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

### ORDER NO. 88-45

## WASTE DISCHARGE REQUIREMENTS FOR IT CORPORATION IMPERIAL VALLEY FACILITY LC-2 AND LC-3, CLASS I SOLID WASTE MANAGEMENT UNITS Imperial County

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

- 1. IT Corporation (hereinafter also referred to as the discharger), 23456 Hawthorne Boulevard, Torrance, California, 90505, submitted a Report of Waste Discharge dated September 30, 1987.
- The discharger's operations are contained on its privately owned 640-acre tract comprising Section 16, T13S, R12E, SBB&M. A site plan of said Section 16 is shown in Attachment A appended hereto as part of this Order.
- 3. The discharger currently operates waste management units at the site under Board Orders No. 84-111 and 85-80. The operation of surface impoundments No. 3, 5, 8, and 9 is covered by Order No. 84-111 as adopted by the Regional Board on November 14, 1984. The operation of the LC-1 Landfill, a Class I Solid Waste Management Unit, is covered by Order No. 85-80 as adopted by the Regional Board on November 20, 1985.
- 4. The discharger proposes to construct two new Class I Solid Waste Management Units (SWMU) at the locations shown on Attachment "A". The LC-2 SWMU will cover an area of 10 acres and have a capacity of 750,000 cubic yards. The LC-3 SWMU will cover an area of 8 acres and have a capacity of 500,000 cubic yards.
- 5. The LC-2 and LC-3 SWMUs (described above) may receive wastes as categorized below. Monthly monitoring reports detailing the amount and type of wastes received into the units described above will be submitted to the Regional Board. Additional waste types may be accepted if written approval is given by the Regional Board's Executive Officer. The wastes listed below are broadly classified and are subject to other restrictions within this Order:

#### Waste Type

491

#### Inorganics

Aqueous solution with total organic residues-	
Residues 10 percent or more	133
Other inorganic solid waste	181

#### Organics

Oil/water separation sludge	222
Unspecified oil-containing waste	223
Other pesticide waste	232
Tank bottom waste	<b>241</b>
Polymeric resin waste	272
Latex waste	291
Biologic waste other than sewage sludge	322
Organic solids with halogens	351
Other organic solids	352

#### Sludges

Unspecified sludge waste

#### Miscellaenous

Empty pesticide containers	
30 gallons or more	511
Other empty containers -	
30 gallons or more	512
Less than 30 gallons	513
Drilling mud	521
Contaminated soil from site cleanups	611

- 6. Manifests are to be utilized for hauling and disposal of all hazardous wastes, wherein the waste producer, hauler, and discharger will certify compliance with State regulations by documenting their proper handling of the wastes.
- 7. The discharger reports as follows: the LC-2 SWMU will be excavated approximately 40 feet below existing grade. The removed soils will be used to construct an embankment around the excavated area which will be 2 to 13 feet above existing grade. The bottom and sides of the prepared excavation will be lined with 3 feet of compacted clay. The clay liner, including bottom and sides, will be designed to have a permeability of less than 1 x 10  $^{-7}$  cm/sec and will be tested after construction to verify that the expected permeability has been achieved. A double synthetic liner system with both leak detection and leachate collection and removal systems will be installed over the completed synthetic liner system prior to receipt of wastes.

<sup>&</sup>lt;sup>1</sup> Department of Health Services Waste Manifest Reporting Requirements (Table III), 1987

- 8. The discharger reports as follows: the LC-3 SWMU will be excavated approximately 30 feet below existing grade with the removed soils to be used to construct an embankment around the excavated area which will be 2 to 14 feet above existing grade. Construction of the clay liner, synthetic liner system, and protective soil cover for the LC-3 SWMU will be the same as for the LC-2 SWMU as described above (Finding No. 7).
- 9. Final covers will be installed over SWMUs LC-2 and LC-3 after they are filled to capacity. The discharger reports that the final cover systems will consist of the following components in descending order:
  - a. <u>Soil Cover</u>: Two-foot minimum thickness of soil cover with the top foot stabilized with a soil binder followed by a polymer sealant surface treatment.
  - b. <u>Geotextile:</u> Acts as a drain layer and helps to maintain the soil cover on slope.
  - c. <u>Synthetic Cover Liner:</u> 80 mil high density polyethylene (HDPE) synthetic liner with textured surfaces.
  - d. <u>Clay Cover:</u> Two-foot minimum thickness of compacted clay with permeability of  $1 \times 10^{-7}$  cm/sec or less.
  - e. Foundation: Two-foot thickness of compacted selected waste.
- 10. SWMUs will receive only solid wastes. For the purposes of this Order, solid waste is defined as waste that contains no free liquid as prescribed in Prohibition B.3. of this Order.
- 11. Liquid waste may be generated on site from the following sources:
  - a. Liquids removed from leachate and leak detection systems.
  - b. Rainfall upon the deposited wastes.
  - c. Purged water from ground water monitoring wells.
  - d. Liquids generated from the on-site laboratory.
  - e. Liquids from cleaning of equipment or trucks.
- 12. Liquid wastes generated on-site will be stored in above-ground tanks.
- 13. Prior to construction operations, the site was undeveloped desert land. The area immediately adjacent to the site is also undeveloped desert land managed by the U. S. Bureau of Land Management. The nearest dwelling is a farmhouse, approximately one mile to the east. The desert land at the site consists of shallow alluvial soils, underlain by partially indurated clays, silts, and silty sands. Ground water first occurs at depths of 50 to 100 feet below ground surface and has total dissolved solids concentrations that range from 1600 mg/l to 9000 mg/l. Average annual rainfall is less than 3 inches and average annual evaporation is greater than one hundred inches. The nearest surface water, the Westside Main Canal, is located one and one half miles east of the site.

- 14. The main drainage channel, which approximately bisects the site, has been improved and is maintained to accommodate a projected 100-year flood from the upslope areas. Wastes contained in disposal units are set back 100 feet from the channel banks. Perimeter drainage is provided for a 100-year flood. Drainage not in contact with waste material is being directed off site. Polluted drainage will remain on site.
- 15. The discharger reports that both the LC-2 and LC-3 SWMUs are underlain by naturally occurring geologic material with permeabilities of not more than 1 x  $10^{-7}$  cm/sec and of sufficient thickness to provide a barrier to vertical movement of fluid from the SWMUs to waters of the State in accordance with Subsection 2531(b)(1) of Subchapter 15, Chapter 3, Title 23 of the California Code of Regulations. The discharger will verify that the underlying geologic materials exposed by the excavations meet the permeability requirements to the satisfaction of the Regional Board's Executive Office.
- 16. The discharger reports that the proposed LC-2 and LC-3 SWMU excavations will expose soils on the sides of the excavations that may have permeabilities of greater than  $1 \times 10^{-7}$  cm/sec and consequently artificial barriers will be constructed on the sloped sides of the excavations prior to construction of the liner systems. The artificial barriers will consist of three feet of clay compacted to achieve permeabilities of less than  $1 \times 10^{-7}$  cm/sec. These clay barriers will act as a base on which an additional three feet of compacted clay will be constructed across the sides and bottoms of the excavations as described in Finding No. 7. Construction of these artificial barriers (clay) on the sloped sides will be done in accordance with Subsection 2531(b)(2) of said Subchapter 15 to the satisfaction of the Regional Board's Executive Officer.
- 17. The discharger reports that both the LC-2 and LC-3 SWMUs will have 200foot setbacks from any known Holocene fault and that said SWMUs will be located outside areas of potential rapid geologic change.
- 18. SWMUs meeting the siting requirements described in Findings No. 14, 15, 16, and 17 (above) are classified as Class I Units in accordance with said Subchapter 15.
- 19. The discharger will notify the Regional Board after completion of the following SWMU construction constructions and will request that said construction receive Regional Board staff inspections and Regional Board Executive Officer approval before additional construction is begun:
  - a. Excavation of the SWMUs.
  - b. Installation of the clay liners.
  - c. Installation of the leak detection and leachate collection and removal systems.

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- 20. Proposals for ground water monitoring networks and vadose zone monitoring networks at the LC-2 and LC-3 SWMUs have been submitted by the discharger. These proposals are being reviewed by Regional Board staff to assure compliance with requirements in Article 5 of said Subchapter 15. Written approval from the Regional Board's Executive Officer shall be obtained prior to implementation of the proposals. Both the ground water and vadose zone monitoring systems will be in place and functioning to the satisfaction of the Regional Board's Executive Officer prior to the disposal of wastes into a SWMU. The approved monitoring networks may also be used for closure and post-closure monitoring as required by said Subchapter 15.
- 21. The discharger has filed an operation and closure plan, and plans for financing site closure and long-term maintenance.
- 22. On August 13, 1980, Imperial County Planning Department adopted Environmental Impact Report No. 226-79 for this disposal site. Said EIR was updated on December 6, 1983, as "Final EIR for Amended CUP 457-80" (SCH #79090501(a)).
- 23. 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 Imperial Hydrologic Unit.
- 24. The Board has notified the discharger and interested agencies and persons of its intent to review and possibly adopt discharge requirements for the proposed discharges into said SWMUs.
- 25. The Board in a public meeting heard and considered all comments pertaining to the discharge.
- IT IS HEREBY ORDERED, IT Corporation shall comply with the following:
- A. Discharge Specifications
  - 1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
  - 2. Waste materials shall not be discharged outside the proposed new SWMUs shown on Attachment A.
  - 3. The SWMUs shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of a 100-year return period as set forth in the current edition of the California Code of Regulations, Title 23, Chapter 3, Subchapter 15.
  - 4. The discharge of wastes into the LC-2 and LC-3 SWMUs at the site shall be limited to the following unless prior approval is given by the Regional Board's Executive Officer:

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#### Waste Type

### California Water Code

491

### Inorganics

Aqueous solution with total organic residues-	
Residues 10 percent or more	133
Other inorganic solid waste	181
Organics	
Oil/water separation sludge	222
Unspecified oil-containing waste	223
Other pesticide waste	232

Tank bottom waste	241
Polymeric resin waste	272
Latex waste	291
Biologic waste other than sewage sludge	322
Organic solids with halogens	351
Other organic solids	352

### Sludges

Unspecified sludge waste

#### Miscellaneous

Empty pesticide containers	
30 gallons or more	511
Other empty containers -	
30 gallons or more	512
Less than 30 gallons	513
Drilling mud	521
Contaminated soil from site cleanups	611

- 5. Wastes described in Discharge Specification 4 (above) shall not be accepted for disposal into the LC-2 or LC-3 SWMUs if they meet or exceed any of the criteria listed below:
  - a. Flammable solids or oxidizers (as defined in 49 CFR 173.150 and .151).
  - b. Reactive wastes (as defined in Section 66705, Title 22 of the California Code of Regulations).
  - c. Wastes containing materials that exceed ten (10) times the total threshold limit concentrations (TTLC) listed in Sections 66999 (b) and (c), Title 22 of the California Code of Regulations.
- 6. Waste material, and any water that has contacted the waste materials, shall be contained in those areas designated for the particular wastes.
- 7. Waste confinement barriers shall be protected and maintained to ensure their effectiveness.

- 8. All site facilities shall be designed and constructed to minimize damage to the graded foundation or to the structures which control leachate, surface drainage, erosion, and gas due to the maximum credible earthquake.
- 9. There shall be no seepage or overflow from the SWMUs.
- 10. Ponded liquids observed in the SWMUs shall be removed and discharged to appropriate facilities. Liquid removed from the leak detection and leachate collection systems shall be collected, analyzed, and discharged to the appropriate facility.
- 11. The discharger shall prevent any transport of waste by wind from SWMUs through the active operational and post-closure periods.
- 12. The SWMUs shall be designed, constructed and operated as described in Findings No. 7, 8, 16, and 19, above; and construction shall be in accordance with the then current edition of Subchapter 15, Chapter 3, Title 23 of the California Code of Regulations.
- 13. The discharger shall place the waste in such a manner as to facilitate and maximize evaporative loss.
- 14. The discharger shall perform waste compatibility testing on all liner components as required by Section 2541 of said Subchapter 15. The data shall be submitted and approved by the Executive Officer prior to discharge of any wastes.
- 15. The discharger shall remove and relocate any wastes which are discharged at this site, in violation of these requirements.
- 16. Upon closure, the completed SWMUs shall be covered, graded, and maintained in conformance with a closure plan approved by the Regional Board's Executive Officer.
- 17. The SWMUs shall receive final inspections of construction by Regional Board staff, and approval by the Executive Officer, prior to the discharge of wastes into said Units.
- 18. The discharger shall establish an irrevocable closure fund, or provide other acceptable means, to ensure closure and post-closure maintenance of the SWMUs.
- 19. Wastes which conform to the definition of extremely hazardous waste in Section 25115 of the Health and Safety Code, such as waste which contains a substance listed in Section 66685, Title 22, of the California Code of Regulations shall not be accepted for disposal unless specifically approved by a written permit from the California Department of Health Services, and written approval from the Regional Board.
- B. Prohibitions
  - 1. The discharge of waste to surface drainage courses or to ground water is prohibited.
  - 2. Waste shall not be accepted for disposal if it contains a substance which is all of the following:

- a. A material that has toxicity upon inhalation that causes it to be toxic as defined by criteria adopted by the California Department of Health Services, or as listed in Section 66680, Title 22, of the California Code of Regulations with an indication that it is toxic; and
- b. A substance with a vapor pressure exceeding one (1) mm mercury at  $20^{\circ}$ C; and
- c. Present in the waste in a concentration greater than ten (10) percent by weight.
- 3. The placement of bulk liquid hazardous wastes or free liquid contained in hazardous wastes (whether or not absorbents have been added) in the SWMUs is prohibited. The procedure for determination of free liquid in a hazardous waste shall be the standard EPA approved method contained in Attachment "B", appended hereto as a part of this Order.
- C. Provisions
  - 1. The discharger shall maintain a copy of this Order at the site to be available at all times to site operating personnel.
  - 2. The discharger shall maintain a legible record using a reporting form approved by the Executive Officer, of the volume and type of each waste received at the site and the manner and location of disposal. The record shall be maintained for a period of not less than ten (10) years, with the records to be forwarded to the Board when disposal operations cease.
  - 3. The discharger shall update the operation plan when material changes in operations are made; and a letter shall be submitted to the Regional Board annually indicating compliance or noncompliance with said plan. The plan shall conform to the then current editions of said Subchapter 15.
  - 4. The discharger shall comply with "Monitoring and Reporting Program No. 88-45" and future revisons thereto, as specified by the Regional Board Executive Officer.
  - 5. This Board Order is specifically in regards to discharges into the above specified SWMUs. Prior to the beginning of construction of any additional waste management unit for discharge of the above listed wastes, the discharger shall submit a completed report of proposed discharge and receive an adopted Order by the Regional Board.
  - 6. A detailed ground water and vadose zone detection monitoring program shall be submitted and approved by the Executive Officer. The monitoring program shall include specifications of well placement, screening, procedures for well development, as well as a detailed sampling and analysis plan. The monitoring program shall also be in full compliance with Article 5 of said Subchapter 15, and shall be implemented and operating prior to deposition of wastes.
  - 7. At least ten (10) days prior to discharge of any wastes into a SWMU, the discharger shall submit to the Regional Board a technical report showing the construction of the SWMU, and a certificate signed by a California Registered Civil Engineer or a Certified Engineering Geologist stating that the SWMU is constructed to meet the requirements of this Order.

- 8. Prior to any change of ownership of these facilities/operations, the discharger shall transmit a copy of this Order to the succeeding owner/operator, and forward a copy of the transmittal letter to this Board.
- 9. This Order does not authorize violation of any federal, state, or local laws or regulations.
- 10. The discharger shall maintain an impermeable road surface on the Garvey Road bridge at the Westside Main Canal to prevent any materials on the bridge from entering the canal. The discharger shall maintain a surface water drainage system to prevent lateral runoff from the bridge or its approaches from entering the Westside Main Canal.

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  $\_JUN 3 \cap 1988$ 

Officer Executive



ATTACHMENT A

## IT CORPORATION IMPERIAL VALLEY FACILITY

Class I Solid Waste Management Units (SWMU) LC-2 SWMU and LC-3 SWMU

> Section 16, T13S, R12E, SBB&M West of Westmorland - Imperial County

> > ORDER NO. 88-45

## ATTACHMENT B

## U. S. ENVIRONMENTAL PROTECTION AGENCY METHOD 9095

### PAINT FILTER LIQUIDS TEST

# 1.0 Scope and application

- 1.1 This method is used to determine the presence of free liquid in a representative sample of waste.
- 1.2 The method is used to determine compliance with Prohibition B.3. of Order No. 88-45.

### 2.0 Summary of method

2.1 A predetermined amount of material is placed in a paint filter. If any portion of the material passes through and drops from the filter within the 5 minute test period, the material is deemed to contain free liquid.

### 3.0 Interferences

3.1 Filter media was observed to separate from the filter cone on exposure to alkaline materials. This development causes no problem if the sample is not disturbed.

## 4.0 Apparatus and Materials

- 4.1 Conical paint filter mesh number 60. Available at local paint stores such as Sherwin-Williams and Glidden for an approximate cost of \$0.07 each.
- 4.2 Glass Funnel (If the paint filter, with the waste, cannot sustain its weight on the ring stand, then a fluted glass funnel or glass funnel with a mouth large enough to allow at least one inch of filter mesh to protrude should be used to support the filter. The funnel is to be fluted or have a large open mount in order to support the paint filter yet not interfere with the movement, to the graduated cylinder, of the material that passes through the filter mesh.)
- 4.3 Ring Stand and Ring, or Tripod.
- 4.4 Beaker or Graduated Cylinder, 100 ml.

### 5.0 Reagents

5.1 None

### 6.0 Sample Collection, Preservation and Handling

- 6.1 All samples must be collected according to the directions in Section One of U.S. Environmental Protection Agency guidance document SW-846.
- 6.2 A 100 ml or 100 g representative sample is required for the test. (If it is not possible to obtain a sample of 100 ml or 100 g that is sufficiently representative of the waste, the analyst may use larger size samples in multiples of 100 ml or 100 g, i.e., 200, 300, 400 ml or g. However, when larger samples are used, analysts shall divide the sample into 100 ml or 100 g portions and test each portion separately. If any portion contains free liquid the entire sample is considered to have free liquid. If the percent of free liquid in the sample needs to be determined, it shall be the average of the subsamples tested.)

#### 7.0 Procedure

- 7.1 Assemble test apparatus.
- 7.2 Place sample in the filter. A funnel may be used to provide support for the paint filter.
- 7.3 Allow sample to drain for 5 minutes into the graduated cylinder.
- 7.4 If any portion of the test material collects in the graduated cylinder in the 5-minute period, then the material is deemed to contain free liquid for purposes of Prohibition B.3. of Order No. 88-45.

## 8.0 Quality Control

8.1 Duplicate samples should be analyzed on a routine basis.

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

## MONITORING AND REPORTING PROGRAM NO. 88-45 FOR IT CORPORATION IMPERIAL VALLEY FACILITY LC-2 AND LC-3, CLASS I SOLID WASTE MANAGEMENT UNITS Imperial County

Site Location: Section 16, T13S, R12E, SBB&M

### MONITORING

IT Corporation shall report monitoring data to the Regional Board in accordance with the following schedule:

### A. Waste Monitoring

- 1. The following information shall be reported monthly to the Regional Board concerning each load of waste accepted for disposal into the SWMU:
  - a. Quantity of each waste received in gallons, tons, or cubic yards.
  - b. Type of waste received classified by the general categories of wastes which have been approved for disposal into the SWMU.
  - c. Manifest number of the waste.
  - d. Date of receipt of the waste.
- 2. The discharger shall annually submit a report concerning each approved waste other than emergency discharges which the discharger plans to continue to accept for disposal into the SWMU. Said report shall contain the following information:
  - a. An analysis of each waste not in excess of 60 days old. If no waste of a specific type has been received during the last 60 days of the calendar year, the discharger shall submit the latest available analysis.
  - b. A statement concerning the maximum anticipated concentrations of hazardous constituents in the waste.
  - c. Anticipated maximum quantity of material to be discharged on a quarterly basis.
- B. Solid Waste Management Unit Monitoring
  - 1. The discharger shall inspect the SWMU containment structures weekly and report the results of the inspections monthly. The report shall contain the following information:

- a. Detection of liquid and quantity thereof within the leachate collection system, and disposition of any leachate recovered.
- b. Detection of liquid and quantity thereof within the leak detection system, and disposition of any leachate recovered.
- c. Any apparent seepage from the SWMU structure.
- d. General condition of the berms.
- e. Steps taken to correct any problems found during inspection, and when taken.
- f. A map showing the location and depth of waste placed within the SWMU since the last report, at five (5) foot depth intervals.
- g. On an annual basis the leak detection system and leachate collection and removal system shall be tested to ensure they are operating properly. The discharger shall report the results of this testing in the annual report.

### C. Ground Water Monitoring

1. Upon completion of each approved ground water monitoring well, the discharger shall obtain four (4) consecutive quarterly samples and analyze for the following constituents:

Constituent	Unit
*pH	pH Units
*Specific Conductance	micromhos/cm
Total Dissovled Solids (TDS)	mg/l
*Total Organic Carbon (TOC)	mg/l
Chemical Oxygen Demand (COD)	mg/l
*Total Organic Halogen	mg/l
Magnesium (Mg)	mg/l
Total Alkalinity	mg/l
Calcium (Ca)	mg/l
Sodium (Na)	mg/l
Lithium (Li)	mg/l
Potassium (K)	mg/l
Chloride (Cl)	mg/l
Fluoride (F)	mg/l
Nitrate (NO <sub>3</sub> as N)	mg/l
Nitrite (NO $_2$ as N)	mg/l
Phosphate, Total (P)	mg/1
Sulfate (SO <sub>4</sub> )	mg/l
Sulfide (S)	mg/1
Oil and Grease	_ mg/l
Total Phenols	mg/l

<sup>\*</sup>Four replicate analyses to be performed on each sample

Constituent	Unit
Radium	pCi/l
Gross Alpha	pCi/l
Gross Beta	mrem/year
Coliform Bacteria (Total)	MPN/100 ml
Arsenic (As)	mg/l
Barium (Ba)	mg/l
Cadmium (Cd)	mg/l
Chromium (Cr)	mg/l
Copper (Cu)	mg/l
Iron (Fe)	mg/l
Lead (Pb)	mg/1
Manganese (Mn)	mg/1
Mercury (Hg)	mg/l
Nickel (Ni)	mg/l
Selenium (Se)	mg/l
Silver (Ag)	mg/l
Zinc (Zn)	mg/l
Endrin	mg/l
Lindane	mg/l
Methoxychlor	mg/l
Toxaphene	mg/l
2,4-D	mg/l
2,4,5-TP Silvex	mg/l

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2. Upon completion of the sampling program described in Section C.1., representative samples of ground water shall be obtained from each ground water monitoring well and analyzed for the following constituents:

Constituent	Unit	Frequency
Total Dissolved Solids	mg/l	Quarterly
Specific Conductance	micromhos/cm	Quarterly
pH	pH Units	Quarterly
Total Organic Carbon	mg/l	Quarterly
Total Organic Halogen	mg/l	Quarterly
Total Alkalinity as CaCO <sub>3</sub>	mg/l	Quarterly
Phosphate, Total (P)	mg/l	Quarterly
Calcium (Ca)	mg/l	Quarterly
Sodium (Na)	mg/l	Quarterly
Potassium (K)	mg/l	Quarterly
Magnesium (Mg)	mg/l	Quarterly
Manganese (Mn)	mg/l	Quarterly
Iron (Fe)	mg/l	Quarterly
Lithium (Li)	mg/l	Quarterly
Chloride (Cl)	mg/l	Quarterly
Fluoride (F)	mg/l	Quarterly
Sulfate (SO <sub>4</sub> )	mg/l	Quarterly
Nitrate ( $NO_3$ as N)	mg/l	Quarterly
Nitrite (NO $_2$ as N)	mg/l	Quarterly
Total Phenols	mg/l	Quarterly

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- 3. The following additional information shall be reported for each sampling of the ground water monitoring wells:
  - a. Date of sampling.
  - b. Date well purged prior to sampling.
  - c. Estimate of volume of water purged from each well prior to sampling.
  - d. Static water level in well prior to pumping (MSL Elevation).
  - e. Date static water level measurement taken.
  - f. Temperature.
- 4. The velocity and direction of the uppermost aquifer shall be determined quarterly, and submitted as part of the quarterly ground water monitoring report outlined in Section C.2.

# D. Vadose Zone Monitoring

- 1. Vadose zone monitoring shall be conducted quarterly using a neutron probe. Measurements shall be obtained from a minimum of four neutron probe access tube locations (subject to approval by the Executive Officer). Quarterly vadose zone monitoring reports shall include the following information:
  - a. Moisture measurements from each access tube presented separately in graphic form for the current quarter.
  - b. Raw data collected from each access tube and copies of all field notes for current quarter.
  - c. A single graphic display for each access tube showing all previous moisture measurements, including measurements from current quarter.
  - d. Location map showing all access tube locations.

### E. Flood Protection Facilities

The discharger shall inspect the SWMU and all internal and external flood protection facilities at least quarterly and following each storm which generates any stormwater flow through the diversion channels. The results of inspections shall be reported quarterly to the Regional Board. If significant damage to the flood protection facilities are found, the discharger shall report immediately to the Regional Board by telephone and transmit by letter the following information:

- 1. Location and extent of damage.
- 2. Type and quantity of wastes threatened, if any.
- 3. Interim measures to be taken to assure that no wastes are discharged from the SWMU.
- 4. Time schedule for repairs.

- F. The discharge of any waste other than those allowed in the specifications, or any other noncompliance with the operations plan, shall be reported to the Board immediately upon the discharger becoming aware that said violation(s) occurred, along with an explanation of how the correction of said violation(s) will be accomplished expeditiously.
- G. The discharger shall submit a report to the Regional Board within 30 days of the occurrence of an earthquake of Richter Scale Magnitude 5.0 or greater that occurs within 50 miles of the site. The report shall include a complete description of damages to any facilities covered by this Order and the steps taken to repair said damages.
- H. A report shall be submitted annually summarizing progress and compliance, and including any noncompliance, with the operations plan.

#### REPORTING

Monitoring reports shall be submitted to the Regional Board as follows:

Monthly reports – by the 15th day of the following month. Quarterly reports – by Janaury 15, April 15, July 15, and October 15 of each year. Annual reports – by January 15 of each year.

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

Executive



SITE LOCATION MAP

IT CORPORATION IMPERIAL VALLEY FACILITY

Section 16, T13S, R12E, SBB&M West of Westmorland - Imperial County

ORDER NO. 88-45