

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 81-65

WASTE DISCHARGE REQUIREMENTS
FOR
KAISER STEEL CORPORATION - EAGLE MOUNTAIN MINE
MINE TAILINGS STORAGE BASIN NO. 7
Eagle Mountain - Riverside County

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

1. Kaiser Steel Corporation (hereinafter also referred to as the discharger), P.O. Box 158, Eagle Mountain, CA 92241, submitted a Report of Waste Discharge, dated April 18, 1980.
2. The discharger mines iron ore, processes the ore, and discharges a tailings slurry containing the minerals tremolite mica, chlorite, talc, gypsum, montmorillonite, kaolinite, hematite, goethite, magnetite, and pyrite to lined earthen basins, constructed above the original ground surface. Most of the slurry water is returned for reuse in the plant process.
3. The discharger is subject to waste discharge requirements adopted in Resolution No. 68-1 for Tailings Basin No. 4, Resolution No. 68-19 for Tailings Basin No. 5, and Order No. 73-83 for Tailings Basin No. 6. Said tailings basins are near capacity, and the discharger proposes to construct a new Tailings Basin No. 7.
4. Tailings Basin No. 7 would be located in Section 6, T4S, R15E, SBB&M. Said basin would encompass 323 acres and have a volume of 24,500,000 tons of dry solids.
5. The discharger proposes to construct Tailings Basin No. 7 above the original ground surface with the highest dike approximately 100 feet above said surface. A minimum three foot thick earthen liner with a coefficient of permeability of not more than 1×10^{-6} cm/sec would be installed to limit seepage from said basin while in use.
6. The discharger proposes to discharge into said basin 0.35 mgd of tailings slurry.

*Cancelled
3/22/89*

7. Recent analyses by the discharger of water removed from the top of existing tailings basins for reuse shows the following concentrations of constituents:

<u>Constituent</u>	<u>Concentration</u>	<u>Constituent</u>	<u>Concentration</u>
pH	7.8	Carbonate(CO)	0mg/1
Conductivity	4200 mhos/cm	Bicarbonate(HCO)	33mg/1
Filtrable Residue	3520 mg/1	Sulfate(SO)	1910mg/1
Calcium(Ca)	480 mg/1	Chloride(Cl)	200mg/1
Magnesium(Mg)	130 mg/1	Fluoride(F)	2.9mg/1
Sodium(Na)	270 mg/1	Nitrate(NO)	32mg/1
Potassium(K)	32 mg/1	Boron(B)	.78mg/1
Iron(Fe)	.45mg/1	Chromium(Cr)	.005mg/1
Copper(Cu)	.02mg/1	Total Hardness	1900mg/1

8. The Water Quality Control Plan for the West Colorado River Basin Region was adopted on April 10, 1975. The Basin Plan contains water quality objectives for the Chuckwalla Hydrologic Unit.
9. Beneficial uses of groundwater to be protected by this Order are as follows:
- a. Municipal
 - b. Industrial
 - c. Agricultural
10. The Regional Board has determined that this project will not have any significant adverse effects on the environment, and has prepared and processed a Negative Declaration.
11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
12. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Kaiser Steel Corporation, shall comply with the following:

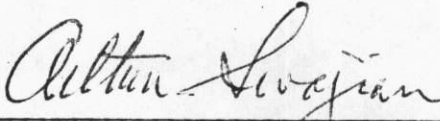
A. Discharge Specifications

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. There shall be no surface flow of effluent away from Tailings Basin No. 7.
3. Adequate protective works shall be provided to assure that a storm, which would be expected to occur on a frequency of once in a 100-year period, would not erode or otherwise render portions of the disposal facilities inoperable.
4. Tailings Basin No. 7 shall be constructed with a lining with a coefficient of permeability not to exceed 1×10^{-6} cm/sec.
5. Unaccounted for water, as measured by a biannual water balance of water delivered to and removed from said tailing basin, shall not exceed 5.5 acre-feet per year per acre of tailings basin storage area.

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 81-65", and future revisions thereto, as specified by the Executive Officer.
2. Three monitoring wells shall be utilized to determine and sample, biannually, the depth and quality of any subsurface seepage of wastewater from the tailings basin. The wells shall be installed at locations approved by the Executive Officer and the procedures for obtaining samples is also subject to approval by the Executive Officer.
3. Design and construction of the basin shall be reviewed for seismic stability by an engineering consultant knowledgeable in this subject.
4. Prior to the discharge of any wastewater into said tailings basin, the discharger shall submit to the Regional Board a technical report signed by a California Registered Civil Engineer stating that Tailings Basin No. 7 is constructed to meet the requirements contained in this Order, and that the monitoring wells are located and constructed as approved by the Executive Officer. The submitted technical reports must be approved by the Executive Officer prior to discharge.
5. Prior to any modification which could result in a material change in the quality or quantity of wastes discharged, or any material change in the method or location of discharge, the discharger shall report thereon to the Board.

I, Arthur Swajian, 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, Colorado River Basin Region on May 20, 1981.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 81-65
FOR
KAISER STEEL CORPORATION - EAGLE MOUNTAIN MINE
MINE TAILINGS STORAGE BASIN NO. 7
Eagle Mountain - Riverside County

Location: Section 6, T4S, R15E, SBB&M

MONITORING

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

<u>ITEM</u>	<u>Units</u>	<u>Regional Frequency</u>
1. Total slurry discharged to basin during month.	Acre feet	Monthly
2. Total water in delivered slurry.	Acre feet	Monthly
3. Total dry solids in delivered slurry.	Tons and acre feet	Monthly
4. Total water returned from basin for reuse during month.	Acre feet	Monthly
5. Total evaporation from basin during month.	Acre feet	Monthly
6. Gain in pond volume of water	Acre feet	Monthly
7. Unaccounted for water during month.	Acre feet	Monthly
8. Wet surface area of pond.	Acres	Monthly
9. Evaporation measured from standard pan.	Inches	Monthly
10. The discharger shall prepare a biannual water balance determining the amount of seepage in acre-feet per year per acre of basin area.		

<u>ITEM</u>	<u>Unit</u>	<u>Regional Frequency</u>
11. Depth below ground surface of standing water in each monitoring well; and total dissolved solids, and sulfate concentrations of water samples taken from each monitoring well.	Feet and mg/l	Biannual
12. Immediate reporting of any surface seepage, spillage, or release of waste material from said tailings basin and related facilities, and immediate measures being taken to correct same and to limit detrimental effects.		

REPORTING

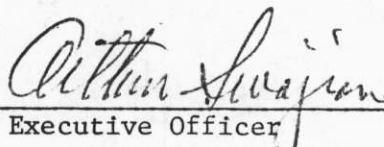
The above monitoring program shall be implemented immediately upon commencement of discharge to Mine Tailings Basin No. 7.

Monthly reports shall be submitted to the Regional Board by the 15th day of the following month. Biannual reports shall be submitted to the Regional Board on or before January 31, and July 31 of each year. Reports for Item 12 (above) shall be forwarded immediately, and if at all possible, shall be preceded by phone communication to the Regional Board's office (714) 346-7491. Copies of the reports submitted to the Board pursuant to this Monitoring and Reporting Program shall be maintained at the operations site, and shall also be made available to the staff of the Regional Board upon request.

Mail reports to:

California Regional Water Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

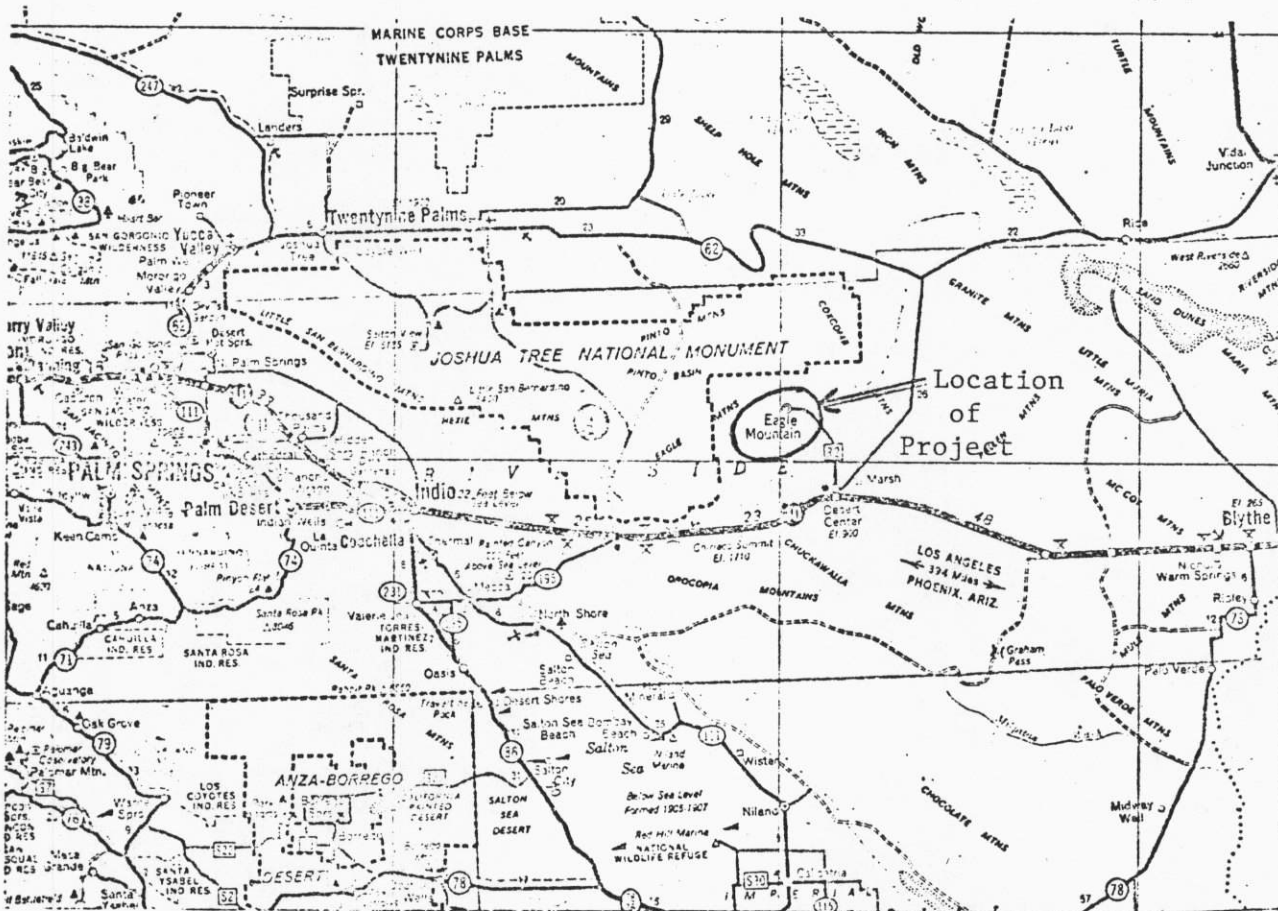
ORDERED BY


Executive Officer

May 20, 1981

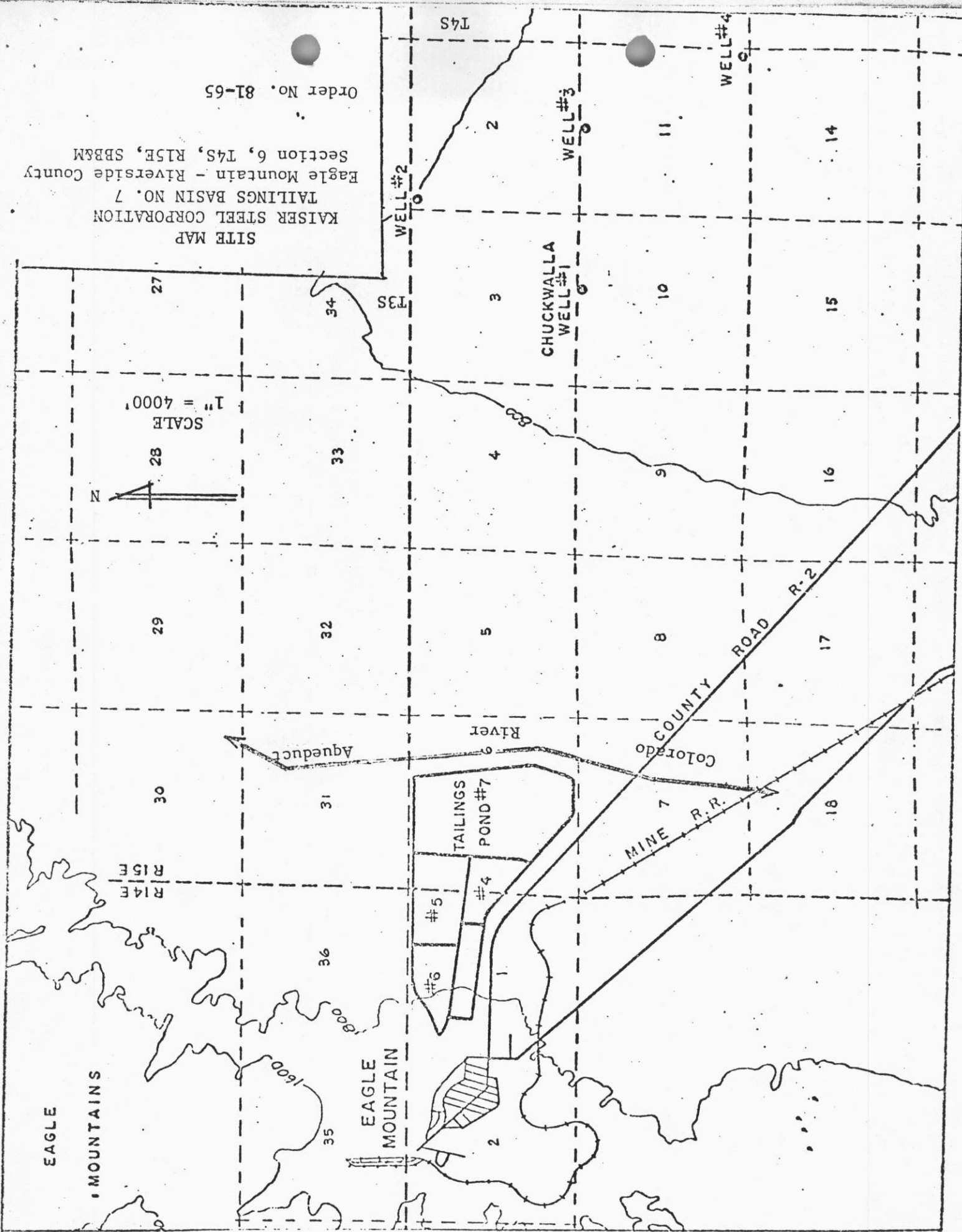
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



AREA MAP
KAISER STEEL CORPORATION
TAILINGS BASIN NO. 7
Eagle Mountain - Riverside County

Order No. 81-65



SITE MAP

KAISER STEEL CORPORATION

TAILINGS BASIN NO. 7

Eagle Mountain - Riverside County
Section 6, T4S, R15E, SBB&M

Order No. 81-65

T4S

WELL #4

WELL #3

CHUCKWALLA
WELL #1

WELL #2

SCALE
1" = 4000'

N

R15E
R14E

EAGLE
MOUNTAINS

EAGLE
MOUNTAIN

TAILINGS
POND #7

MINE R.R.
COLORADO
COUNTY ROAD R-2

Aqueduct

River

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

NEGATIVE DECLARATION

Draft

Final

Project Title:

Kaiser Steel Corporation - Eagle Mountain Mine Tailings Basin No. 7 -
Chuckwalla Valley, Riverside County, California

Project Description:

Kaiser Steel Corporation proposes to construct a new tailings basin, Tailings Basin No. 7, at its Eagle Mountain iron ore mine. Subject basin will utilize about 323 acres of land in Section 6, T4S, R15E, SBB&M.

Tailings Basin No. 7 will be used to store fine tailings which are discharged from the processing plant in the form of a water-borne slurry. Tailings contain the minerals tremolite, mica, chlorite, talc, gypsum, montmorillonite, kaolinite, hematite, goethite, magnetite, and pyrite.

The subject tailings basin will be located upstream and immediately adjacent to the Colorado River Aqueduct and will overlie a groundwater basin with designated beneficial uses of municipal, domestic, agricultural, and industrial supply.

This Negative Declaration is prepared pursuant to the requirements of Chapter 3, Title 14, California Administrative Code.

Based upon the Initial Study, it has been found that the following mitigation measures will avoid potentially significant effects:

1. An impervious lining would be provided to limit seepage from the tailings basin.
2. The operation of the tailings basin would be monitored to determine any leakage therefrom.
3. Flood protection facilities will be provided to protect basin walls and prevent erosion of Colorado River Aqueduct.

Contact Person: Wilburn C. Ponder, Staff Engineer

Telephone: (714) 346-7491

Date: May 20, 1981

Arthur Swajian

ARTHUR SWAJIAN
Executive Officer