial uses of surface or ground waters as a result of changes in water quality or quantity is indicated.
8. Any potential adverse impact to the environment from the sludge applications will be mitigated by applying the sludge at agronomic rates, and by incorporating the sludge within twenty-four hours.
9. Any potential adverse impact to the soils from contamination by metals will be mitigated by following single application and lifetime limits of all constituents as described in both EPA and State Health Department guidelines.
10. Any potential health hazards resulting from the sludge spreading will be mitigated by requiring rest periods for public access and avoidance of unprocessed direct consumption of human food-chain crops as described in both EPA and State Health Department guidelines.

July 15, 1988  
Date

Arthur Seajian  
Executive Officer