

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 93-017

WASTE DISCHARGE REQUIREMENTS  
FOR  
UNITED STATES GYPSUM COMPANY  
DISCHARGE OF INDUSTRIAL AND DOMESTIC WASTEWATER  
Plaster City - Imperial County

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

1. United States Gypsum Company (hereinafter referred to as the discharger) located at 3810 West Highway 80, Plaster City, California 92269, a subsidiary of U.S.G. Corporation at 101 South Wacker Drive, Chicago, Illinois 60606-4385, submitted a complete Report of Waste Discharge for this update on December 15, 1992, and owns and operates the facility at 3810 West Highway 80.
2. The basic operation of this gypsum facility is to quarry gypsum ore from the ground, then crush and grind the rock to a fine powder. The powdered material is then processed to form 'stucco' or plaster. The plaster is then used as a base material to produce gypsum wall board and industrial plaster at the site. In the manufacture of gypsum wall board, other ingredients not exceeding 7.5% of the total are added to the base material. In the manufacture of the industrial plaster, ingredients added to the base material does not exceed 2.0%.
3. The discharger presently discharges at four separate locations. These locations are described as follows:
  - a. A maximum of 25,000 gallons-per-day of plant sewage and cooling tower blowdown is passed through an Imhoff tank for settling, and then to a trickling filter. Treated wastewater then flows to two (2) earthen basins for evaporation and infiltration. The location of this disposal site is the SE 1/4 of Section 8, T16S, R11E, SBB&M. The discharger reports that no chemical additives are used in the cooling water.
  - b. A maximum of 10,000 gallons-per-day of sewage wastewater generated from the village and facility office is passed through an Imhoff tank into two (2) earthen basins for oxidation, evaporation and infiltration. The discharger reports that no chemical additives are used in the cooling water. The location of this disposal site is the N 1/4 corner of Section 8, T16S, R11E, SBB&M.
  - c. A maximum of 12,500 gallons-per-day of industrial wastewater generated from pulper equipment cleanup, the plant machine shop and vehicle wash rack pit is discharged to land via two (2) unlined earthen ditches near the E 1/4 corner of Section 8, T16S, R11E, SBB&M. This wastewater then flows easterly into Section 9, T16S, R11E, SBB&M for about one-half (1/2) mile. Approximately 2,500 gallons-per-day of this wastewater comes from the machine shop and vehicle maintenance yard.

- d. A maximum of 23,000 gallons-per-day of industrial wastewater is discharged into two (2) earthen ditches. This wastewater then flows one quarter (1/4) mile southward. The industrial wastewater consists mostly of compressor cooling water which does not contain any chemical additives. The location of the discharge is the SE 1/4 of Section 8, T16S, R11E, SBB&M.
4. The discharger operates a solid waste disposal facility on the premises. This facility is regulated by the Regional Board under Board Order No. 88-060. All sludges, grits and screenings (which are a result of the wastewater treatment process) are presently being disposed at this site.
  5. The discharger's facility is located on the western edge of the Imperial Valley. Inside the Salton Trough, a seismic spreading zone, and several faults are located near the site of operations. Soils in this area consist of poorly graded alluvium.
  6. The site of operations is located in gently sloping lowland desert region with an average rainfall of three inches. Storm water generated as a result of rainfall runs down from the mountains on the west and then infiltrates into alluvial soils.
  7. Federal regulations for storm water discharges were promulgated by the EPA on 16 November 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain NPDES permits and to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.
  8. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS000001), as amended by Water Quality Order No. 91-12-DWR, specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the permit.
  9. The discharger submitted ground water monitoring analyses from two wells quarterly. The result of these analyses show the TDS concentration of the ground water to range from 6,000 to 30,000 mg/L.
  10. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted May 15, 1991 and designates the beneficial uses of ground and surface waters in this Region.
  11. The designated beneficial uses of ground waters in the Imperial Hydrologic Unit are:
    - a. Municipal supply (MUN)
    - b. Industrial supply (IND)
  12. The ground water level at the site has been reported to be approximately one hundred (100) feet below ground surface.
  13. This discharge has been subject to waste discharge requirements adopted in Board Order No. 88-046.

14. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this discharge.
15. The Board in a public meeting heard and considered all comments pertaining to this discharge.
16. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, that Board Order No. 88-046 is rescinded and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Discharge Prohibitions

1. The discharge or deposit of hazardous waste (as defined in Chapter 15, Title 23, California Code of Regulations) at this facility is prohibited.
2. The discharge or deposit of designated waste (as defined in Chapter 15) to the evaporation/infiltration basins is prohibited.
3. The discharge of wastes to surface water, or water drainage courses is prohibited.
4. The discharge of waste containing any carcinogen or reproductive toxin listed by the Governor pursuant to health and Safety Code Sections 25249.5 through 25249.13, the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), where such chemical passes or probably will pass into any source of drinking water, is prohibited.

B. Discharge Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of Division 7 of the California Water Code.
2. Representative samples of wastewater effluent discharged to basins and ditches described in Findings 3.a. and 3.b. from treatment facilities shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>30-Day<sup>1</sup> Arithmetic Mean Discharge Rate</u>	<u>7-Day<sup>2</sup> Arithmetic Mean Discharge Rate</u>
20°C BOD <sub>5</sub>	mg/L <sup>3</sup>	45	65
Suspended Solids	mg/L	45	65
Settleable Matter	ml/L <sup>4</sup>	0.3	0.5

3. Wastewater described in discharge Finding No. 3.c and 3.d shall be contained at all times in waste managements units designed and constructed in order to prevent any adverse impact on ground or surface water.
4. The discharger shall submit by October 1, 1993 engineered design plans for the collection, transportation and disposal systems of the wastewater described in Finding No. 3.c and 3.d. The systems shall be designed and constructed under the supervision of a California Registered Civil Engineer.
5. Wastewater discharged to the basins and ditches shall consists of those characteristics and volumes described in Finding No. 3.a., b., c., and d.
6. The discharger shall accurately characterize the waste to determine appropriate location of discharge.
7. Discharge into the unlined ditches and basins shall cease in event of any failure in the disposal system which threatens beneficial water uses.
8. The discharger shall remove and properly relocate any wastes which are discharged at this site in violation of these requirements.
9. Wastewater volume discharged at this facility shall not exceed quantities specified in Finding No. 3.a., b., c., and d.
10. There shall be no surface flow of wastewater away from the designated disposal areas. All wastewater shall be contained within the disposal units.
11. A minimum freeboard of two feet shall be maintained at all times in the basins and ditches.

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<sup>1</sup> 30-Day Mean - The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

<sup>2</sup> 7-Day Mean - The arithmetic mean of pollutant parameter values samples collected in a period of 7 consecutive days.

<sup>3</sup> mg/L - milligrams per Liter

<sup>4</sup> ml/L - milliliters per Liter

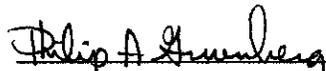
12. If it is found that the treatment facilities cannot meet effluent limitations stipulated under these Discharge Specifications, then the facility will be put on a compliance schedule to meet these specifications.

B. Provisions

1. Prior to any modifications in this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board; and obtain revised requirements before any modifications are implemented.
2. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
3. The discharger shall ensure that all site operating personnel are familiar with the content of this Board Order.
4. The discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all state and federal laws and regulations. In addition, the discharger shall submit an annual report which gives the amount (in tons) and the method of all sludge disposal for the previous year.
5. The following information shall be submitted to the Regional Board's Executive Officer within 90 days of the effective date of this Board Order and updated as changes occur:
  - a. Annual sludge production in dry tons and percent solids.
  - b. A schematic diagram showing sludge handling facilities (e.g. digesters, lagoons, drying beds, incinerators) and a solids flow diagram.
  - c. A narrative description of sludge dewatering and other treatment processes, including process parameters. For example, if sludge is digested, report average temperature and retention time of the digesters. If drying beds are used, report the depth of application and drying time and the temperature achieved and duration.
6. The discharger shall develop and implement a Storm Water Pollution Plan for this facility. The Plan must be submitted to the Regional Board's Executive Officer for review and approval no later than 90 days after the adoption of this Board Order.
7. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.
8. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

9. Measures acceptable to the Regional Board's Executive Officer shall be taken to exclude the public from contact with all wastewater mentioned in Finding No. 3.a., b., c., and d.
10. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
11. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
12. The discharger shall comply with "Monitoring and Reporting Program No. 93-017", and future revisions thereto, as specified by the Regional Board's Executive Officer, and be in accordance with the following:
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records for a period of at least 5 years from the date of the sample, measurement and report. This period may be extended by request from the Regional Board's Executive Officer at any time.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements
    - 2) The individual(s) who performed the sampling or measurements
    - 3) The date(s) when analyses were performed
    - 4) The individual(s) who performed the analyses
    - 5) The results of such analyses
13. The discharger shall allow the Regional Board's Executive Officer, or his/her authorized representatives, upon the presentation of credentials and other documents as may be required by law to:
  - a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or facilities where records must be kept under the conditions of this Board Order.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Board Order. Inspect and sample or monitor at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order.
14. One year prior to the anticipated closure of the basins, the discharger shall submit to the Regional Board, for review and approval by the Regional Board's Executive Officer, a closure plan.
15. Upon abandonment of this facility, or as required, residual solids shall be removed from the basins and discharged at a disposal facility approved by the Regional Board's Executive Officer.

I, Philip A. Gruenberg, 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 19, 1993.

  
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Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 93-017  
FOR  
UNITED STATES GYPSUM COMPANY  
DISCHARGE OF INDUSTRIAL AND DOMESTIC WASTEWATER  
Plaster City - Imperial County

MONITORING

The four wastewater streams discharged at locations given below, shall be monitored as follows:

1. Plant Sewage and Blowdown from Cooling Towers: Location of discharge: SE 1/4 of Section 8, T16S, R11E, SBB&M

The trickling filter effluent shall be monitored for constituents as indicated below:

<u>CONSTITUENT</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>FREQUENCY</u>
BOD	mg/L <sup>1</sup>	Grab	Monthly
pH	-	Grab	Monthly
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly
Total Copper (Cu)	mg/L	Grab	Annually
Total Iron (Fe)	mg/L	Grab	Annually
Settleable Matter	ml/L <sup>2</sup>	Grab	Monthly
Total Suspended Solids (TSS)	mg/L	Grab	Monthly
Volatile Organic Compounds (VOCs) EPA Method 624	µg/L	Grab	Annually
Estimated Volume of Discharge	GPD <sup>3</sup>	-	Monthly

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<sup>1</sup> mg/L - milligrams per Liter

<sup>2</sup> ml/L - milliliter per Liter

<sup>3</sup> GPD - Gallons-per-Day

2. Sanitary Sewage from Village and Office: Location of discharge: N 1/4 of Section 8, T16S, R11E, SBB&M

The wastewater discharged to the two (2) oxidation basins shall be monitored for constituents as indicated below:

<u>CONSTITUENT</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>FREQUENCY</u>
BOD	mg/L	Grab	Monthly
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly
Settleable Matter	ml/L	Grab	Monthly
Total Suspended Solids (TSS)	mg/L	Grab	Monthly
Estimated Volume of Discharge	GPD <sup>3</sup>		Monthly

3. Industrial Wastewater from Pulper and Wastewater from the Vehicle Wash Rack and Machine Shop: Location of discharge: E 1/4 of Section 8, T16S, R11E, SBB&M

The wastewater discharged to the two (2) earthen ditches shall be monitored for constituents as indicated below:

<u>CONSTITUENT</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>FREQUENCY</u>
BOD	mg/L	Grab	Monthly
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly
pH	pH units	Grab	Quarterly
Volatile and Semi-Volatile Organic Compounds (EPA Methods 624, 625)	µg/L <sup>4</sup>	Grab	Quarterly
Mercury	mg/L	Grab	Quarterly
Estimated Volume of Discharge	GPD <sup>3</sup>	-	Monthly
Oil and Grease	mg/L	Grab	Monthly

<sup>4</sup> µg/L - micrograms per Liter

4. Compressor Cooling Wastewater: Location of Discharge: SE 1/4 of Section 8, T16S, R11E, SBB&M

The wastewater discharged to the two (2) earthen ditches shall be monitored for constituents as indicated below:

<u>CONSTITUENT</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>FREQUENCY</u>
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly
pH	pH units	Grab	Quarterly
Estimated Volume of Discharge	GPD <sup>3</sup>	-	Monthly
Volatile and Semi-Volatile Organic Compounds (EPA Methods 624, 625)	µg/l	Grab	Quarterly

5. Treated domestic sewage sludge shall be monitored for the following:

<u>CONSTITUENT</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>FREQUENCY</u>
Arsenic	mg/kg <sup>5</sup>	Grab	Annually
Cadmium	mg/kg	Grab	Annually
Chromium	mg/kg	Grab	Annually
Copper	mg/kg	Grab	Annually
Lead	mg/kg	Grab	Annually
Mercury	mg/kg	Grab	Annually
Molybdenum	mg/kg	Grab	Annually
Nickel	mg/kg	Grab	Annually
Selenium	mg/kg	Grab	Annually
Zinc	mg/kg	Grab	Annually
Fecal Coliform	MPN <sup>6</sup>	Grab	Annually

The discharger shall report quarterly on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the wastewater treatment plant facility.

<sup>5</sup> mg/kg - milligram per kilogram on a dry weight basis

<sup>6</sup> MPN - Most Probable Number

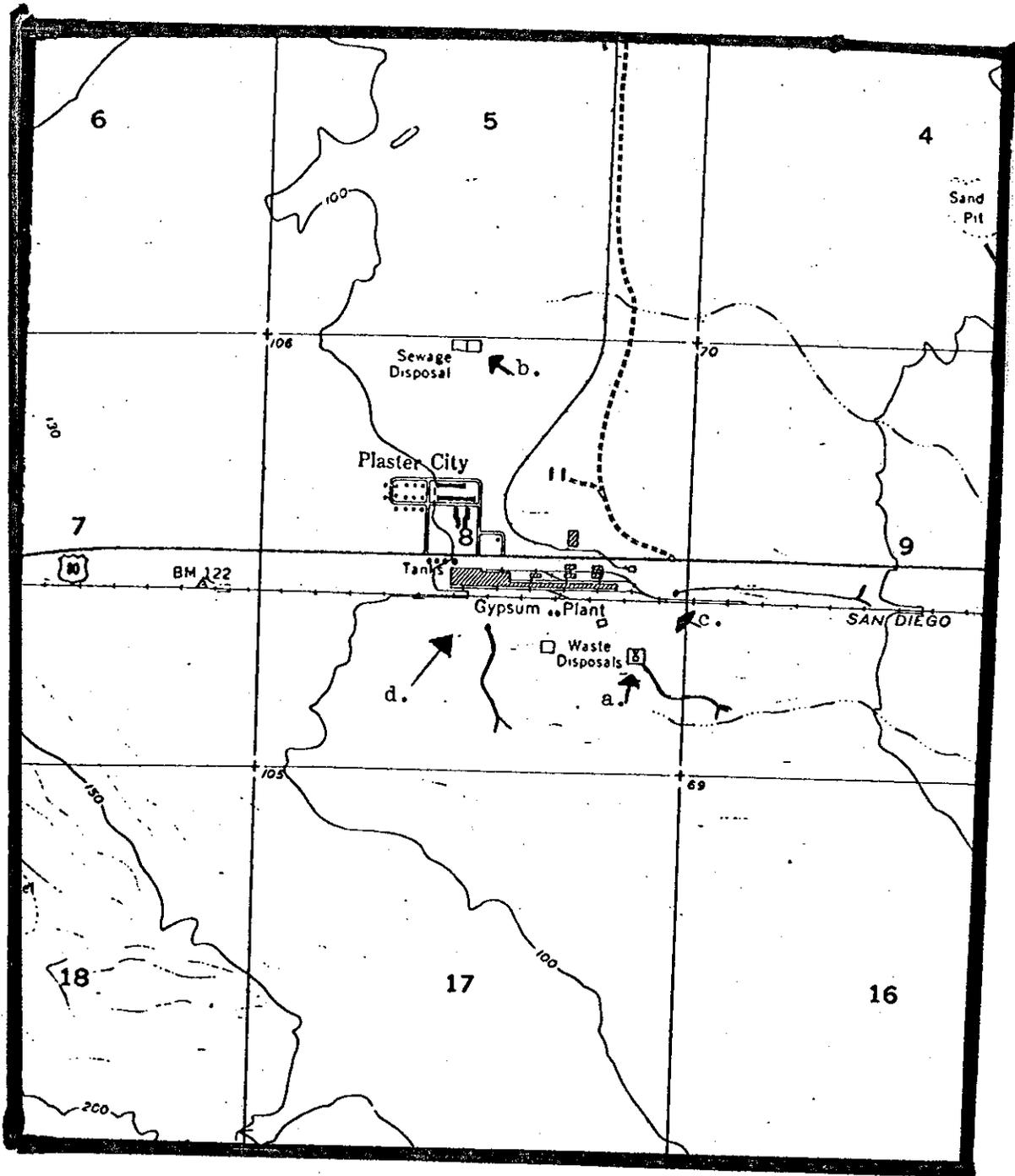
REPORTING

The discharger shall report to the Regional Board as follows:

1. Monthly monitoring reports shall be submitted to the Regional Board the 15th day of each month.
2. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year.
3. Annual reports shall be submitted to the Regional Board by January 15 of each year.
4. The discharger shall arrange the data in tabular form so that the date, the constituents, and other specified information are readily discernible. The data shall be summarized in such a manner as to clearly illustrate the facility is operating in compliance with waste discharge requirements.
5. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring program.
6. The collection, preservation and holding times of all samples shall be in accordance with EPA-approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
7. Report immediately any failure in the disposal system by telephone and follow up by letter.
8. Submit monitoring reports to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, CA 92260

ORDERED BY: Philip A. Swanberg  
Executive Officer  
May 19, 1993  
Date



SITE MAP

UNITED STATES GYPSUM COMPANY  
DISCHARGE OF INDUSTRIAL AND DOMESTIC WASTEWATER  
Plaster City - Imperial County  
Location of Waste Discharges:

- a. Plant Sewage and Blowdown from Cooling Towers
  - b. Sanitary Sewage from Village and Office
  - c. Industrial Wastewater from Cleanup and Pulper Equipment
  - d. Compressor Cooling Water and Water Base Cleanup Waste
- USGS 7.5 min. Topographic Map - Plaster City, CA Section 8, T16S, R11E, SBB&M