

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

ORDER NO. 89-16

WASTE DISCHARGE REQUIREMENTS  
FOR  
SPACE ORDNANCE SYSTEMS  
(Division of TransTechnology Corporation)  
(File No. 88-02)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. Space Ordnance Systems, a Division of TransTechnology Corporation, has filed a report of waste discharge with this Board.
2. Space Ordnance Systems, operates a facility for the manufacture of ordnance devices, including infrared countermeasure flares and energetic devices (typically containing D.O.T. Class A or B explosives), at 25977 Sand Canyon Road, Canyon Country, California, and proposes to discharge up to 210,000 gallons per day (gpd) of treated ground water back into the ground water aquifer through one of three discharge infiltration sites:

Discharge Area 1 - Injection trench (see attached map)  
2,400 feet N 11<sup>0</sup> W from the northwest  
corner of Section 12, T3N, R12W,  
SBBM.

Discharge Area 2 - R and D infiltration cistern (see  
attached map) 2,600 feet N 30<sup>0</sup> W from  
the northwest corner of Section 12,  
T 3 N, R 12 W, SBBM.

Discharge Area 3 - Percolation Ponds (see attached map)  
1,800 feet N 35<sup>0</sup> W from the northwest  
corner of Section 12, T 3 N, R 12 W,  
SBBM.

The discharge areas are situated in the Upper Santa Clara  
Hydrographic Subunit, Eastern Hydrographic Subarea.

Revised December 19, 1988

3. On March 14, 1984, the Executive Officer issued Cleanup and Abatement Order No. 84-03 to Space Ordnance Systems ordering to clean up organic solvents or residuals thereof and the polluted soils and polluted groundwater, if any, and to abate the effects thereof forthwith.
4. In the past, liquid and solid wastes containing organic solvents and other organic hydrocarbon compounds, plus flammable solvents and explosive chemical wastes, were improperly and illegally stored in steel barrels at the site. There was evidence found that these wastes were disposed of via spray irrigation and leach field to the ground water.
5. Contaminated ground water will be extracted from three wells and will be conveyed by pipeline to an on-site storage facility for treatment. Monitoring wells will also be installed to monitor the ground water aquifer for effectiveness of the ground water treatment system.
6. Contaminated groundwater will be treated through an activated carbon treatment system where actionable levels of organic pollutants will be removed. The treated effluent will be returned to the aquifer via one of three discharge infiltration sites.
7. The proposed discharge is a part of a remedial action plan for the cleanup of contaminated ground water. The purpose of treated water discharge at the Sand Canyon facility is to recharge the ground water aquifer. The continuous removal of volatile organic compounds through extraction of ground water and treatment, and subsequent percolation of treated water to the aquifer will remedy the ground water contamination problem.
8. All other process wastes from this facility are treated on site and disposed of at a legal disposal site.
9. The Board adopted a revised Water Quality Control Plan for the Santa Clara River Basin (4A) on March 27, 1978. The plan contained water quality objectives for Upper Santa Clara Hydrographic Subunit. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.
10. The beneficial uses of the ground water are: municipal and domestic supply, industrial service supply, industrial process supply and agricultural supply.

11. This action is being taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, commencing with Section 21100) in accordance with Section 15308, Chapter 3, Title 14, of the California Administrative Code.

The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that Space Ordnance Systems, a Division of TransTechnology Corporation, shall comply with the following:

A. Discharge Specifications

1. Wastes discharged shall be limited to treated carbon filtered groundwater only, as proposed, and shall not exceed the daily volume withdrawn from the recovery well(s).
2. The discharge of an effluent in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Max. Discharge Limitations</u>	
		<u>30-day Ave.</u>	<u>Daily Maximum</u>
Benzene	ug/l	--	0.700
1,1-Dichloroethane	ug/l	--	10.0
1,2-Dichloroethane	ug/l	--	1.00
* 1,1-Dichloroethene	ug/l	--	6.0
Tetrachloroethene	ug/l	--	4.00
1,1,1-Trichloroethane	ug/l	--	10.0
Toluene	ug/l	--	10.0
Trichloroethene	ug/l	--	5.00

<u>Constituents</u>	<u>Units</u>	<u>Max. Discharge Limitations</u>	
		<u>30-day Ave.</u>	<u>Daily Maximum</u>
trans-1,2-Dichloroethene	ug/l	--	10.0
cis-1,2-Dichloroethene	ug/l	--	10.0
Xylene	ug/l	--	10.0

3. Ground water shall be pumped from the on-site extraction well(s) and treated to remove contaminants. The treated water shall be piped directly to the recharge facilities and allowed to infiltrate. The treated water shall only be returned to the same aquifer from which it was extracted.
4. Wastes shall be discharged only on property owned or controlled by the discharger, as proposed.
5. The discharge of any separately extracted volatile organic contaminants onto the ground or into any water course or tributary to surface waters is prohibited.
6. Neither the disposal nor any handling of wastes shall cause pollution or nuisance.
7. The discharge of wastes onto the ground or into any tributary to surface waters except those covered under waste discharge requirements issued by this Board is prohibited at all times.
8. Neither the disposal nor any handling of wastes shall result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
9. Wastes discharged shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving waters.

10. Wastes discharged which could affect receiving waters shall not contain any substance in concentrations toxic to human, animal, or plant life.
11. Wastes discharged shall not cause a violation of any applicable water quality standards for receiving waters adopted by this Board or the State Water Resources Control Board.
12. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

B. Provisions

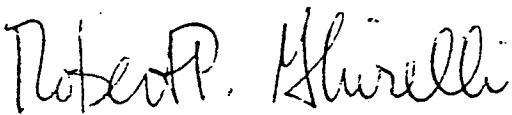
1. A copy of this Order shall be maintained at the discharge facility so as to be available at all times to operating personnel.
2. These requirements are applicable only to treated ground water discharged into the aquifer through recharge facilities placed into service by Space Ordnance Systems only in connection with the on-site ground water recovery and treatment system.
3. If there is any storage of hazardous materials or hydrocarbons at this facility and if the facility is not staffed at all times, a 24-hour emergency response telephone number shall be prominently posted where it can be easily read from outside the facility.
4. In accordance with Section 13260 (b) of the Water Code, the discharger shall file a report of any material change or proposed change in the character, location or volume of the discharge. A report of waste discharge is not required for additional extraction wells added to this system, but the Executive Officer shall be so notified by letter of the locations of all proposed new extraction wells.
5. In the event of any change in name, ownership, or control of these waste discharge facilities, the discharger shall notify the Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

6. The discharger shall notify the Board immediately by telephone of any adverse condition resulting from this discharge or from operations producing this waste discharge. Such notification shall be affirmed in writing within one week from the date of such occurrence.
7. In accordance with Section 13267 of the Water Code, the discharger shall furnish, under penalty of perjury, technical monitoring reports to the Board. Such reports shall be submitted in accordance with specifications prepared by the Executive Officer. These specifications are subject to periodic revision as may be warranted.
8. The discharger must comply with all of the terms, requirements and conditions of this Order. Any violation of this Order constitutes a violation of the California Water Code, and is grounds for enforcement action, Order termination, Order revocation, and reissuance, or any combination thereof.
9. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
10. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
11. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
12. These requirements do not exempt the discharger from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of waste at this site which may be contained in other statutes or required by other agencies.

13. This Order does not alleviate the responsibility of the discharger to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
14. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from any liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
15. This Order does not convey any property rights of any sort, or any exclusive privilege.
16. The Regional Board, and other authorized representatives shall be allowed:
  - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
  - b. Access to copy any records that are kept under the conditions of this Order;
  - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.
17. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures.

18. This Order includes the attached "General Monitoring and Reporting Provisions".
19. In the event that the proposed ground water cleanup operation becomes ineffective, the discharger shall propose an alternative ground water cleanup system to the Executive Officer.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on February 27, 1989.



ROBERT P. GHIRELLI, D.Env.  
Executive Officer



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
MONITORING AND REPORTING PROGRAM NO. 6857  
FOR  
SPACE ORDNANCE SYSTEMS  
(Division of TransTechnology Corporation)  
(File No. 88-02)

The discharger shall implement this monitoring program on the effective date of this Order. Monitoring reports shall be submitted monthly and will be due on the first day of the second following month. The first report under this program is due March 1, 1989.

Each monitoring report shall affirm in writing that all analyses were conducted at a laboratory certified for such analyses by State Department of Health Services or approved by the Executive Officer and in accordance with current EPA guideline procedures or as specified in the Monitoring Program.

For any analyses performed for which no procedure is specified in the EPA guidelines or in the Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

I. Location of Extraction Wells and Ground Water Monitoring and Sampling Wells.

The discharger shall file with this Board, not later than 30 days after receipt of this Order, a report listing the wells proposed to be used for ground water extraction and monitoring and sampling. The monitoring and sampling wells shall be distributed about the area so as to provide sufficient data to enable determination to be made of the effects on ground water quality by this cleanup operation. The report shall give the location, total depth, and perforated intervals (depth) of each well.

Water level measurements shall be taken in all wells, prior to sampling, each time the wells are sampled, and reported in the monitoring report. The ground water elevation for each well shall be measured for determining ground water flow direction and gradient. The ground water elevations shall be determined utilizing standard survey techniques with all elevations referenced to an established bench mark. The ground water elevation summary shall be presented as a table including static water elevation, well head elevation and as a ground water contour map with appropriate gradient information. The ground water summary table shall be cumulative referencing all previous measurements.

II. Effluent Monitoring

A sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained. The following shall constitute the effluent monitoring program:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency of Analyses [1]</u>
pH	pH units	grab	Quarterly
Temperature	<sup>0</sup> F	grab	Quarterly
Total flow	gal/day	----	Quarterly
Benzene	ug/l	grab	Quarterly
1,1-Dichloroethane	ug/l	grab	Quarterly
1,2-Dichloroethane	ug/l	grab	Quarterly
1,1-Dichloroethene	ug/l	grab	Quarterly
Tetrachloroethene	ug/l	grab	Quarterly
1,1,1-Trichloroethane	ug/l	grab	Quarterly
Toluene	ug/l	grab	Quarterly
Trichloroethene	ug/l	grab	Quarterly
trans-1,2-Dichloroethene	ug/l	grab	Quarterly
cis-1,2-Dichloroethene	ug/l	grab	Quarterly
Xylene	ug/l	grab	Quarterly

[1] For the first month of sampling, samples will be taken weekly, the second month one sample will be taken, the fourth month one sample will be taken, and the sixth month one sample will be taken; thereafter, samples will be taken quarterly.

III. Influent Monitoring

A sampling station shall be established for each extraction well and be located where representative samples can be obtained. The following shall constitute the influent monitoring program:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency of Analyses [1]</u>
pH	pH units	grab	Quarterly
Temperature	<sup>0</sup> F	grab	Quarterly
Total flow	gal/day	----	Quarterly
Benzene	ug/l	grab	Quarterly
1,1-Dichloroethane	ug/l	grab	Quarterly
1,2-Dichloroethane	ug/l	grab	Quarterly
1,1-Dichloroethene	ug/l	grab	Quarterly

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency of Analyses [1]</u>
Tetrachloroethene	ug/l	grab	Quarterly
1,1,1-Trichloroethane	ug/l	grab	Quarterly
Toluene	ug/l	grab	Quarterly
Trichloroethene	ug/l	grab	Quarterly
trans-1,2-Dichloroethene	ug/l	grab	Quarterly
cis-1,2-Dichloroethene	ug/l	grab	Quarterly
Xylene	ug/l	grab	Quarterly

#### IV. Ground Water Monitoring

A sampling station shall be established for each ground water monitoring well and be located where representative samples can be obtained. The following shall constitute the ground water monitoring program:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency of Analyses [2]</u>
pH	pH units	grab	Quarterly
Temperature	<sup>o</sup> F	grab	Quarterly
Benzene	ug/l	grab	Quarterly
1,1-Dichloroethane	ug/l	grab	Quarterly
1,2-Dichloroethane	ug/l	grab	Quarterly
1,1-Dichloroethene	ug/l	grab	Quarterly
Tetrachloroethene	ug/l	grab	Quarterly
1,1,1-Trichloroethane	ug/l	grab	Quarterly
Toluene	ug/l	grab	Quarterly
Trichloroethene	ug/l	grab	Quarterly
trans-1,2-Dichloroethene	ug/l	grab	Quarterly
cis-1,2-Dichloroethene	ug/l	grab	Quarterly
Xylene	ug/l	grab	Quarterly

[2] One sample will be taken after the second month, one sample will be taken after the fourth month, one sample after the sixth month and one sample will be taken quarterly thereafter.

V. Operation and Maintenance Report

The discharger shall file a technical report with the Board, not later than 30 days after receipt of this Order, relative to the operation and maintenance program for the ground water treatment system. The report shall contain, at a minimum, the following information:

1. The name and address of the person of company responsible for the operation and maintenance of the ground water treatment system;
2. Type of maintenance (preventive or corrective);
3. Frequency of maintenance, if preventive.

VI. Hauling Report

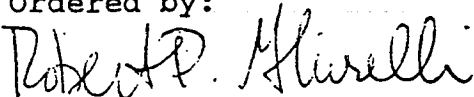
In the event wastes are transported to a different disposal site during the reporting period, the following information shall be included in the monitoring report for that period:

1. Types of wastes and quantity of each type;
2. Name and address of each hauler of wastes (or method of transport if other than hauling);
3. Location of the final disposal point(s) for each type of waste.

VII. Annual Report

The annual report shall include the results of summaries of all analyses and a complete system evaluation. The system evaluation shall contain an analysis covering the cleanup effectiveness. The system effectiveness shall evaluate, but not be limited to, the present ground water conditions, rate of cleanup, system operating conditions, projected completion (if possible), and any system modifications.

Ordered by:



ROBERT P. GHIRELLI, D.Env.  
Executive Officer

Date: February 27, 1989

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
GENERAL MONITORING AND REPORTING PROVISIONS

1. All sampling, sample preservation, and analyses 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.
2. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board or approved by the Executive Officer.
3. Effluent samples shall be taken downstream of any addition to the treatment works and prior to mixing with the receiving waters.
4. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.
5. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
6. 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.
7. 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.
8. 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.

Space Ordnance Systems  
General Monitoring and Reporting Provisions

File No. 88-02

9. 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 of when requested by the Board.
10. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.
11. 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 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.
12. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the foregoing is true and correct. Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

\_\_\_\_\_ Signature

\_\_\_\_\_ Title"

Space Ordnance Systems  
General Monitoring and Reporting Provisions

File No. 88-02

13. The discharger shall mail a copy of each monitoring report to the following:  
California Regional Water Quality Control  
Board - Los Angeles Region  
107 South Broadway, Room 4027  
Los Angeles, CA 90012
14. If no flow occurred (or no waste was deposited) during the reporting period, the report shall so state.
15. These records and reports are public documents and shall be made available for inspection during business hours at the offices of the California Regional Water Quality Control Board, Los Angeles Region.