CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 91-017

WASTE DISCHARGE REQUIREMENTS
FOR
HOLLY SUGAR CORPORATION
COAL ASH TRANSPORT WATER HOLDING BASIN
South of Brawley - Imperial County

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

1. Holly Sugar Corporation (hereinafter also referred to as the discharger), P.O. Box 581, Brawley, California 92227 verified as accurate the updated information given below on December 4, 1990.

2. The discharger operates a coal-fired boiler which generates ash as spent fuel. This ash is slurried with transport water and pumped to an earthen, unlined holding basin. In addition, sulfur dioxide emissions from the boiler stack are controlled by using soda ash and water in a scrubber. The fly ash and sodium sulfate resulting from the wet scrubber operations are combined with the ash slurry for deposition in the holding basin. The water in the holding basin is recycled continuously for reuse as ash transport water. The basin is located in the NW¼ of Section 30, T14S, R14E, SBB&M as shown on the attached site map.

3. The design maximum volume of slurry to the basin is 1.15 million-gallons-per-day (mgd) with an 0.5 mgd estimated average volume. About 3,000 cubic yards per year of solids is deposited in the basin. The boiler operates on a cycle of 130 days per year. The discharger intends to sell the solids removed from the holding basin as a product (fill material, cement additive etc). Pending sale, the solids removed from the basin are stored on-site.

4. Results of testing conducted by the discharger on representative samples of solids deposited in the holding basin have confirmed that the generated ash is non-hazardous and non-toxic according to the criteria of Article 11, Title 22, California Code of Regulations.

5. Results of recent monitoring conducted by the discharger and Regional Board staff indicate that the wastewater has the following range of characteristics:

   a. Total dissolved solids content: 4,000 - 24,000 mg/l
   b. pH: 8.4 - 9.8

   In Attachment A of this Board Order, results of mineral and metal analyses for water soluble constituents are for three different types of coal which were ashed in the laboratory.

SUPERSEDED BY
BOARD ORDER NO. R7-2003-0016
05-07-03

CHANGE IN NAME OR OWNERSHIP
BY BOARD ORDER NO. 01-010

6. Process water is supplied to the discharger by Imperial Irrigation District via the All-American Canal.

7. The Water Quality Control Plan for the Colorado River Basin Region of California designates the beneficial uses of ground and surface waters in this Region.

8. The designated beneficial uses of ground waters in the Imperial Hydrologic Unit are:

   a. Municipal supply (MUN)
   b. Industrial supply (IND)

   However, within the Imperial Valley area of the Imperial Hydrologic Unit, much of the ground water is too saline for municipal use. The existing municipal use in this Unit is practically inconsequential.

9. Shallow ground waters at/near the location of waste discharge are saline and not beneficially used. The total dissolved solids concentration as shown in Attachment A are:

   a. 15 feet depth: 31,000 mg/l
   b. 60 feet depth: 20,000 mg/l
   c. 126 feet depth: 13,000 mg/l

   Deep ground waters in the area are brine and are being investigated for geothermal development. The total dissolved solids concentration as shown in Attachment A is 76,000 mg/l and located at a depth of several thousand feet.

10. The wastes in Finding No. 2, above, are not hazardous nor designated wastes; and their discharge is therefore exempt from the provisions of Chapter 15, Title 23 of the California Code of Regulations.

11. This discharge has been subject to waste discharge requirements adopted in Board Order No. 86-022.

12. The purpose of this Board Order is to update the waste discharge requirements of Board Order No. 86-022.

13. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this discharge.

14. The Board in a public meeting heard and considered all comments pertaining to this discharge.

15. 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 the discharger shall comply with the following:

A. Discharge Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.

2. There shall be no direct discharge of wastewater to any rivers, canals, drainage channels, or drains (including subsurface drainage systems) which could provide flow or seepage to Salton Sea.

3. A minimum depth of freeboard of two (2) feet shall be maintained at all times in the containment basin.

4. 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.

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 91-017", and future revisions thereto, as specified by the Regional Board's Executive Officer.

2. Final disposal of solid wastes removed from the holding basin, whether disposal at a solid waste disposal facility, or sold as a product, shall be in accordance with the prior written approval of the Executive Officer.

3. 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.

4. 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.

IT IS FURTHER ORDERED that Board Order No. 86-022 be superseded by this Board Order.

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 March 13, 1991.

Philip A Gruenberg
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 91-017
FOR
HOLLY SUGAR CORPORATION
COAL ASH TRANSPORT WATER HOLDING BASIN
South of Brawley - Imperial County

Location of Discharge: NW¼, Section 30, T14S, R14E, SBB&M

MONITORING

1. Wastewater contained in the holding basin shall be monitored for the following constituents at the end of each operating season:

1. Totals Solids	16. Magnesium (Mg)
2. Total Dissolved Solids	17. Mercury (Hg)
3. Total Suspended Solids	18. Nickel (Ni)
4. Sodium (Na)	19. Zinc (Zn)
5. Alkalinity	20. Phosphorus (P)
6. Ammonia (N)	21. 20° BOD_5
7. Nitrate (N)	22. COD
8. Total Hardness	23. Bromide
9. Sulfate (SO_4)	24. Fluoride (F)
10. Aluminum (Al)	25. Carbonate (CO_3)
11. Chromium (Cr)	26. Bicarbonate (HCO_3)
12. Chloride (Cl)	27. Lead (Pb)
13. Copper (Cu)	28. pH
14. Iron (Fe)	29. Calcium (Ca)
15. Manganese (Mn)	30. Potassium (K)
	31. Barium (Ba)

2. The discharger shall estimate the number of cubic yards or tons of solids removed from the holding basin per year and also report on the method and location of its final disposal.

REPORTING

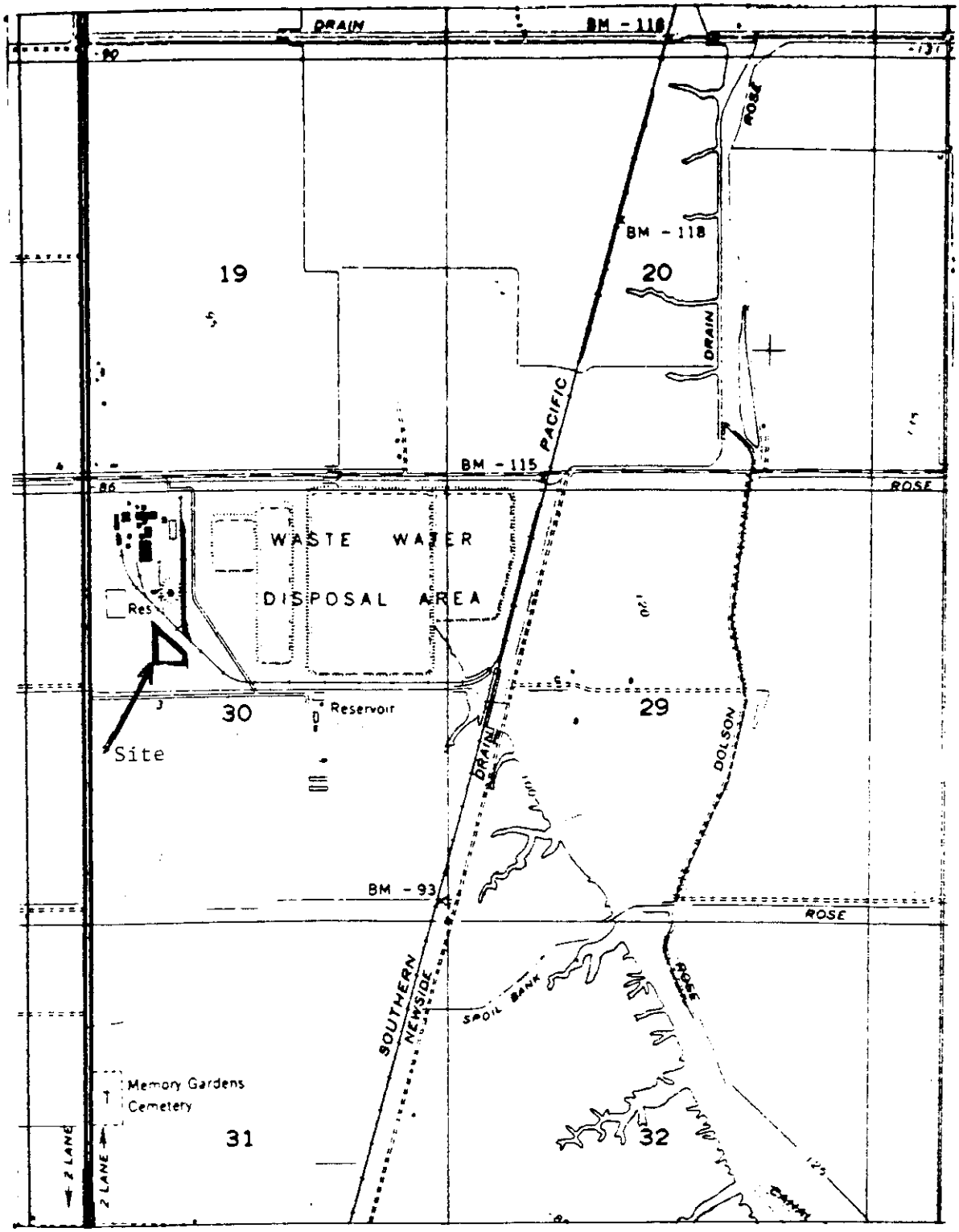
The above annual reports shall be submitted to the Regional Board by January 15th of each year to:

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

ORDERED BY: Philip A Gruenberg
Executive Officer

March 13, 1991
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD NO. 7



SITE MAP

HOLLY SUGAR CORPORATION
COAL ASH TRANSPORT WATER HOLDING BASIN
South of Brawley - Imperial County
NW¼, Section 30, T14S, R14E, SBB&M
Brawley 7½ Topographic Map

Board Order No. 91-017

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7
COLORADO RIVER BASIN REGION

ATTACHMENT A TO ORDER NO. 91-017

HOLLY SUGAR CORPORATION
PROPOSED DISCHARGE OF GOAL BOILER ASH TO PROPOSED CONTAINMENT BASIN
LOCATED IN SECTION 30, T14S, R14E, SBB&M

	CONSTITUENT	ION	UNIT	QUALITY OF WASTEWATER DISCHARGE — DISCHARGER ANALYSES (1) NO. 1	NO. 2	NO. 3	EPA (2) HIGH	QUALITY OF GROUND WATER (3) — SHALLOW GROUNDWATER 15' DEPTH	60' DEPTH	126' DEPTH	DEEP GEOTHERMAL	COLO. R. WATER SUPPLY
1	TOTAL SOLIDS		Mg/l	---	---	---	1290					
2	TOTAL DISSOLVED SOLIDS		"	2700	644	3128	1210	31,028	20,315	13,700	76,000	860
3	TOTAL SUSPENDED SOLIDS		"	---	---	---	51	---	6,250			
4	SODIUM	Na	"	123	19	105	982	6700	5000		22,000	130
5	ALKALINITY	$CaCO_3$	"	240	200	260	226	---				
6	AMMONIA	N	"	0.41	0.31	0.46	1.01	---				< .05
7	NITRATE	N	"	0.33	< 0.1	0.32	1.3	---	4.9			
8	TOTAL HARDNESS	$CaCO_3$	"	1831	458	1928	406	---	5554	3400		
9	SULFATE	SO_4	"	1480	160	1780	527	1550	690	875		345
10	ALUMINUM	Al	"	1.5	0.77	0.34	6	< 0.5	< 0.5			
11	CHROMIUM	Cr	"	< 0.05	< 0.05	< 0.05	0.08	< 0.01	< 0.01			
12	CHLORIDE	Cl	"	30	30	30	161	14,644	10,832	7,580	46,000	127
13	COPPER	Cu	"	0.04	0.57	0.16	0.06	< 0.02	< 0.01		0.11	
14	IRON	Fe	"	< 0.03	< 0.03	< 0.03	2.89	< 0.01	< 0.05		65	
15	MANGANESE	Mn	"	< 0.01	< 0.01	< 0.01	0.102	1.15	1.9		190	.05
16	MAGNESIUM	Mg	"	1	1	1	25	842	620	417	34	33
17	MERCURY	Hg	"	< 0.002	< 0.002	< 0.002	0.0002	< .0005	< .0002			
18	NICKEL	Ni	"	---	---	---	0.015	< 0.01	0.12			
19	ZINC	Zn	"	0.01	< 0.01	< 0.01	0.162	< 0.01	0.02		14	.29
20	PHOSPHORUS	P	"	0.05	< 0.1	0.05	0.41	3.3	< 0.1			
21	20° BOD_5	---	"	30	5	29		---	< 6.0			
22	COD	---	"	29	22	52		1050	324			
23	BROMIDE	---	"	< 0.1	< 0.1	< 0.1		23	18.8			
24	FLUORIDE	F	"	0.03	0.06	0.02		< 0.05	0.31			
25	CARBONATE	CO_3	"	144	48	48		---	0			0
26	BICARBONATE	HCO_3	"	0	0	0		256	406	416	49	156
27	LEAD	Pb	"	< 0.05	< 0.05	< 0.05		< 0.004	< 0.05		1.1	.003
28	PH	---	"	9.4	10.5	10.2		---	7.1	7.4		8.0
29	CALCIUM	Ca	"	732	182	771		2040	1200	676	8100	100
30	POTASSIUM	F	"	13	0	3		35	30		3800	6
31	BARIUM	Ba	"	.09	0.63	0.43		---	2.5		363	

(1) Three analyses using different sources of coal - Holly Sugar Corp. letter dated 12/19/85.

(2) High values of ash pond overflows from coal fired power plants - "EPA Development Document for Effluent Limitations Guideline" and NSPS for the steam Electric Power Generating Point Source Category, EPA 440/1-74 029-a Group 1.

(These are changes in parameter levels from intake to discharge - does not include source water constituents)

(3) 15 & 60 foot depth- See Holly Sugar Corporation letter dated 12/6/85. For 126' depth See. "Geological Survey Professional Paper 486-K". Well No. 14S/14E 30 N.