

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

ORDER NO. 86-29

**WASTE DISCHARGE REQUIREMENTS
FOR
CRITON ARMTEC
South of Coachella - Riverside County**

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

1. Armtec Defense Products Company (hereinafter also referred to as the discharger), 85-901 Avenue 53, P.O. Box 848, Coachella, California 92236, submitted updated information on the discharge of wastes, dated October 31, 1985.
2. The discharger is discharging a maximum of 180,000 gallons-per-day of wastewater from an industrial plant into a settling tank. The wastewater is then disposed of by means of flood irrigating up to seven (7) acres of fallow land adjacent to the plant in the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 8, T6S, R8E, SBB&M.
3. The wastewater contains cellulose fibers, acrylic fibers, and very small amounts of polyvinyl acetate and diphenylamine. Prior to discharge, the fibers are removed by means of a screen and the settling tank. Monitoring reports submitted to the Board during the past year show constituent levels in the wastewater that range as follows:

TDS - 185-255 mg/l

pH - 7.0-7.7

Suspended Solids - 60-80 mg/l

Settleable Matter - less than 0.1 mg/l.

4. A recent chemical analysis of the wastewater taken from the field discharge pipe is as follows:

Wastewater

TDS 244 mg/l
DPA 1.30 mg/l
pH 7.9

Diphenylamine (DPA) is listed as a toxic waste in the California Administrative Code, Title 22, Division 4, Chapter 30. The results of analysis reveal that its concentration in the wastewater is at a low level. This is due not only to the small amount used but also from dilution by a large volume of water used in the process. Therefore, this

*Superseded
with Board
Order 91-043
9/18/91*

discharge is considered to contain insignificant amounts of hazardous or designated wastes and thereby is exempt from the provisions of Subchapter 15, Chapter 3 of the California Administrative Code.

5. Domestic sewage from 200 workers is discharged into the City of Coachella's sewerage system.
6. There are no wells within 200 feet of the disposal area. Depth to shallow ground water in the area is approximately eight (8) feet.
7. The discharge from this industrial plant has been subject to waste discharge requirements adopted in Board Order No. 80-71.
8. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Regional Board on November 14, 1984. The Basin Plan contains water quality objectives for Coachella Hydrologic Subunit.
9. The beneficial uses of the ground waters of the Coachella Hydrologic Subunit are:
 - a. Municipal supply
 - b. Industrial supply
 - c. Agricultural supply
10. The disposal basin is located in the Indio Subarea of the Coachella Hydrologic Subunit. Shallow ground waters at this location are isolated from deep ground waters by a clay aquitard, are influenced by agricultural operations, are brackish, and enter irrigation drains and flow to Salton Sea.
11. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
12. The Board in a public meeting heard and considered all comments pertaining to the discharge.
13. These waste discharge requirements govern an existing facility, which the discharger is currently operating, and therefore is exempt from the provisions of the California Environmental Quality Act in accordance with Section 15301 of Title 14, Chapter 3 of the California Administrative Code.

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

A. Discharge Specifications

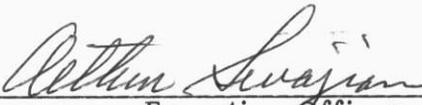
1. Neither the treatment nor the discharge of wastewater shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.

2. Wastewater discharged to land shall be substantially free of settleable and floatable materials.
3. Wastewater shall be contained within the discharge area designated in Finding No. 2 (above), by means of a berm that would provide a minimum freeboard depth of one foot.
4. There shall be no direct discharge of wastewater to agricultural tile drains or drainage channels.
5. Adequate protective measures shall be provided to assure that flood or surface drainage waters do not erode or otherwise render portions of the disposal facilities inoperable.

B. Provisions

1. Prior to any modifications of this facility which would result in material change in the quality or quantity of wastewater discharged, or any material change in location of discharge, the discharger shall report in writing to the Regional Board.
2. In the event of any change in the operation, or in control or ownership of land and/or waste disposal facilities owned or controlled by the discharger, the discharger shall:
 - a. Notify the Board of such change; and
 - b. Transmit a copy of this Order to the succeeding owner or operator, and file a copy of the transmittal letter with this Board.
3. The discharger shall comply with "Monitoring and Reporting Program No. 86-29", and future revisions thereto, as specified by the Executive Officer.
4. This Order supersedes Board Order No. 80-71.

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 May 24, 1986.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 86-029 (REVISION NO. 2)

FOR
CRITON ARMTEC
South of Coachella - Riverside County

Location of Discharge: NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 8 T6S, R8E, SBB&M (Near intersection
of Tyler Street and Avenue 53)

MONITORING

A. EFFLUENT MONITORING

Discharge of wastewater from building No. 3 to ponds No. 1, 2, 3, and 4 and discharge from building No. 9 to ponds No. 5, 6, and 7 shall be separately monitored for constituents indicated below. Separate composite samples for the two discharges shall be collected as follows:

1. Discharge From Building No. 3

A single composited sample shall be collected and analyzed, and will consist of the following:

- a) 50 percent of sample volume shall be composed of grab samples collected from ponds No. 1, 2, 3, and 4. These grab samples shall be collected in equivalent volume at a minimum of 2 different locations within each pond, and optimally in the corners of the pond opposite the effluent discharge pipe.
- b) 50 percent of sample volume shall be composed of an 8 hour composite of effluent from the discharge pipe(s) feeding ponds No. 1, 2, 3, and 4. This 8 hour composite shall consist of grab samples collected at least every two hours from every discharge point feeding the ponds.

Individual samples collected for VOC analyses shall be properly chilled immediately following collection, and should be composited into an approved sample container at the end of the 8 hour sampling period.

2. Discharge from Building No. 9

Sampling and compositing for this discharge shall be done using the same procedure as described in A.1.

REPLACED BY
86-029 (REV 3)
3/9/90

Samples No. 1 and 2 above shall be analyzed as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
1. Total Dissolved Solids	mg/l	Composite	Monthly
2. Sulfates (SO ₄)	mg/l	Composite	Monthly
3. Settleable Matter	mg/l	Composite	Monthly
4. Suspended Solids	mg/l	Composite	Monthly
5. Nitrocellulose	mg/l	Composite	Monthly
6. pH	pH Units	Composite	Monthly
7. Chemical Oxygen Demand (COD)	mg/l	Composite	Monthly
8. Cyanide	mg/l	Composite	Monthly
9. Trivalent Chromium	mg/l	Composite	Monthly
10. Total Chromium	mg/l	Composite	Monthly
11. Aluminum	mg/l	Composite	Monthly
12. Volatile Organic Compounds (VOC) including:			
a. Epichlorohydrin	mg/l	Composite	Monthly
b. 1,3-Dichloro-2-Propanol	mg/l	Composite	Monthly
c. 3-Chloro-1,2-Dihydroxypropane	mg/l	Composite	Monthly
d. Methylene Chloride	mg/l	Composite	Monthly
e. Acetone	mg/l	Composite	Monthly
f. Total Xylenes	mg/l	Composite	Monthly
g. N-Hexane	mg/l	Composite	Monthly
h. DPA (Diphenylamine)	mg/l	Composite	Monthly
i. Styrene	mg/l	Composite	Monthly
j. Akardite	mg/l	Composite	Monthly
k. Acrylonitrile	mg/l	Composite	Monthly
13. Bioassays	-		Quarterly

Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Board Executive Officer. *Primephales promelas* (Fathead Minnow) and *Ceriodaphnia* are suggested test species which may be utilized. The bioassays must be conducted in accordance with the protocol given in EPA/600/4-85/014 - Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organism. The aforementioned type of wastewater composite sample shall be used for these bioassays.

In addition, a one time bioassay test shall be performed according to EPA/600/4-85/014 on an approved fish species and invertebrate species, using DPA (diphenylamine used at the discharger's facility) and appropriate dilution water only (i.e. without addition of any wastewater).

Also, average daily flows of the effluent discharged from Building No. 3 and Building No. 9 shall be recorded in gallons-per-day on a daily basis, and reported to the Regional Board monthly.

B. GROUND WATER MONITORING

The Discharger shall obtain representative samples of ground water from the existing one upgradient and seven downgradient monitoring wells for analyses of constituents indicated below:

<u>Constituent</u>	<u>Unit</u>	<u>Sampling Frequency</u>
1. Total Dissolved Solids	mg/l	Semi-Annually
2. Sulfates	mg/l	Semi-Annually
3. Nitrates (NO ₃ -N)	mg/l	Semi-Annually
4. Chemical Oxygen Demand (COD)	mg/l	Semi-Annually
5. pH	-	Semi-Annually
6. Cyanide	mg/l	Semi-Annually
7. Trivalent Chromium	mg/l	Semi-Annually
8. Total Chromium	mg/l	Semi-Annually
9. Aluminum	mg/l	Semi-Annually
10. Nitrocellulose	mg/l	Semi-Annually
11. Volatile Organic Compounds (VOC) including:	mg/l	Semi-Annually
a. Epichlorohydrin	mg/l	Semi-Annually
b. 1,3 Dichloro-2-Propanol	mg/l	Semi-Annually
c. 3-Chloro-1,2-Dihydroxypropane	mg/l	Semi-Annually
d. Methylene Chloride	mg/l	Semi-Annually
e. Acetone	mg/l	Semi-Annually
f. Total Xylenes	mg/l	Semi-Annually
g. N-Hexane	mg/l	Semi-Annually
h. DPA (Diphenylamine)	mg/l	Semi-Annually
i. Styrene	mg/l	Semi-Annually
j. Akardite	mg/l	Semi-Annually
k. Acrylonitrile	mg/l	Semi-Annually

In addition, the wastewater shall be sampled monthly at the tile line inspection well located about 200 feet south of the southeast corner of the ponds for DPA.

The collection, preservation and holding times of all samples shall be in accordance with the EPA recommended methods for the aforementioned constituents. The laboratory performing the analyses shall be certified by the State of California, Department of Health Services.

REPORTING

Monitoring reports due monthly shall be submitted to the Regional Board by the fifteenth day of the following month. Quarterly reports shall be submitted by January 15, April 15, July 15, and October 15 of each year. Semi-Annual reports shall be submitted by July 15 and January 15 of each year. Results of the aforementioned "one-time bioassay test" shall be submitted by not later than October 15, 1989.

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:

Phil Greenberg
Executive Officer

8-4-89
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 86-029 (REVISION NO. 3)
FOR
CRITON ARMTEC

Location of Discharge: NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 8, T6S, R8E, SBB&M (Near intersection of Tyler Street and Avenue 53)

MONITORING

A. EFFLUENT MONITORING

1. Discharge of wastewater from building No. 3 to ponds 1, 2, 3, and 4 and from building No. 9 to ponds 5, 6, and 7 shall be monitored for constituents indicated below. A single composited sample shall be collected for analyses as follows:
 - a. Twenty-five percent by volume of the composited sample shall be composed of grab samples collected from ponds No. 1, 2, 3, and 4. These grab samples shall be collected in equal volumes at a minimum of 2 different locations in each pond, preferably at the corners of the pond opposite the effluent discharge pipe.
 - b. Twenty-five percent by volume of the composited sample shall be composed of grab samples collected as described in Item 1.a., from ponds No. 5, 6, and 7.
 - c. Twenty-five percent by volume of the composited sample shall be composed of an 8-hour composite of effluent from the discharge pipe feeding ponds No. 1, 2, 3, and 4. This 8-hour composite shall consist of grab samples collected at least every two hours from the discharge pipe feeding the ponds.
 - d. Remaining twenty-five percent by volume of the composited sample shall be composed of an 8-hour composite of effluent from the discharge pipe feeding ponds No. 5, 6, and 7, and shall be collected as described in Item 1.c.
2. Individual samples collected for volatile organic compounds analyses shall be properly chilled immediately following collection, and should be composited into an approved sample container at the end of the 8-hour sampling period.

The composited sample shall be analyzed for the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
<u>a. Inorganic</u>			
1) Total Dissolved Solids	mg/l	8-Hr. Composite	Monthly
2) Settleable Matter	ml/l	8-Hr. Composite	Monthly
3) Suspended Solids	mg/l	8-Hr. Composite	Monthly
4) pH	-	8-Hr. Composite	Monthly
5) Chemical Oxygen Demand (COD)	mg/l	8-Hr. Composite	Monthly
6) Trivalent Chromium	mg/l	8-Hr. Composite	Monthly
7) Hexavalent Chromium	mg/l	8-Hr. Composite	Monthly
<u>b. Organic</u>			
1) Total xylenes	µg/l	8-Hr. Composite	Quarterly
2) Methylene Chloride	µg/l	8-Hr. Composite	Quarterly
3) Acetone	µg/l	8-Hr. Composite	Quarterly
4) N-Hexane	µg/l	8-Hr. Composite	Quarterly
5) Benzene	µg/l	8-Hr. Composite	Quarterly
6) Ethyl Benzene	µg/l	8-Hr. Composite	Quarterly
7) Toluene	µg/l	8-Hr. Composite	Quarterly
8) Diethylene Oxide	µg/l	8-Hr. Composite	Quarterly
9) 4-Methyl-2-Pentanone	µg/l	8-Hr. Composite	Quarterly
10) Styrene	µg/l	8-Hr. Composite	Quarterly
11) Diphenylamine (DPA)	µg/l	8-Hr. Composite	Monthly
<u>c. Other Parameters</u>			
1) Total Daily Discharge	GPD	-	Daily
2) Bioassays	-	-	Quarterly

Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Board Executive Officer. Pimephales promelas (Fathead Minnow) and Ceriodaphnia are suggested test species which may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/4-85/013 Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms.

B. TILE LINE DISCHARGE MONITORING

1. Wastewater infiltrating beneath the ponds shall be sampled as indicated below at the tile line inspection well, located about 200 feet south of the southeast corner of the ponds.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
<u>a. Inorganic</u>			
1. Total Dissolved Solids	mg/l	Grab	Quarterly
2. pH	-	Grab	Quarterly
3. Chemical Oxygen Demand	mg/l	Grab	Quarterly
4. Trivalent Chromium	mg/l	Grab	Quarterly
5. Hexavalent Chromium	mg/l	Grab	Quarterly
<u>b. Organic</u>			
1. Total Xylenes	µg/l	Grab	Quarterly
2. Methylene Chloride	µg/l	Grab	Quarterly
3. Acetone	µg/l	Grab	Quarterly
4. N-Hexane	µg/l	Grab	Quarterly
5. Benzene	µg/l	Grab	Quarterly
6. Ethyl Benzene	µg/l	Grab	Quarterly
7. Toluene	µg/l	Grab	Quarterly
8. Diethylene Oxide	µg/l	Grab	Quarterly
9. 4-Methyl-2-Pentanone	µg/l	Grab	Quarterly
10. Styrene	µg/l	Grab	Quarterly
11. Diphenylamine	µg/l	Grab	Monthly

The collection, preservation and holding times of all samples shall be in accordance with the EPA recommended methods for the aforementioned constituents. The laboratory performing the analyses shall be certified by the State of California, Department of Health Services.

REPORTING

Monthly and daily monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year.

Submit 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:

Philip A. Guenzberg
Executive Officer

3-6-90
Date

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

**MONITORING AND REPORTING PROGRAM NO. 86-29 (REVISION NO. 1)
FOR
CRITON ARMTEC
South of Coachella - Riverside County**

Location of Discharge: NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 8 T6S, R8E, SBB&M (Near intersection of Tyler Street and Avenue 53).

EFFLUENT MONITORING

- I. The wastewater shall be sampled at the point of discharge for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	8-Hr Composite	Monthly
Settleable Matter	mg/l	8-Hr Composite	Monthly
Suspended Solids	mg/l	8-Hr Composite	Monthly
pH	pH Units	Grab	Monthly
Average Daily Flow	Gallons	-	Monthly
DPA (Diphenylamine)	mg/l	Grab	Monthly

- II. The wastewater shall be sampled monthly at the tile line inspection well located about 200 feet south of the southeast corner of the discharge field for diphenylamine (DPA).

*Superseded by
86-29 (R-2)
8-4-89*

REPORTING

The monthly monitoring reports shall be submitted to the Regional Board by the 15th day of each succeeding month.

In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements.

Ordered by:

Arthur Swajon
Executive Officer

June 16, 1986
Date

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

MONITORING AND REPORTING PROGRAM NO. 86-29
FOR
CRITON ARMTEC
South of Coachella - Riverside County

Location of Discharge: NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 8, T6S, R8E, SBB&M (Near intersection of Tyler Street and Avenue 53).

EFFLUENT MONITORING

- I. The wastewater shall be sampled at the point of discharge for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	24-Hr Composite	Monthly
Settleable Matter	mg/l	24-Hr Composite	Monthly
Suspended Solids	mg/l	24-Hr Composite	Monthly
pH	pH Units	Grab	Monthly
Average Daily Flow	Gallons	-	Monthly
DPA (Diphenylamine)	mg/l	Grab	Monthly

- II. The wastewater shall be sampled monthly at the tile line inspection well located about 200 feet south of the southeast corner of the discharge field for diphenylamine (DPA).

*Replaced by
86-29 Rev. 1)*

REPORTING

The monthly monitoring reports shall be submitted to the Regional Board by the 15th day of each succeeding month.

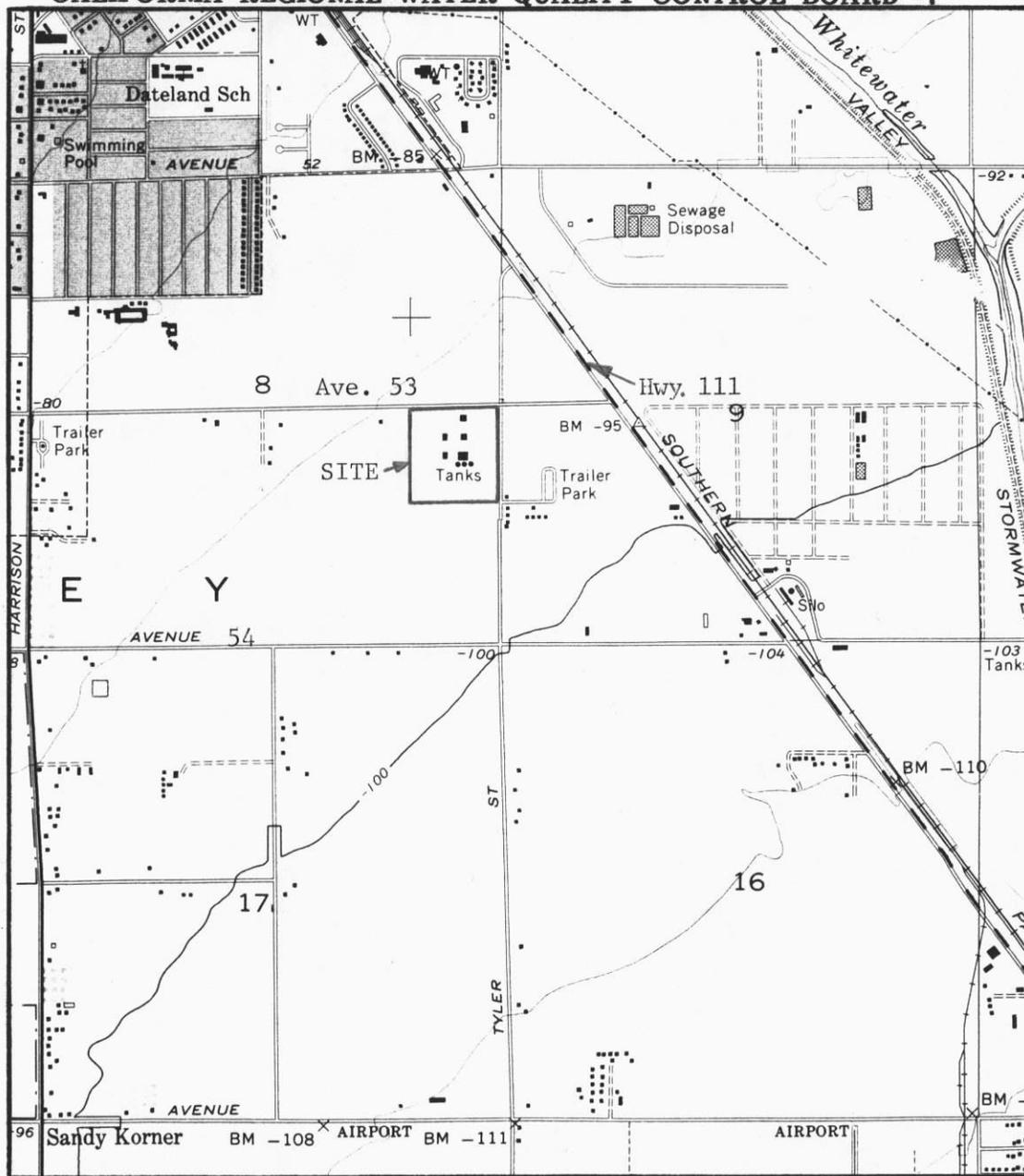
In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements.

Ordered by:

Arthur Seogian
Executive Officer

May 21, 1986
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD -7



SITE MAP NO. 1
CRITON ARMTEC
South of Coachella - Riverside County
NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 8, T6S, R8E, SBB&M
USGS Indio 7.5 min. Topographic Map

