



San Joaquin Valley
Unified Air Pollution Control District

COPY

October 21, 1996

Robert L. Green
Spreckels Development Company
18800 S. Spreckels Road
Manteca, CA 95336

Re: Project #: 960487 Application #: N-784

Project Description: Emission Reduction Credit (ERC) application for facility located at
18800 South Spreckels Road in Manteca, CA.

Dear Mr. Green:

Your application for Emission Reduction Credits for the above referenced project has been received by the Air Pollution Control District, and reviewed for completeness.

Based on this preliminary review, the application appears to be complete. However, during the processing of this application, the District may request additional information to clarify, correct or otherwise supplement the information on file.

Thank you for your cooperation. Should you have any questions, please contact Anthony Mendes of Permit Services at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services



Anthony Mendes
Permit Services Manager - Northern Region

SS/AM/PAH

cc: Mike Heydari, RMT. Inc.
4640 Admiralty Way Suite 301, Marina del Rey, CA 90292

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 - Fresno, CA 93721 - (209) 497-1000 - FAX (209) 233-2057

Northern Region

4230 Kiernan Avenue, Suite 130 - Modesto, CA 95356
(209) 545-7000 - FAX (209) 545-8652

Central Region

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(209) 497-1000 - Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 - Bakersfield, CA 93301
(805) 862-5200 - Fax (805) 862-5201

TELEPHONE RECORD FORM

Project # 960487Date/Time/
Initials

Names of All Persons Involved and Conversation Record

10/12/96 PAH	SPOKE w/ JONAS TUCCO (823-3121). HE SAID ALL CORRESPONDENCE SHOULD BE TO THE FACILITY ADDRESS IN MANTECA & UNDER THE NAME SPRECKELS DEVELOPMENT COMPANY, INC.
1/23/97 8:45 PAH	CALLED MEL BOLINDER OF SPRECKELS - WOODLAND (916 668 2539) HIS NAME WAS ON A PM10 SPECIATION REPORT FOR POWDERED SUGAR (26%). HE DIDN'T KNOW A % FOR GRANULAR SUGAR BUT THOUGHT IT WOULD BE SMALL. HE SAID TYPICAL POWDERED SUGAR SIZE RANGES FROM 0 TO 44 μ & EXTRA FINE GRANULAR (EFG) IS TYPICALLY 370 μ . HE GOT ROBERT FLETCHER IN A CONFERENCE CALL. BOB SAID WHEN THEY RECEIVE 50 000 HWT IN A SILO, THEY COLLECT \approx 25 lbs OF FINES.
1/23/97 9:00	LEFT MESSAGE FOR ANNE OGREY (835-3210) OF HOLLY TO SEE IF SHE KNOWS GRANULAR PM 10 % OR EF
1/23/97 10:55	SPOKE w/ RAY RAMERO OF IMPERIAL COUNTY ^{APCD} (619 339 4606) HE SAID FOR HOLLY IN BRAWLEY THEY USE 0.01 g/scf OUT OF BARGE USE
1/23/97 11:00	LEFT MESSAGE w/ GLENN COUNTY APCD (916 934 6500)
1/23/97 2:00	SPOKE w/ CAROL ALLEN OF BAY AREA AQMD (415 749 4702) SHE SAID FOR C & H, THEY USED AMMONIA NITRATE EF (AP-42) FOR GRANULAR BULK LOADOUT. SOME CONSULTANTS DOWN THERE FOUND THAT GRANULAR SUGAR WAS COMPARABLE TO FERTILIZER
4/22/97 2:05	LEFT MESSAGE FOR ED PIKE OF EPA (415-244-1211)
4/20/97 2:10	SPOKE w/ ALEX KAICHTUSKY OF CARB (916-327-5626)
4/22/97 3:00 PAH	RICH MILLER OF CARB CALLED BACK. HE WANTS A COPY OF APPENDIX - FAXED TO HIM (916-445-5023). HE SAID SEVERAL AP 42 FACTORS FOR NATURAL GAS COMBUSTION CHANGED IN 10/96, BUT DOESN'T THINK THEY AFFECT THIS PROJECT. HE WANTED TO KNOW WHY WE USED 4305 LIMIT FOR NO _x INSTEAD OF ACTUAL VALUES (IF < 30 PPM). THE ACTUAL WAS > 30.

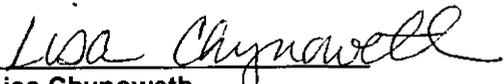
EMISSION REDUCTION CREDIT
DOCUMENTATION PACKAGE

PREPARED IN SUPPORT OF A BANKING
CERTIFICATE APPLICATION PACKAGE
FOR

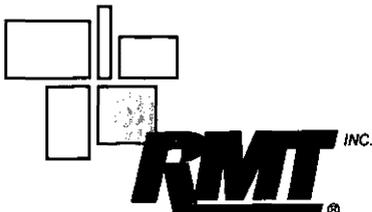
SPRECKELS DEVELOPMENT COMPANY
MANTECA, CALIFORNIA

PREPARED BY
RMT, INC.

SEPTEMBER, 1996


Lisa Chynoweth
Project Engineer


Mike Heydari, C.P.F.
Project Manager



RMT, INC. — LOS ANGELES
4640 ADMIRALTY WAY — SUITE 301
MARINA DEL REY, CA — 90292-6621
310/578-1241 — 310/821-3280 FAX

NOTICE

This ERC document is designed to provide accurate information with regard to the subject matter covered. The contents furnished herein are based upon the information provided by the Spreckels Development Company.

CONFIDENTIALITY

This ERC document, and the data and information contained herein, is **CONFIDENTIAL** and provided to the SJVUAPCD for review and certification for ERC generated by the shutdown of the facility. This report and its contents may not be shared, distributed, or copied for use by other companies, partnerships or individuals without the express written authorization of SPRECKELS DEVELOPMENT COMPANY.

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Section 1

INTRODUCTION

1.1 Background

The Spreckels Development Company (Spreckels) started operations in Manteca, CA in 1917. This facility is located at 18800 South Spreckels Road, Manteca, California (SJVUAPCD Facility ID No. 784). Spreckels produces and markets a nearly full line of sugar products. On April 19, 1996, Spreckels completely shut down the Manteca facility and its operations on a permanent basis.

The facility operates primarily during the spring and fall campaigns but also has some equipment that operates year-round. Spreckels is requesting Emission Reduction Credits for all four quarters. The facility emissions are primarily criteria pollutants from the combustion of natural gas in two cogeneration units, and two pulp dryers, and the processing of sugar beets. Year-round equipment includes product finishing and storage, dry pulp handling, and powdered sugar conveying, storage, and packaging equipment, and a diesel air compressor. The facility also operates a Trane boiler during the first and fourth quarters of the year only.

1.2 Purpose

This report has been prepared by RMT, Inc. (RMT) for submittal to the SJVUAPCD in support of an application for ERC. All environmental issues regarding the Spreckels facility and this ERC application should be directed to one of the following persons:

Mr. Jerry Tucker
Spreckels Development Company
18800 S. Spreckels Road
Manteca, CA 95336
Phone: (209) 823-3121

or

Mr. Mike Heydari
RMT, Inc.
4640 Admiralty Way, Suite 301
Marina del Rey, CA 90292
Phone: (310) 578-1241

1.3 Scope

This report is prepared in support of the data provided to the SJVUAPCD on the attached Application Form for Emission Reduction Credits (Appendix A). The data provided herein is based on information provided by Spreckels. This report also contains an evaluation of the shut down emission reductions with respect to applicable local and federal regulations.

Section 2
FINDINGS AND CONCLUSIONS

Based on data provided by Spreckels, RMT prepared an application for Emission Reduction Credits (ERC) for submittal to the SJVUAPCD. The shut down of the facility resulted in a reduction of criteria air contaminants. Based on annual emission statements submitted to the SJVUAPCD for calendar years 1994, and 1995, quarterly emission reductions were averaged over a two year baseline period and are presented in Table 1.

Table 1
Summary of Criteria Pollutant Quarterly Emission Reductions
(1994 and 1995 Averages)

Pollutant	1st Quarter Emissions (lb/qtr)	2nd Quarter Emissions (lb/qtr)	3rd Quarter Emissions (lb/qtr)	4th Quarter Emissions (lb/qtr)
PM-10	2,903	24,240	18,964	2,903
NO _x	1,262	64,097	49,902	1,262
SO _x	9	13,080	322	9
ROG	4	631	494	4
CO	314	12,549	8,596	314

The emission reductions resulting from facility shut down were analyzed by RMT with respect to applicable local and federal requirements. The emission reductions are required to be real, quantifiable, surplus, permanent, and enforceable to be eligible for ERCs. Based on information provided by Spreckels, it is believed that these requirements are satisfied.

Section 3
SHUT DOWN GENERATED EMISSION REDUCTIONS

3.1 Process Description

Spreckels produced and marketed a nearly full line of sugar products. The Manteca facility processed sugar beets grown in the San Joaquin and Sacramento valleys of California as well as some areas in far Northern California. Spreckels personnel had learned how to integrate the refining of raw cane sugar along with the process of extracting and refining sugar from beets.

Sugar beets arrived at the Spreckels facility in Manteca either by railcar or by truck. After they were washed and filtered through screens to remove flume, rocks, and trash, they were conveyed to the sugar beet receiving hoppers. The sugar beets were then cleaned and sliced. The beet slices, called cossettes, were soaked in hot water at about 167°F. Slaked lime (CaOH₂) was then added to the sugared juice, called diffusion juice, until it reached a pH of about 12.4 and a temperature of over 185°F. Carbon dioxide was bubbled into the limed sugar juice in two stages until the pH dropped to around 9. The juice was then filtered and many impurities were discarded. The light amber colored filtered juice, called thin juice, was concentrated to about 45 percent solids in multiple effect evaporators. The thickened juice, called thick juice, was percolated through a bed of vegetable carbon. This was a process patented by Spreckels some years ago. The carbon treated thick juice was then added to crystallized sugar until the sugar purity was over 90 percent. This liquor was filtered and was then called standard liquor. The standard liquor was drawn into vessels and further concentrated under vacuum. At the right moment some very fine "seed" sugar particles were added and the crystallization process began. When the sugar crystals had grown to the correct size, the vessel was emptied and the sugar crystals were separated using a centrifuge. The wet sugar was dried using a filtered steam of heated air and then cooled using water cooled air. At this point, after the sugar had passed several quality tests, it was transferred in covered screw conveyors to large silos for storage.

In the packaging process, sugar was withdrawn from the storage silos as needed using covered elevators and screw conveyors. The sugar was packaged in bulk rail cars or trucks, bulk bags of 2,000 pounds, or containers of 100, 50, 25, 10, 5, or 1 pound. Quality tests were made on samples taken as the sugar was packaged. The sugar was packaged as close to the time of shipment as possible.

The process control laboratory performed about 1,700 tests every 24 hours during the processing seasons. These tests involved sugar beet quality, various process juices and liquors, boiler waters and condensates, domestic and factory cold waters, various factory waste water streams, lime and carbon

testing, and the analysis of various byproducts such as wet and dried beet pulp, molasses, concentrated separator byproduct, etc. The control laboratory also tested the refined sugar prior to storage and again after withdrawal for packaging.

3.2 Shut Down Generated Emission Reductions

Since the Spreckels facility in Manteca is shutting down, the facility is surrendering all of its current SJVUAPCD Permits to Operate (PTO). Copies of all PTOs currently held by the Manteca facility can be found in Appendix C. Table 2, Permitted Emission Sources Including Emission Limits, lists all of the Operating Permits currently held by the facility by permit number including equipment description and applicable control equipment as well as any emission limits included on the Permits. Not all of the permitted equipment, however, were listed as emission sources on the 1994, and 1995, emission statements submitted to the SJVUAPCD. Therefore, Table 3, Emission Source Inventory, lists by permit number only the equipment that was included in the 1994, and 1995, emission statements for which ERCs are requested. Table 3 also includes the Source Classification Codes and descriptions that were available from the emission statements as well as the 1994, and 1995, throughput data and operating hours for each emission source. Appendix B, Emission Calculations, contains a series of worksheets which calculate the emissions for each quarter in 1994 and 1995. The quarterly emissions from each source have been calculated for all criteria pollutants using the emission factors previously submitted in the emissions statements. Only the sources with emissions submitted in the 1994, and 1995 emissions statements were included in the emission calculations. Table 4, Summary Shutdown Generated Criteria Pollutant Emission Reductions, summarizes the quarterly actual criteria pollutant emissions for 1994, and 1995, that were calculated. Table 4 also lists the average emissions for all quarters. These average emissions listed in pounds per quarter are the actual emission reductions for which ERCs are requested.

3.3 Regulations

Emission reductions must be real, surplus, permanent, quantifiable, and enforceable in order to be eligible for ERCs, according to SJVUAPCD Rule 2301-4.2.1 and US EPA's "Emission Trading Policy Statement," published in the Federal Register on December 4, 1986. SJVUAPCD Rule 2301-4.2.3 requires documentation to be submitted within 180 days from the date the emission reductions occur.

TABLE 2
SPRECKELS - MANTECA, CA
Permitted Emission Sources Including Emission Limits

PERMIT NUMBER	EQUIPMENT DESCRIPTION	EMISSION LIMIT	CONTROL EQUIPMENT
N-784-1-0	Carbon Regeneration Kiln (2.5 MMBtu/hr)	PM: 0.1 gr/dscf	Stack Gas Water Scrubber
N-784-2-0	Beet Sugar Manufacturing, Product Finishing and Storage	None	Baghouse
N-784-2-1	Sugar Receiving and Storage System with Production Elevator	PM10: 15 lbs/day	Baghouse
N-784-3-0	Beet Sugar Manufacturing; Bulk Loadout System	None	Baghouse
N-784-4-0	Beet Sugar Carbonation Process	PM: 0.1 gr/dscf	
N-784-5-0	Beet Sugar Manufacturing; East Pulp Dryer (50 MMBtu/hr) and Storage	PM: 10 lbs/hr (0.1 gr/dscf)	
N-784-6-0	Beet Sugar Manufacturing; West Pulp Dryer (50 MMBtu/hr) and Storage	PM: 10 lbs/hr (0.1 gr/dscf)	
N-784-7-0	Beet Sugar Manufacturing; Lime Production	PM: 0.1 gr/dscf	Dry Cyclone, Water Scrubber
N-784-8-1	Combustion Engineering Boiler (136 MMBtu/hr)	SOx: 5346 lbs/day (FO#6) NOx: 326.4 lbs/day (NG) or 1798.5 lbs/day (FO#6) NOx: 0.061 lb/MMBtu (NG) or 0.551 lbs/MMBtu (FO#6) CO: 63 ppm (NG) or 20 ppm (FO#6) at 3% oxygen FO#6: 1.5% sulfur by weight	Coen Low NOx Burner, FGR
N-784-9-0	Trane Company Boiler (50 MMBtu/hr)	PM: 0.1 gr/dscf	
N-784-10-0	Beet Sugar Purification (Drying and Cooling)	PM: 0.1 gr/dscf	
N-784-11-0	Dried Pulp Handling System	PM: 0.1 gr/dscf	Dust supression by spray
N-784-12-0	Powdered Sugar Conveying and Storage Bin	PM: 0.1 gr/dscf	
N-784-13-0	Starch Bag Cutting and Receiving Hopper	PM: 0.1 gr/dscf	Baghouse (area dust collector)
N-784-14-0	Starch Storage Bin	PM: 0.1 gr/dscf	Baghouse, Bin Vent Filter
N-784-15-0	Sugar and Starch Pulverizer	PM: 0.1 gr/dscf	Baghouse
N-784-16-0	Two Bemis Series 5500 Pressurized Valve Bag Packers	PM: 0.1 gr/dscf	Baghouse (area dust collector)
N-784-17-0	Mikro-Pulsaire Model #255-8-30 Baghouse (Area Dust Collection System)	PM: 0.1 gr/dscf	
N-784-18-0	One 420,000 gallon aboveground heated fuel oil storage tank	None	
N-784-19-0	Air Compressor powered by a diesel fired IC Engine (112 HP)	NOx: 7.2 g/hp-hr or 7 lbs/day Sulfur: 0.25% by weight	
N-784-20-0	Emergency Fire Pump served by a GM diesel fired IC Engine (188 hp)	None	
N-784-21-0	One 900 gallon gasoline storage tank	10000 gal/mo or 24000 gal/yr	Vapor Recovery System (95%)
N-784-22-1	Union Iron Works Boiler (159 MMBtu/hr)	SOx: 6123 lbs/day (FO#6) NOx: 381.6 lbs/day (NG) or 2101.6 lbs/day (FO#6) NOx: 0.061 lb/MMBtu (NG) or 0.551 lbs/MMBtu (FO#6) CO: 63 ppm (NG) or 20 ppm (FO#6) at 3% oxygen FO#6: 1.5% sulfur by weight	Coen Low NOx Burner, FGR
N-784-23-0	Unconfined Sandblasting Operation (Sanstorm)		
N-784-24-0	Unconfined Sandblasting Operation (Clemeco)		
N-784-26-0	#5 Well Emergency Pump served by a diesel fired IC Engine (60 hp)		
N-784-28-0	Sugar Vacuum System (for Clean-up)	PM10: 0.2 lbs/day	Baghouse (Saunco/Mines)

NOTES:

This table includes all of the permits which will be surrendered to the SJVUAPCD.
The Emission Limits represent all emission limits on each individual permit.

TABLE 3
SPRECKELS - MANTECA, CA
Emission Source Inventory

Equipmt Number	PERMIT NUMBER	EQUIPMENT DESCRIPTION	Heat Input Rating (MMBtu/hr)	AIRS SCC Code	SCC DESCRIPTION	EMISSION CONTROLS	EMITTENTS
1	N-784-1-0	Carbon Regeneration Kiln	2.5	3-02-016-99	Sugar Beet Processing - Other Not Classified	Stack Gas Water Scrubber	PM-10, SOx, NOx, VOC, CO
2, 3	N-784-2-0, -3-0	Product Finishing, Storage, and Bulk Loadout	--			Baghouse	PM-10
4	N-784-4-0	Sugar Carbonation Process	--	3-07-004-01	Pulpboard Manufacture - Paperboard	None - Exhausts to atmos.	PM-10
5, 6	N-784-5-0, -6-0	Pulp Dryers	(2) 50	1-02-006-02	Natural Gas Combustion (10 - 100 MMBtu/hr)	None - Exhausts to atmos.	PM-10, SOx, NOx, VOC, CO
				1-01-004-01	Fuel Oil #6 Combustion: Normal Firing	None - Exhausts to atmos.	PM-10, SOx, NOx, VOC, CO
7	N-784-7-0	Lime Kiln (18 burners)	(18) 3	3-90-006-03	Natural Gas - Lime Kiln	Dry Cyclone, Water Scrubber	PM-10, SOx, NOx, VOC, CO
				3-05-016-03	Lime Manufacture - Calcining: Vertical Kiln	Dry Cyclone, Water Scrubber	PM-10
8, 22	N-784-8-2, -22-2	Cogen Plant (2 boilers)	136 and 159	1-01-006-01	Natural Gas Combustion (> 100 MMBtu/hr)	Low NOx burner, FGR	PM-10, SOx, NOx, VOC, CO
9	N-784-9-1	Trane Boiler	50	1-02-006-02	Natural Gas Combustion (10 - 100 MMBtu/hr)	None - Exhausts to atmos.	PM-10, SOx, NOx, VOC, CO
10	N-784-10-0	Beet Sugar Drying & Cooling	--			None - Exhausts to atmos.	PM-10
11	N-784-11-0	Dry Pulp Handling System	--	3-02-888-05	Fugitive Emissions - Specify	None - Exhausts to atmos.	PM-10
12, 17	N-784-12-0, -17-0	Powder Sugar Conveying, Storage, & Packaging	--	3-02-888-05	Fugitive Emissions - Specify	None - Exhausts to atmos.	PM-10
18	N-784-18-0	Fuel Oil Storage (420 kgal aboveground, heated)	--			None - Exhausts to atmos.	VOC
19	N-784-19-0	Diesel Air Compressor (112 hp)	--			None - Exhausts to atmos.	PM-10, SOx, NOx, VOC, CO

Notes:
 This emission inventory includes all equipment listed in the 1995 and 1994 emission statements submitted to the SJVUAPCD.
 All of the information included in this table is from the 1995 and 1994 emission statements submitted to the SJVUAPCD.
 Permitted equipment that was not reported in the 1995 or 1994 emission statements is not included.
 The boilers are permitted to utilize both natural gas and fuel oil #6.
 Fuel Oil #6 was not used in 1995.

TABLE 4
SPRECKELS - MANTECA, CA
Summary of Shutdown Generated Criteria Pollutant Emission Reductions

Year	Pollutant	Actual Emissions (Lbs/Qtr)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1994	PM-10	3,613	26,674	25,843	3,613
	NOx	972	73,108	66,479	972
	SOx	8	25,806	425	8
	ROG	3	726	652	3
	CO	241	15,515	11,570	241
1995	PM-10	2,193	21,805	12,084	2,193
	NOx	1,552	55,085	33,324	1,552
	SOx	11	353	219	11
	ROG	4	536	335	4
	CO	386	9,582	5,622	386
Average	PM-10	2,903	24,240	18,964	2,903
	NOx	1,262	64,097	49,902	1,262
	SOx	9	13,080	322	9
	ROG	4	631	494	4
	CO	314	12,549	8,596	314

Section 4
ANALYSIS OF BASELINE AND EMISSION DATA

4.1 Baseline Period

SJVUAPCD Rule 2201-3.7.1 specifies that a two-year period be used to determine the baseline emissions level. The two-year period immediately preceding the date of application is generally used for this purpose. The annual emission statements for 1994 and 1995 have been used for calculation of baseline emissions, and are attached to this report as Appendix C. The Spreckels facility operates primarily in the second and third quarters of the year, and since it was shut down on April 19, the facility did not begin its spring campaign operations in 1996. Therefore, there are no emission reductions in 1996 for which credits are requested.

4.2 Summary of Emissions Calculations

A summary of the actual criteria pollutant emissions resulting from the Spreckels manufacturing operations during calendar years 1994, and 1995, are presented in Table 4. The facility maintained good material and operational records in accordance with the conditions specified on the Permit to Operate for each equipment. Spreckels' equipment was operated in compliance with all SJVUAPCD applicable rules. The baseline criteria pollutant emissions, averaged over the two year baseline period were calculated and are presented in Table 4.

Section 5

ANALYSIS OF CREDIBILITY OF EMISSION REDUCTIONS

5.1 Real

The criteria pollutant emission reductions resulting from the Spreckels facility shut down are presented in Table 4. The facility was shut down on April 19, 1996, and the shut down emissions reductions are real.

5.2 Surplus

It is believed that the emission reductions will be surplus. Spreckels was permitted and operated in compliance with all applicable SJVUAPCD regulations. The emission reductions were not relied upon for air quality planning purposes by the SJVUAPCD, and were not used by Spreckels to meet any other regulatory requirement.

5.3 Enforceable

The reduction is enforceable since the facility has already stopped all operations.

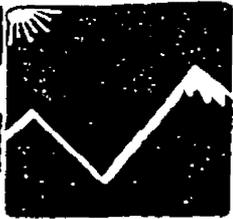
5.4 Permanent

The facility was shut down permanently on April 19, 1996.

5.5 Quantifiable

The present criteria pollutant emissions have been quantified using actual production data submitted by Spreckels to the SJVUAPCD (refer to Appendix C for SJVUAPCD Annual Emission Statement Forms for calendar years 1994-1995).

APPENDIX A
APPLICATION FOR EMISSION REDUCTION CREDIT



San Joaquin Valley Unified Air Pollution Control District

APPLICATION FOR:

EMISSION REDUCTION CREDIT (ERC)
 CONSOLIDATION OF ERC CERTIFICATES

ERC RE-ISSUE AFTER PARTIAL USE
 ERC TRANSFER OF OWNERSHIP

ERC TO BE ISSUED TO:

Spreckels Development Company

MAILING ADDRESS:

Street/P.O. Box: RMT, Inc., 4640 Admiralty Way, Suite 301

City: Marina del Rey

State: CA

Zip Code: 90292

LOCATION OF REDUCTION:

Street: 18800 South Spreckels Road

City: Manteca, CA

4. DATE OF

REDUCTION: 4/19/1996

PERMIT NO(S): See Tables 2 and 3

EXISTING ERC NO(S): --

METHOD RESULTING IN EMISSION REDUCTION:

SHUTDOWN

RETROFIT

PROCESS CHANGE

OTHER

DESCRIPTION:

The facility has stopped all operations and has been permanently shutdown.

7. REQUESTED ERCs (In Pounds Per Calendar Quarter):

	VOC	NOx	CO	PM10	SOx	OTHER
1st QTR	4	1,262	314	2,903	9	--
2nd QTR	631	64,097	12,549	24,240	13,080	--
3rd QTR	494	49,902	8,596	18,964	322	--
4th QTR	4	1,262	314	2,903	9	--
TOTAL COST	\$	\$	\$	\$	\$	\$

SIGNATURE OF APPLICANT:

Robert L. Green

TYPE OR PRINT TITLE OF APPLICANT:

President

TYPE OR PRINT NAME OF APPLICANT:

ROBERT L. GREEN

DATE:

Sept 25, 1996

TELEPHONE NO:

209-823-5121

APCD USE ONLY:

RECEIVED

SEP 25 1996

SAN JOAQUIN VALLEY
UNIFIED A.P.C.D.

NO. REGION

FILING FEE RECEIVED: \$

\$650.00 / CR#003364

DATE PAID:

9-25-96

PROJECT NO.:

960487

ID# 784

APPENDIX B
EMISSION CALCULATIONS

APPENDIX B CONTENTS

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TABLE B-1
SPRECKELS - MANTECA, CA
1st Quarter 1994 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (1st Q. '94)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qr)
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	18863 tons	PM-10	0.05	943.15
N-784-9-1	Trane Boiler	6.56 mmcf	PM-10	13.7	89.87
			NOx	140	918.40
			SOx	0.6	3.94
			ROG	0.4	2.62
			CO	35	229.60
N-784-11-0	Dry Pulp Handling System	9730 tons	PM-10	0.24	2335.14
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	3679 tons	PM-10	0.05	183.94
N-784-19-0	Diesel Air Compressor (112 hp)	0.088 kgal	PM-10	43.4	3.80
			NOx	617.4	54.02
			SOx	40.6	3.55
			ROG	1	0.09
			CO	133	11.64
TOTAL EMISSIONS (lbs/qr):			PM-10		3,556
			NOx		972
			SOx		7
			ROG		3
			CO		241

NOTES:

The emission factors used are from the 1994 emission statement submitted to the SJVUAPCD.
Only equipment that was used in the first quarter of 1994 is included in this table.

TABLE B-2
SPRECKELS - MANTECA, CA
2nd Quarter 1994 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (2nd Q. '94)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qr)
N-784-1-0	Carbon Regeneration Kiln (Natural Gas)	4.78 mmcf	PM-10	6.85	32.74
			NOx	50.0	239.00
			SOx	0.30	1.43
			ROG	0.40	1.91
			CO	10.50	50.19
✓ N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	18863 tons	PM-10	0.05	943.15
✓ N-784-5-0, -6-0	Pulp Dryers - Natural Gas	152.27 mmcf	PM-10	13.7	2086.10
			NOx	140	21317.80
			SOx	0.60	91.36
			ROG	0.40	60.91
			CO	35.0	5329.45
N-784-5-0, -6-0	Pulp Dryers - Fuel Oil #2	197.38 kgal	PM-10	11.1	2190.92
			NOx	55.0	10855.90
			SOx	128.8	25422.54
			ROG	0.83	163.83
			CO	21.0	4144.98
N-784-7-0	Lime Kiln (18 burners) - Natural Gas	83.80 mmcf	PM-10	0.12	10.06
			NOx	1.00	83.80
			SOx	0.10	8.38
			ROG	0.40	33.52
			CO	0.21	17.60
N-784-7-0	Lime Kiln (18 burners) - Product	6859 tons	PM-10	1.23	8436.57
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Natural Gas	465.38 mmcf	PM-10	5.00	2326.90
			NOx	87.15	40557.78
			SOx	0.60	279.23
			ROG	1.00	465.38
			CO	12.81	5961.50
✓ N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Fuel Oil #6	0 kgal	PM-10	3.99	0.00
			NOx	83.56	0.00
			SOx	150	0.00
			ROG	1.00	0.00
			CO	2.76	0.00
✓ N-784-10-0	Beet Sugar Drying & Cooling	38420 tons	PM-10	0.21	8068.24
✓ N-784-11-0	Dry Pulp Handling System	9730 tons	PM-10	0.24	2335.14
✓ N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	3679 tons	PM-10	0.05	183.94
✓ N-784-19-0	Diesel Air Compressor (112 hp)	0.0875 kgal	PM-10	43.4	3.80
			NOx	617.4	54.02
			SOx	40.6	3.55
			ROG	1	0.09
			CO	133	11.64
TOTAL EMISSIONS (lbs/qr):			PM-10		26,618
			NOx		73,108
			SOx		26,806
			ROG		726
			CO		15,515

NOTES:
The emission factors used are from the 1994 emission statement submitted to the SJVUAPCD.
Only equipment that was used in the second quarter of 1994 is included in this table.
The Trane boiler was not used in the second quarter of 1994.

TABLE B-3
SPRECKELS - MANTECA, CA
3rd Quarter 1994 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (3rd Q, '94)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qr)
N-784-1-0	Carbon Regeneration Kiln (Natural Gas)	7.14 mmcf	PM-10	6.85	48.91
			NOx	50.0	357.00
			SOx	0.30	2.14
			ROG	0.40	2.86
			CO	10.50	74.97
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	18863 tons	PM-10	0.05	943.15
N-784-5-0, -6-0	Pulp Dryers - Natural Gas	122.45 mmcf	PM-10	13.7	1677.57
			NOx	140	17143.00
			SOx	0.60	73.47
			ROG	0.40	48.98
			CO	35.0	4285.75
N-784-5-0, -6-0	Pulp Dryers - Fuel Oil #2	0 kgal	PM-10	11.1	0.00
			NOx	55.0	0.00
			SOx	128.8	0.00
			ROG	0.83	0.00
			CO	21.0	0.00
N-784-7-0	Lime Kiln (18 burners) - Natural Gas	99.13 mmcf	PM-10	0.12	11.90
			NOx	1.00	99.13
			SOx	0.10	9.91
			ROG	0.40	39.65
			CO	0.21	20.82
N-784-7-0	Lime Kiln (18 burners) - Product	8133 tons	PM-10	1.23	10003.59
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Natural Gas	560.25 mmcf	PM-10	5.00	2801.26
			NOx	87.15	48825.87
			SOx	0.60	336.15
			ROG	1.00	560.25
			CO	12.81	7176.82
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Fuel Oil #6	0 kgal	PM-10	3.99	0.00
			NOx	83.56	0.00
			SOx	150	0.00
			ROG	1.00	0.00
			CO	2.76	0.00
N-784-10-0	Beet Sugar Drying & Cooling	37032 tons	PM-10	0.21	7776.65
N-784-11-0	Dry Pulp Handling System	9730 tons	PM-10	0.24	2335.14
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	3679 tons	PM-10	0.05	183.94
N-784-19-0	Diesel Air Compressor (112 hp)	0.0875 kgal	PM-10	43.4	3.80
			NOx	617.4	54.02
			SOx	40.6	3.55
			ROG	1	0.09
			CO	133	11.64
TOTAL EMISSIONS (lbs/qr):			PM-10		25,786
			NOx		66,479
			SOx		425
			ROG		652
			CO		11,570

NOTES:

The emission factors used are from the 1994 emission statement submitted to the SJVUAPCD. Only equipment that was used in the third quarter of 1994 is included in this table. The Trane boiler was not used in the third quarter of 1994.

TABLE B-4
SPRECKELS - MANTECA, CA
4th Quarter 1994 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (4th Q, '94)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qtr)
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	18863 tons	PM-10	0.05	943.15
N-784-9-1	Trane Boiler	6.56 mmcf	PM-10	13.7	89.87
			NOx	140	918.40
			SOx	0.6	3.94
			ROG	0.4	2.62
			CO	35	229.60
N-784-11-0	Dry Pulp Handling System	9730 tons	PM-10	0.24	2335.14
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	3679 tons	PM-10	0.05	183.94
N-784-19-0	Diesel Air Compressor (112 hp)	0.088 kgal	PM-10	43.4	3.80
			NOx	617.4	54.02
			SOx	40.6	3.55
			ROG	1	0.09
			CO	133	11.64
TOTAL EMISSIONS (lbs/qtr):			PM-10		3,556
			NOx		972
			SOx		7
			ROG		3
			CO		241

NOTES:

The emission factors used are from the 1994 emission statement submitted to the SJVUAPCD. Only equipment that was used in the fourth quarter of 1994 is included in this table.

TABLE B-5
SPRECKELS - MANTECA, CA
1st Quarter 1995 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (1st Q. '95)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qtr)
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	13546 tons	PM-10	0.05	677.31
N-784-9-1	Trane Boiler	10.59 mmcf	PM-10	13.7	145.12
			NOx	140	1483.00
			SOx	0.6	6.36
			ROG	0.4	4.24
			CO	35	370.75
N-784-11-0	Dry Pulp Handling System	4314 tons	PM-10	0.24	1035.24
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	8280 tons	PM-10	0.05	414.00
N-784-19-0	Diesel Air Compressor (112 hp)	0.117 kgal	PM-10	43.4	5.08
			NOx	617.4	72.24
			SOx	40.6	4.75
			ROG	1.00	0.12
			CO	133	15.56
TOTAL EMISSIONS (lbs/qtr):			PM-10		2,277
			NOx		1,555
			SOx		11
			ROG		4
			CO		386

NOTES:

The emission factors used are from the 1995 emission statement submitted to the SJVUAPCD.
Only equipment that was used in the first quarter of 1995 is included in this table.

TABLE B-6
SPRECKELS - MANTECA, CA
2nd Quarter 1995 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (2nd Q. '95)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qr)
N-784-1-0	Carbon Regeneration Kiln (Natural Gas)	4.24 mmcf	PM-10	6.85	29.02
			NOx	50.0	211.85
			SOx	0.30	1.27
			ROG	0.40	1.69
			CO	10.50	44.49
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	13546 tons	PM-10	0.05	677.31
N-784-5-0, -6-0	Pulp Dryers - Natural Gas	101.38 mmcf	PM-10	13.7	1388.96
			NOx	140	14193.76
			SOx	0.60	60.83
			ROG	0.40	40.55
			CO	35.0	3548.44
N-784-5-0, -6-0	Pulp Dryers - Fuel Oil #2	0 kgal	PM-10	11.1	0.00
			NOx	55.0	0.00
			SOx	128.8	0.00
			ROG	0.83	0.00
			CO	21.0	0.00
N-784-7-0	Lime Kiln (18 burners) - Natural Gas	71.24 mmcf	PM-10	0.12	8.55
			NOx	1.00	71.24
			SOx	0.10	7.12
			ROG	0.40	28.50
			CO	0.21	14.96
N-784-7-0	Lime Kiln (18 burners) - Product	7099 tons	PM-10	1.23	8731.77
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Natural Gas	465.13 mmcf	PM-10	5.00	2325.63
			NOx	87.15	40535.73
			SOx	0.60	279.08
			ROG	1.00	465.13
			CO	12.81	5958.26
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Fuel Oil #6	0 kgal	PM-10	3.99	0.00
			NOx	83.56	0.00
			SOx	150	0.00
			ROG	1.00	0.00
			CO	2.76	0.00
N-784-10-0	Beet Sugar Drying & Cooling	34602 tons	PM-10	0.21	7266.47
N-784-11-0	Dry Pulp Handling System	4314 tons	PM-10	0.24	1035.24
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	8280 tons	PM-10	0.05	414.00
N-784-19-0	Diesel Air Compressor (112 hp)	0.117 kgal	PM-10	43.4	5.08
			NOx	617.4	72.24
			SOx	40.6	4.75
			ROG	1.00	0.12
			CO	133	15.56
TOTAL EMISSIONS (lbs/qr):			PM-10		21,882
			NOx		66,085
			SOx		363
			ROG		536
			CO		9,582

NOTES:

The emission factors used are from the 1995 emission statement submitted to the SJVUAPCD. Only equipment that was used in the second quarter of 1995 is included in this table. The Trane boiler was not used in the second quarter of 1995.

TABLE B-7
SPRECKELS - MANTECA, CA
3rd Quarter 1995 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (3rd Q, '95)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qr)
N-784-1-0	Carbon Regeneration Kiln (Natural Gas)	1.84 mmcf	PM-10	6.85	12.57
			NOx	50.0	91.75
			SOx	0.30	0.55
			ROG	0.40	0.73
			CO	10.50	19.27
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	13546 tons	PM-10	0.05	677.31
N-784-5-0, -6-0	Pulp Dryers - Natural Gas	49.27 mmcf	PM-10	13.7	675.03
			NOx	140	6898.08
			SOx	0.60	29.56
			ROG	0.40	19.71
			CO	35.0	1724.52
N-784-5-0, -6-0	Pulp Dryers - Fuel Oil #2	0 kgal	PM-10	11.1	0.00
			NOx	55.0	0.00
			SOx	128.8	0.00
			ROG	0.83	0.00
			CO	21.0	0.00
N-784-7-0	Lime Kiln (18 burners) - Natural Gas	32.93 mmcf	PM-10	0.12	3.95
			NOx	1.00	32.93
			SOx	0.10	3.29
			ROG	0.40	13.17
			CO	0.21	6.92
N-784-7-0	Lime Kiln (18 burners) - Product	3025 tons	PM-10	1.23	3720.75
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Natural Gas	300.96 mmcf	PM-10	5.00	1504.82
			NOx	87.15	26228.93
			SOx	0.60	180.58
			ROG	1.00	300.96
			CO	12.81	3855.34
N-784-8-2, -22-2	Cogeneration Plant (2 Boilers) - Fuel Oil #6	0 kgal	PM-10	3.99	0.00
			NOx	83.56	0.00
			SOx	150	0.00
			ROG	1.00	0.00
			CO	2.76	0.00
N-784-10-0	Beet Sugar Drying & Cooling	19582 tons	PM-10	0.21	4112.29
N-784-11-0	Dry Pulp Handling System	4314 tons	PM-10	0.24	1035.24
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	8280 tons	PM-10	0.05	414.00
N-784-19-0	Diesel Air Compressor (112 hp)	0.117 kgal	PM-10	43.4	5.08
			NOx	617.4	72.24
			SOx	40.6	4.75
			ROG	1.00	0.12
			CO	133	15.56
TOTAL EMISSIONS (lbs/qr):			PM-10		12,161
			NOx		33,324
			SOx		219
			ROG		335
			CO		5,622

NOTES:

The emission factors used are from the 1995 emission statement submitted to the SJVUAPCD. Only equipment that was used in the third quarter of 1995 is included in this table. The Trane boiler was not used in the third quarter of 1995.

TABLE B-8
SPRECKELS - MANTECA, CA
4th Quarter 1995 Actual Criteria Pollutant Emission Calculations

Permit Number	Equipment Description	Quarterly Throughput (4th Q, '95)	Pollutant	Emission Factor (lb/unit)	Emissions (lbs/qtr)
N-784-2-0, -3-0	Product Finishing, Storage, & Bulk Loadout (product)	13546 tons	PM-10	0.05	677.31
N-784-9-1	Trane Boiler	10.59 mmcf	PM-10	13.7	145.12
			NOx	140	1483.00
			SOx	0.6	6.36
			ROG	0.4	4.24
			CO	35	370.75
N-784-11-0	Dry Pulp Handling System	4314 tons	PM-10	0.24	1035.24
N-784-12-0	Powder Sugar Conveying, Storage, & Packaging	8280 tons	PM-10	0.05	414.00
N-784-19-0	Diesel Air Compressor (112 hp)	0.117 kgal	PM-10	43.4	5.08
			NOx	617.4	72.24
			SOx	40.6	4.75
			ROG	1.00	0.12
			CO	133	15.56
TOTAL EMISSIONS (lbs/qtr):			PM-10		2,277
			NOx		1,555
			SOx		11
			ROG		4
			CO		386

NOTES:

The emission factors used are from the 1995 emission statement submitted to the SJVUAPCD. Only equipment that was used in the fourth quarter of 1995 is included in this table.

TABLE B-9
SPRECKELS - MANTECA, CA
Summary of Shutdown Generated Criteria Pollutant Emission Reductions

Year	Pollutant	Actual Emissions (Lbs/Qtr)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1994	PM-10	3,613	26,674	25,843	3,613
	NOx	972	73,108	66,479	972
	SOx	8	25,806	425	8
	ROG	3	726	652	3
	CO	241	15,515	11,570	241
1995	PM-10	2,193	21,805	12,084	2,193
	NOx	1,552	55,085	33,324	1,552
	SOx	11	353	219	11
	ROG	4	536	335	4
	CO	386	9,582	5,622	386
Average	PM-10	2,903	24,240	18,964	2,903
	NOx	1,262	64,097	49,902	1,262
	SOx	9	13,080	322	9
	ROG	4	631	494	4
	CO	314	12,549	8,596	314

APPENDIX C
SJVUAPCD EMISSION STATEMENTS FOR 1994 AND 1995

EMISSION STATEMENT - CALENDAR YEAR 1994 EMISSIONS

CONFIDENTIAL

Please sign and return to:

San Joaquin Valley Unified APCD
1999 Tuolumne St., Suite 200
Fresno, CA 93721

Facility ID # 784
TAD # 39-20
SIC 2003
Facility Name SPRECKELS SUGAR CO., MANTECA

N-784-

by: lgg date: 3 03 95

dev. ID	equip. number	equipment type	rating /hr	yearly process rate	units source code	wks/yr	heat content (MMBTU/unit)	control	H ₂ O #/unit	COG #/unit	NO _x #/unit	SO ₂ #/unit	CO #/unit	PM #/unit
5	1	CARBON REGENERATION KILN	2.5 MMBTU	11.92	MMCF 3-02-018-89	28	1050	13	50.00	2.00	0.40	0.30	10.60	8.85
	2,3	PROD. FIN. STOR. & BULK LOADOUT		75452.00	TONS	52			0.30	0.02	0.01	0.00	0.08	0.04
	4	SUGAR CARBONATION PROCESS			TONS 3-07-004-01	28								2.00
1,2	5,8	PULP DRYERS NG	(2)50 MMBTU	274.72	MMCF 1-02-008-02	28	1050		140.00	5.80	0.40	0.60	35.00	13.70
1,2	5,8	PULP DRYERS #2 FUEL OIL	(2)50 MMBTU	197.38	1000 GAL. 1-01-004-01	28	144.7		19.23	0.80	0.32	0.08	4.81	1.88
3	7	LIME KILN	(18)3 MMBTU	182.83	MMCF 3-000-08-03	28	1050	13	65.00	1.20	0.83	120.80	21.00	11.10
4	7	LIME KILN		14992.00	TONS 3-05-018-03	28			5.43	0.13	0.11	12.71	2.07	1.10
	8,22	COGENERATION PLANT (2 BOILERS)	138/158 MMBTU	1025.63	MMCF 1-01-008-01	28	1050		1.00	0.08	0.40	0.01	0.21	0.12
	8,22	COGENERATION PLANT (2 BOILERS)	138/159 MMBTU	8.33	1000 GAL. 1-01-004-01	20	144.7		0.09	0.01	0.00	0.00	0.02	0.01
	8	BOILER (TRANE)	50 MMBTU	13.12	MMCF 1-02-000-02	28	1050							1.23
	10	BEET SUGAR DRYING & COOLING		75452.00	TONS 3-02-888-05	28								9.22
	11	DRIED PULP HANDLING SYSTEM		38919.00	TONS 3-02-888-05	28			87.15	1.58	1.00	0.80	12.81	5.00
	12-17	POWDERED SUGAR CONV. STOR. PCKGE		14715.00	TONS 3-02-888-05	52			44.60	0.81	0.81	0.31	6.67	2.68
	18	FUEL OIL STORAGE		205.72	1000 GAL. 1-01-004-01	52			83.68	0.45	1.00	150.00	2.78	3.90
	19	DIESEL AIR COMPRESSOR	112 HP	0.35	1000 GAL. 1-02-000-02	52			0.35	0.00	0.00	0.82	0.01	0.02
TOTAL EMISSIONS (tons/year):									140.00	5.80	0.40	0.60	35.00	13.70
									0.11	0.01	0.01	0.01	0.02	0.01
									71.21	1.80	1.26	13.74	13.80	24.65

Contact JERRY TUCKER

Company SPRECKELS SUGAR CO.

Address P.O. Box 1287

City, State, Zip MANTECA, CA 95336

Telephone (209) 823 3121

Location of facility if different from above 18800 S. SPRECKELS RD. MANTECA, CA 95336

Jerry Tucker / Chief Chemist
Name/Title of responsible official

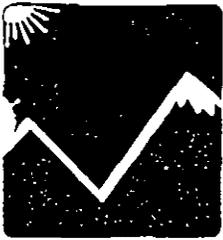
I certify that the information contained in this Emission Statement is accurate to the best of my knowledge.

Jerry Tucker
signature of responsible official

1095 EMISSION STATEMENT

DEV NUMBER	EQUIP NUMBER	EQUIPMENT TYPE	RATING PER HR	YEARLY PROCESS RATE	UNITS SOURCE CODE MMCF	WKS/ YEAR	HEAT CONTENT MMBTU/UNIT	CONTROL NOX #/UNIT	TOG #/UNIT	ROG FRACTION	SOX #/UNIT	CO #/UNIT	PM# #/UNIT	
	5	1 CARBON REGENERATION KILN	2.5	6.072	MMCF 3-02-016-99	23	1050	13	50 0.15	2.9 0.01	0.4 0.00	0.3 0.00	10.5 0.03	6.8 0.0
	2,3	PROD. FIN. STOR & BULK LOADOUT		54105	TONS	52							0.0 1.3	
	4	SUGAR CARBONATION PROCESS		64309	TONS 3-07-004-01	20								
1,2	5,6	PULP DRYERS NAT GAS	(2)50 MMBTU	150.664	MMCF 1-02-006-02	20	1050	140 10.55	5.08 0.38	0.4 0.03	0.6 0.05	35 2.64	1.3 1.0	
1,2	5,6	PULP DRYERS #2 FUEL OIL	(20)50 MMBTU	0	1000 GAL 1-01-004-01	0	144.7	55 0.00	1.28 0.00	0.83 0.00	128.0 0.00	21 0.00	1.1 0.0	
3	7	LIME KILN	(18)3 MMBTU	104.172	MMCF 3-900-06-03	23	1050	13	1 0.05	0.06 0.00	0.4 0.02	0.1 0.01	0.21 0.01	0.1 0.0
4	7	LIME KILN		10124	TONS 3-05-018-03	23							1.2 6.2	
	8,22	COGEN PLANT (2 BOILERS)	136/159 MMBTU	786.089	MMCF 1-01-006-01	23	1050	87.15 33.38	1.58 0.81	1 0.38	0.6 0.23	12.81 4.91	1.9	
	8,22	COGEN PLANT (2 BOILERS)	136/159 MMBTU	0	1000 GAL 1-01-004-01	23	144.7	83.56 0.00	0.45 0.00	1 0.00	150 0.00	2.76 0.00	3.9 0.0	
	9	BOILER (TRANE)	50 MMBTU	21.1857	MMCF 1-02-006-02	28	1050	140 1.48	5.8 0.06	0.4 0.00	0.6 0.01	35 0.37	1.3 0.1	
	10	BEET SUGAR DRYING & COOLING		54185	TONS	23							0.2 5.6	
	11	DRY PULP HANDLING SYSTEM		17254	TONS 3-02-888-05	20							0.2 2.0	
	12,17	POWDER SUGAR CONV,STOR,PCKGE		33120	TONS 3-02-888-05	52							0.0 0.8	
	18	FUEL OIL STORAGE		0	1000 GAL	0								
	19	DIESEL AIR COMPRESSOR	HP	112	0.468	1000 GAL	52		817.4 0.14	50.4 0.01	1 0.00	40.8 0.01	133 0.03	4.3 0.0
TOTAL EMISSIONS FOR YEAR								45.76	1.07	0.44	0.30	7.90	10.3	

APPENDIX D
FACILITY PERMITS TO OPERATE



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-1-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
CARBON REGENERATION KILN, 2.5 MMBTU/HR.

CONDITIONS

Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.

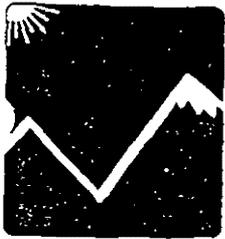
No air contaminant shall be released into the atmosphere which causes a public nuisance.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director/APCO

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95356 *(209) 545-7000* FAX (209) 545-8652



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-2-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

BEET SUGAR MANUFACTURING; PRODUCT FINISHING AND STORAGE SERVED BY A BAGHOUSE.

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. There shall be no visible emissions for a period or periods aggregating more than three minutes in any one hour.
3. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley--
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-2-1

EXPIRATION DATE: 06/01/1998

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

SUGAR RECEIVING AND STORAGE SYSTEM WITH A SUGAR DUST COLLECTION SYSTEM TO REMOVE DUST FROM THE PRODUCTION ELEVATOR LOCATED BETWEEN BIN 1 AND 2 ON THE EAST SIDE.

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
3. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.
6. PM10 emissions shall not exceed 15 lbs/day.
7. A log shall be kept on site indicating the amount of sugar received and stored on a daily basis. All logs shall be maintained at the site for a period of at least two years and be made available for District inspection upon request.

CONDITIONS CONTINUE ON NEXT PAGE

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178-11-2-2787

8. Proper housekeeping shall be maintained in and around the conveying elevators, galley area, and storage bins to minimize fugitive dust emissions.

There shall be no visible emissions from any of the dust collectors.



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-3-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

BEET SUGAR MANUFACTURING; BULK LOADOUT SYSTEM SERVED BY A BAGHOUSE.

CONDITIONS

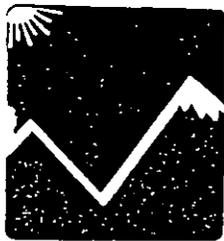
1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. There shall be no visible emissions for a period or periods aggregating more than three minutes in any one hour.
3. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-7844-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
BEET SUGAR CARBONATION PROCESS.

CONDITIONS

Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.

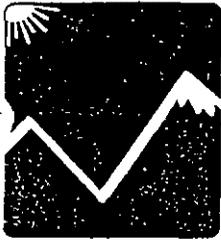
No air contaminant shall be released into the atmosphere which causes a public nuisance.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-5-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

REFINERY SUGAR MANUFACTURING; EAST PULP DRYER (50 MMBTU/HR) AND STORAGE.

CONDITIONS

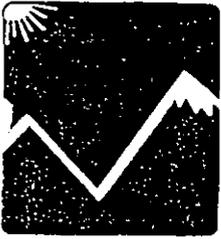
1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.
3. The drier may be fired on either Natural gas or Fuel Oil #6.
4. Particulate matter emissions from the scrubber shall be no more than 0.1 gr/dscf and 10 lbs/hr.
5. Scrubber sprays and/or nozzles shall be maintained in optimum working condition.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

ERMIT NO: N-784-6-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

BET SUGAR MANUFACTURING; WEST PULP DRYER (50 MMBTU/HR) AND STORAGE.

CONDITIONS

-
- Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
 - No air contaminant shall be released into the atmosphere which causes a public nuisance.
 - The drier may be fired on either Natural gas or Fuel Oil #6.
 - Particulate matter emissions from the scrubber shall be no more than 0.1 gr/dscf and 10 lbs/hr.
 - Scrubber sprays and/or nozzles shall be maintained in optimum working condition.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-7-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.

MAILING ADDRESS: P. O. BOX 1287

MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

SUGAR MANUFACTURING; LIME PRODUCTION.

CONDITIONS

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.
3. The Line-Kiln burners may be fired on fuel oil #6.

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Executive Director/APCO

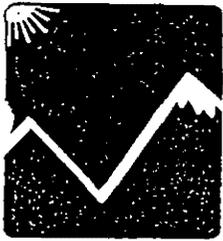
Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95356 *(209) 545-7000* FAX (209) 545-8652

Conditions for Permit No: N-784-8-0
SPRECKELS SUGAR COMPANY, INC.
18800 S SPRECKELS ROAD

EQUIPMENT DESCRIPTION:
BOILER, COMBUSTION ENGINEERING, 136 MMBTU/HR

CONDITIONS

- 1 - Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
- 2 - No air contaminant shall be released into the atmosphere which causes a public nuisance.



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-8-1

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

COMBUSTION ENGINEERING BOILER (136 MMBTU/HR) WITH A COEN LOW NOX BURNER (MODEL 695).

CONDITIONS

No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.

No air contaminant shall be released into the atmosphere which causes a public nuisance.

3. A daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.
4. An analysis showing the sulfur and nitrogen contents of each load of fuel oil received shall be maintained on the premises for period of at least two years and shall be made available for District inspection upon request.
5. Source testing to demonstrate compliance with permit conditions and all rules and regulations shall be conducted within 90 days of initial start-up and on an annual basis thereafter.
6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing.

CONDITIONS CONTINUE ON NEXT PAGE

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8. The results of each source test shall be submitted to the District within 60 days thereafter.

9. The boiler shall be fired on Natural Gas or #6 Fuel Oil only.

10. The SOx emissions shall not exceed 5,346 pounds in any one day when fired on #6 Fuel Oil.

11. The NOx emissions shall not exceed 85 ppm by volume at 3% Oxygen or 0.1 #/MM Btu when fired on Natural Gas.

12. The CO emissions shall not exceed 63 ppm by volume at 3% Oxygen when fired on Natural Gas and 20 ppm by volume at 3% Oxygen when fired on # 6 Fuel Oil.

13. The applicant must demonstrate to the satisfaction of the APCO that CO emissions are reduced to the optimum level.

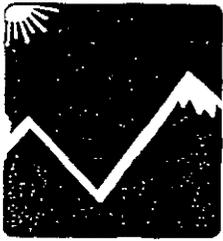
14. NOx emissions shall not exceed 326.4 pounds in any one day when fired on Natural Gas and 1,798.5 lbs. in any one day, when fired on Fuel Oil #6.

15. The boiler shall be equipped with a fuel meter for Natural Gas.

16. The NOx emissions shall not exceed 437 ppm by volume at 3% Oxygen or 0.551 lbs/MM Btu when fired on Fuel Oil #6.

17. The NMHC emissions, measured as methane, shall not exceed 3.8 ppm by volume at 3% Oxygen, when fired on Natural Gas and 3.0 ppm by volume at 3% Oxygen when fired on Fuel Oil #6.

18. The sulfur content of the Fuel Oil shall not exceed 1.5% by weight.



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

ERMIT NO: N-784-9-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
BOILER, 50 MMBTU/HR.

CONDITIONS

Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.

No air contaminant shall be released into the atmosphere which causes a public nuisance.

3. The boilers may be fired on either natural gas or #6 fuel oil.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-10-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

BEET SUGAR PURIFICATION (DRYING AND COOLING).

CONDITIONS

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-11-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
DRIED PULP HANDLING SYSTEM.

CONDITIONS

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.

2. No air contaminant shall be released into the atmosphere which causes a public nuisance.

3. Dust suppression shall be accomplished by uniform spray distribution of at least 1 1/2% (by weight) wet additive.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-12-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.

MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

POWDERED SUGAR CONVEYING AND STORAGE BIN.

CONDITIONS

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.

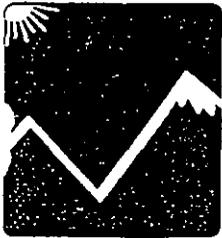
No air contaminant shall be released into the atmosphere which causes a public nuisance.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District-Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-13-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

STARCH BAG CUTTING AND RECEIVING HOPPER SERVED BY A MIKRO-PULSAIRE MODEL #255-8-30 BAGHOUSE (AREA DUST COLLECTOR).

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
3. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.
6. All emissions from the starch receiving hopper shall be ducted to the Micro-Pulsaire Model 255-8-30 baghouse ("Area Dust Collector").

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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Executive Director/APCO

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-14-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
STARCH STORAGE BIN SERVED BY A MIKRO-PULSAIRE 48 BIN VENT FILTER.

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
3. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director/APCO

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95356 *(209) 545-7000* FAX (209) 545-8652



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-15-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

SUGAR AND STARCH PULVERIZER (MODEL 200 MIKRO-ACM) SERVED BY A MIKRO-PULSAIRE BAGHOUSE (MODEL 28A 3-40).

CONDITIONS

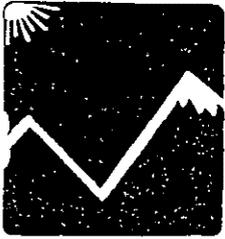
1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
 - Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
 - The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
 - Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
 - Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.
- 6 The pulverizing mill shall be maintained free of any air leaks.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

AVID L. CROW

Executive Director/APCO

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-17-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

TRUKRO-PULSAIRE MODEL #255-8-30 BAGHOUSE ("AREA DUST COLLECTION SYSTEM").

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
3. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-16-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

TWO (2) BEMIS SERIES 5500 PRESSURIZED VALVE BAG PACKERS DUCTED TO THE "AREA DUST COLLECTION SYSTEM".

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/dscf and visible emissions from any single emission point shall be less than 20% opacity.
3. All emissions from the pressurized Valve Bag Packers shall be ducted to the Micro-Pulsaire Model 55-8-30 baghouse ("Area Dust Collector").

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

AVID L. CROW

Executive Director/APCO

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-21-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

ONE (1) 900 GALLON CONVAULT GASOLINE STORAGE TANK SERVED BY AN OPW COAXIAL PHASE I VAPOR RECOVERY SYSTEM AND ONE (1) NOZZLE.

CONDITIONS

1. At least 95% by weight of all vapors displaced during the filling of storage tanks shall be prevented from entering the atmosphere.
2. Pressure/Vacuum relief valves shall be maintained operational at all times.
The vapor recovery system and its components shall be installed, operated, and maintained in accordance with the State certification requirements.
3. Records of monthly gasoline throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request.
5. Total gasoline throughput for the facility shall not exceed 10,000 gallons per month nor 24,000 gallons per calendar year.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-18-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

ONE (1) 420,000 GALLON ABOVE GROUND HEATED FUEL OIL STORAGE TANK.

CONDITIONS

No air contaminant shall be released into the atmosphere which causes a public nuisance.

The fuel oil temperature shall not exceed 120 degrees F.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-19-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
AIR COMPRESSOR POWERED BY A DIESEL FIRED I.C. ENGINE (112 HP).

CONDITIONS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.
3. Diesel fuel shall have a maximum sulfur content of less than 0.25% by weight.
4. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing.
5. The permittee shall submit to the District a written report indicating the standard factory engine timing, the actual standard timing, date and person performing the timing retard.
6. On annual basis, the permittee shall submit to the District a written proof of the engine timing as determined by a competent person.
7. NOx emissions shall not exceed 7.2 g/hp-hr.
 1. NOx emissions from the engine shall not exceed 7 pounds during any one day.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

ERMIT NO: N-784-20-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.

MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

EMERGENCY FIRE PUMP SERVED BY A DETROIT GM DIESEL FIRED I.C. (188 HP).

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.

2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.

3. A daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-22-1

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.

MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

IRON WORKS BOILER (159 MMBTU/HR) WITH A COEN LOW NOX BURNER (MODEL 695).

CONDITIONS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.
3. A daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.
4. An analysis showing the sulfur and nitrogen contents of each load of fuel oil received shall be maintained on the premises for period of at least two years and shall be made available for District inspection upon request.
5. Source testing to demonstrate compliance with permit conditions and all rules and regulations shall be conducted within 90 days of initial start-up and on an annual basis thereafter.
6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing.

CONDITIONS CONTINUE ON NEXT PAGE

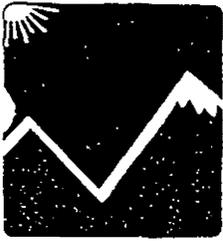
This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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7. The results of each source test shall be submitted to the District within 60 days thereafter.
The boiler shall be fired on Natural Gas or #6 Fuel Oil only.
9. The NOx emissions shall not exceed 85 ppm by volume at 3% Oxygen or 0.1 #/MM Btu when fired on Natural Gas.
10. The SOx emissions shall not exceed 6,123 pounds in any one day when fired on #6 Fuel Oil.
 1. The CO emissions shall not exceed 63 ppm by volume at 3% Oxygen when fired on Natural Gas and 20 ppm by volume at 3% Oxygen when fired on # 6 Fuel Oil.
 2. The applicant must demonstrate to the satisfaction of the APCO that CO emissions are reduced to the optimum level.
13. NOx emissions shall not exceed 381.6 pounds in any one day when fired on Natural Gas and 2,101.6 pounds in any one day when fired on Fuel Oil #6.
14. The boiler shall be equipped with a fuel meter for Natural Gas.
 5. The NOx emissions shall not exceed 437 ppm by volume at 3% Oxygen or 0.551 lbs/MM Btu when fired on Fuel Oil #6.
 5. The NMHC emissions, measured as methane, shall not exceed 3.8 ppm by volume at 3% Oxygen, when fired on Natural Gas and 3.0 ppm by volume at 3% Oxygen when fired on Fuel Oil #6.
 7. The sulfur content of the Fuel Oil shall not exceed 1.5% by weight.



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-23-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

UNCONFINED SANDBLASTING OPERATION SERVED BY A SANSTORM SANDBLASTING MACHINE (MODEL #HEW).

CONDITIONS

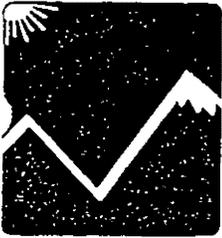
1. Visible emissions from the Sand Blasting Operations shall be less than 40% opacity.
2. Only Air Resources Board approved sand shall be used for sand blasting operations.
3. The sand employed for blasting purposes shall not be reused under any circumstances.
4. The blasting operations shall be carried out in a manner to prevent any nuisances.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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Executive Director/APCO

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95356 *(209) 545-7000* FAX (209) 545-8652



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-24-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

UNCONFINED SANDBLASTING OPERATION SERVED BY A CLEMCO SANDBLASTING MACHINE (MODEL #SCWB-2452).

CONDITIONS

1. Visible emissions from the Sand Blasting Operations shall be less than 40% opacity.

2. Only Air Resources Board approved sand shall be used for sand blasting operations.

3. The sand employed for blasting purposes shall not be reused under any circumstances.

4. All sand blasting operations shall be carried out in a manner to prevent any nuisances.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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Executive Director/APCO

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San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N-784-26-0

EXPIRATION DATE: 06/01/98

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

5 WELL EMERGENCY PUMP SERVED BY AN INTERNATIONAL-MURPHY-LESTER DIESEL FIRED I.C. ENGINE (60 HP).

CONDITIONS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.

daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.

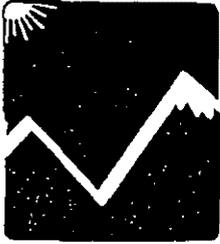
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o. PM10 emissions shall not exceed 0.2 pounds in any one day.



San Joaquin Valley
Unified Air Pollution Control District

PERMIT TO OPERATE

PERMIT NO: N- 784-28-0

EXPIRATION DATE: 06/01/1998

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

SUGAR VACUUM SYSTEM (FOR CLEAN-UP) SERVED BY A SAUNCO/MINES BAGHOUSE (MODEL #SVRB4-14-92).

CONDITIONS

No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.

The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location.

Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises.

Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere.

The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency.

6. No air contaminant shall be released into the atmosphere which causes a public nuisance.

There shall be no visible emissions from the baghouse.

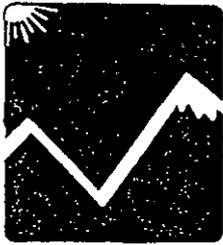
CONDITIONS CONTINUE ON NEXT PAGE

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require a new permit. This permit shall be posted as prescribed in District Rule 2010.

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Executive Director/APCO

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San Joaquin Valley
Unified Air Pollution Control District
AUTHORITY TO CONSTRUCT

PERMIT NO: N-784-9-1

ISSUANCE DATE: 02/09/96

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.

MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

CRANE COMPANY 50 MMBTU/HR BOILER (S/N 10753). MODIFICATION TO LIMIT THE ANNUAL HEAT INPUT TO LESS THAN 90 BILLION BTUS.

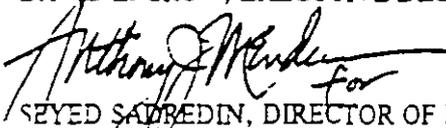
CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance.
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide).
4. The boilers may be fired on either natural gas or #6 fuel oil.
5. The heat input to this boiler shall not exceed 90 billion BTUs during any one calendar year.
6. A record of daily fuel consumption in BTUs and type of fuel used shall be maintained, and retained on the premises for a period of at least two years and made available for District inspection upon request.
7. The boiler shall be equipped with dedicated fuel flow meter for natural gas usage showing the cumulative total amount of natural gas burned.

CONDITIONS CONTINUE ON NEXT PAGE

This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 545-7000 WHEN CONSTRUCTION OF THE EQUIPMENT IS COMPLETED. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

DAVID L. CROW, EXECUTIVE DIRECTOR/APCO


SEYED SAIBREDIN, DIRECTOR OF PERMIT SERVICES

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95336 *(209) 545-7000* FAX (209) 545-8652

6. The boiler shall meet the requirements of Rule 4351 - "Boilers, Steam Generators, and Process Heaters" section 5.2 as outlined in the compliance section (section 7.0) of this rule.



San Joaquin Valley
Unified Air Pollution Control District
AUTHORITY TO CONSTRUCT

PERMIT NO: N-784-8-2

ISSUANCE DATE: 02/09/96

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:
COMBUSTION ENGINEERING TYPE VP 136 MMBTU/HR BOILER (S/N 25 VP-12R) EQUIPPED WITH A COEN LOW NOX
BURNER AND FLUE GAS RECIRCULATION SYSTEM. MODIFICATION TO LIMIT THE NOX EMISSIONS TO 0.061
BS/MMBTU FOR NATURAL GAS TO COMPLY WITH SECT. 7.4 OF RULE 4305

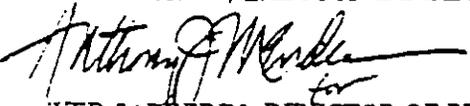
CONDITIONS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
- No air contaminant shall be released into the atmosphere which causes a public nuisance.
- A daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.
- An analysis showing the sulfur and nitrogen contents of each load of fuel oil received shall be maintained on the premises for period of at least two years and shall be made available for District inspection upon request.
- Source testing to demonstrate compliance with permit conditions and all rules and regulations shall be conducted within 90 days of initial start-up and on an annual basis thereafter.
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing.

CONDITIONS CONTINUE ON NEXT PAGE

This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 545-7000 WHEN CONSTRUCTION OF THE EQUIPMENT IS COMPLETED. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

DAVID L. CROW, EXECUTIVE DIRECTOR/APCO


AYED SAEED, DIRECTOR OF PERMIT SERVICES

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95336 *(209) 545-7000* FAX (209) 545-8652

- .. The results of each source test shall be submitted to the District within 60 days thereafter.
7. The boiler shall be fired on Natural Gas or #6 Fuel Oil only.
9. The SOx emissions shall not exceed 5,346 pounds in any one day when fired on #6 Fuel Oil.
10. The NOx emissions concentration shall not exceed 0.061 lbs/mmbtu when fired on natural gas.
11. The CO emissions concentration shall not exceed 63 ppm by volume at 3% Oxygen when fired on Natural Gas and 20 ppm by volume at 3% Oxygen when fired on # 6 Fuel Oil.
12. The boiler shall be equipped with a fuel meter for Natural Gas.
13. The NOx emissions concentration shall not exceed 437 ppm by volume at 3% Oxygen or 0.551 lbs/MM Btu when fired on Fuel Oil #6.
14. The NMHC emissions concentration, measured as methane, shall not exceed 3.8 ppm by volume at 3% Oxygen, when fired on Natural Gas and 3.0 ppm by volume at 3% Oxygen when fired on Fuel Oil #6.
15. The sulfur content of the Fuel Oil shall not exceed 1.5% by weight.
16. The boiler shall meet the requirements of Rule 4351 - "Boilers, Steam Generators, and Process Heaters" section 5.1 as outlined in the compliance section (section 7.0) of this rule.



San Joaquin Valley
Unified Air Pollution Control District
AUTHORITY TO CONSTRUCT

PERMIT NO: N-784-22-2

ISSUANCE DATE: 02/09/96

LEGAL OWNER OR OPERATOR: SPRECKELS SUGAR COMPANY, INC.
MAILING ADDRESS: P. O. BOX 1287
MANTECA, CA 95336

LOCATION: 18800 S SPRECKELS ROAD, MANTECA

EQUIPMENT DESCRIPTION:

UNION IRON WORKS TYPE MH 159 MMBTU/HR BOILER (S/N 23429) EQUIPPED WITH A COEN LOW NOX BURNER AND FLUE GAS RECIRCULATION SYSTEM. MODIFICATION TO LIMIT THE NOX EMISSIONS TO 0.061 MMBTU /HR FOR NATURAL GAS TO COMPLY WITH SECTION 7.4 OF RULE 4305.

CONDITIONS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity.
2. No air contaminant shall be released into the atmosphere which causes a public nuisance.
3. A daily log of either operating hours or fuel usage shall be kept on the premises at all times and made available for District inspection upon request. Records shall be kept for a minimum of two years.
4. An analysis showing the sulfur and nitrogen contents of each load of fuel oil received shall be maintained on the premises for period of at least two years and shall be made available for District inspection upon request.
5. Source testing to demonstrate compliance with permit conditions and all rules and regulations shall be conducted within 90 days of initial start-up and on an annual basis thereafter.
6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing.

CONDITIONS CONTINUE ON NEXT PAGE

This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 545-7000 WHEN CONSTRUCTION OF THE EQUIPMENT IS COMPLETED. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

DAVID L. CROW, EXECUTIVE DIRECTOR:APCO


EYED SABKEDIN, DIRECTOR OF PERMIT SERVICES

Northern Regional Office *4230 Kiernan Ave., Suite 130 *Modesto, California 95356 *(209) 545-7000* FAX (209) 545-8652

7. The results of each source test shall be submitted to the District within 60 days thereafter.
8. The boiler shall be fired on Natural Gas or #6 Fuel Oil only.
9. The NOx emissions concentration shall not exceed 0.061 lbs/mmbtu when fired on natural gas.
10. The SOx emissions shall not exceed 6,123 pounds in any one day when fired on #6 Fuel Oil.
11. The CO emissions concentration shall not exceed 63 ppm by volume at 3% Oxygen when fired on Natural Gas and 20 ppm by volume at 3% Oxygen when fired on #6 Fuel Oil.
12. The boiler shall be equipped with a fuel meter for Natural Gas.
13. The NOx emissions concentration shall not exceed 437 ppm by volume at 3% Oxygen or 0.551 lbs/MMBtu when fired on Fuel Oil #6.
14. The NMHC emissions concentration, measured as methane, shall not exceed 3.8 ppm by volume at 3% Oxygen, when fired on Natural Gas and 3.0 ppm by volume at 3% Oxygen when fired on Fuel Oil #6.
15. The sulfur content of the Fuel Oil shall not exceed 1.5% by weight.
16. The boiler shall meet the requirements of Rule 4351 - "Boilers, Steam Generators, and Process Heaters" section 5.1 as outlined in the compliance section (section 7.0) of this rule.

APPENDIX E
FACILITY PLOT PLAN

EMISSION REDUCTION CREDIT APPLICATION REVIEW
N-122-1, N-122-2, N-122-3, N-122-4, & N-122-5
Project #: 960487

Engineer: Paul Andrew Hensleigh
Date: March 20, 1997

Company Name: Spreckels Development Company
Facility Address: 18800 S Spreckels Road
Manteca, CA 95336

Contact Name: Jerry Tucker, Robert Green (209) 823-3121
Date received: September 25, 1996
Date deemed complete: October 21, 1996

I. SUMMARY:

The primary business of Spreckels Development Company (Spreckels) was the manufacturing of sugar products. Spreckels started operations at this site in 1917 and completely shut down operations on April 19, 1996.

The facility operated primarily during the spring and fall but also had some equipment that operated year round. The facility emissions are primarily Volatile Organic Compound (VOC), Oxides of Nitrogen (NOx), Carbon Monoxide (CO), Particulate Matter with an aerodynamic diameter smaller than or equal to a nominal ten microns (PM10), and Oxides of Sulfur (SOx) from the combustion of natural gas in two cogeneration units and two pulp dryers, and PM10 emissions from the processing of sugar beets. The year round equipment included product finishing and storage, dry pulp handling, powdered sugar conveying, storage, and packaging equipment, and a diesel air compressor. In addition, a boiler was operated during the first and fourth quarters of the year.

The amount of reductions that will be granted by the District are as follows:

Pollutant	1st Quarter (lbs)	2nd Quarter (lbs)	3rd Quarter (lbs)	4th Quarter (lbs)
VOC	26	1,107	904	26
NOx	308	40,238	31,149	308
CO	283	11,655	9,283	283
PM10	715	8,177	6,581	715
SOx	8	999	321	8

II. APPLICABLE RULES:

Rule 2301 Emission Reduction Credit Banking (Amended 12/17/92)

III. LOCATION OF REDUCTION:

18800 S Spreckels Road in Manteca, California.

IV. METHOD OF GENERATING REDUCTIONS:

This application for Emission Reduction Credits (ERCs) is based on the shut down of a stationary source. The ERCs will be based on the historical usage of natural gas consumed and the amount of material processed for the eight (8) calendar quarters from January 1994 to December 1995. The equipment at this facility was permitted as follows:

Permit unit N-784-1-0 was a 2.5 mmBtu/hr carbon regeneration kiln which was fired on natural gas and served by a stack gas water scrubber.

Permit units N-784-2-1 & N-784-3-0 were for granular sugar finishing, storage, and bulk loadout operations served by a baghouse.

Permit units N-784-5-0 & N-784-6-0 were for two (2) 50 mmBtu/hr pulp dryers which were capable of being fired on natural gas or fuel oil #6. During the baseline period, these units were operated on fuel oil only during the 2nd quarter of 1994.

Permit unit N-784-7-0 was for a vertical lime kiln with eighteen (18) 3 mmBtu/hr burners which were capable of being fired on natural gas or fuel oil # 6. During the baseline period, this unit only operated on natural gas. This kiln was served by a dry cyclone and a water scrubber. The limestone was charged at the top of the kiln and calcined as it descended to discharge at the bottom of the kiln. The lime produced was converted to hydrated (slaked) lime by the wet scrubber to perform the hydrating, and also to prevent product loss. The slaked lime (CaOH_2) was used in the manufacturing of sugar products. In addition to the combustion emissions, there were PM10 emissions from the handling of the lime.

Permit units N-784-8-1 & N-784-22-1 were for a cogeneration plant which consisted of a 136 mmBtu/hr Combustion Engineering boiler with a Coen low NOx burner and a 159 mmBtu/hr Union Iron Works boiler with a low NOx burner. Both boilers were capable of being fired on natural gas or fuel oil # 6. During the baseline period, these units only operated on natural gas.

Permit unit N-784-9-0 was for a 50 mmBtu/hr Trane boiler which was capable of being fired on natural gas or fuel oil # 6. This boiler was operated only during the first and fourth quarters of the year. During the baseline period, this unit only operated on natural gas.

Permit unit N-784-10-0 was for beet sugar drying and cooling served by a Ducon scrubber.

IV. METHOD OF GENERATING REDUCTIONS (Continued):

Permit unit N-784-11-0 was for a dry pulp handling system which used a wet additive as a dust suppression system.

Permit units N-784-12-0 through N-784-17-0 were for powdered sugar handling operations. N-784-12-0 was for granular sugar conveying into storage with no external control equipment. N-784-13-0 was for a starch receiving operation (from bags) served by the "area dust collector". N-784-14-0 was for a starch storage bin served by a bin vent filter. N-784-15-0 was for a sugar and starch pulverizer served by a baghouse. N-784-16-0 was for two bagging machines served by the "area dust collector". N-784-17-0 was for the "area dust collector" serving N-784-13-0 and N-784-16-0. The records submitted with this application were for the amount of powdered sugar which went through the packers served by the area dust collector.

Permit unit N-784-19-0 was for a 112 hp diesel fired IC engine powering an air compressor.

The above was a summary of all emission units for which records were submitted and credits applied for. Any other operations not mentioned above will not be used in calculating Emission Reduction Credits.

V. EMISSION REDUCTION CREDIT (ERC) CALCULATIONS:

A. Assumptions and Emission Factors (EF):

N-784-1-0 2.5 mmBtu/hr Carbon Regeneration Kiln:

The emission factors for this unit will be based on the Environmental Protection Agency (EPA) Compilation of Emission Factors (AP-42) Section 1.4 (1/95) for natural gas combustion for commercial boilers between 0.3 mmBtu/hr and 10 mmBtu/hr.

$EF_{VOC} = 5.28 \text{ lbs/mmft}^3$ of natural gas
 $EF_{NOx} = 100 \text{ lbs/mmft}^3$ of natural gas
 $EF_{CO} = 21 \text{ lbs/mmft}^3$ of natural gas
 $EF_{PM10} = 12 \text{ lbs/mmft}^3$ of natural gas
 $EF_{SOx} = 0.6 \text{ lbs/mmft}^3$ of natural gas

N-784-2-1 & N-784-3-0 Granular sugar finishing, storage, and bulk loadout operation served by a baghouse:

Per information from the Bay Area Air Quality Management District, the properties of granular sugar are very similar to urea. At a sugar handling facility in their jurisdiction, for the granular sugar handling operations, the Bay Area AQMD used an uncontrolled emission factor for urea handling of 0.19 pounds Particulate Matter (PM) per ton (AP-42, section 8.2-1, 1/95).

V. ERC CALCULATIONS (Continued):

Assuming that the baghouse had a control efficiency of 99 % and that 100 % of the PM out of the baghouse is PM10, the controlled emission factor would be equal to:

$$EF_{PM10} = (0.19 \text{ lb PM/ton}) * (1 - 0.99) = 0.0019 \text{ lbs PM10/ton} = 0.002 \text{ lbs PM10/ton}$$

N-784-5-0 & N-784-6-0 Two (2) 50 mmBtu/hr pulp driers:

The emission factors for these units will be based on AP-42 Section 1.4 (1/95) for natural gas combustion for small industrial boilers between 10 mmBtu/hr and 100 mmBtu/hr and Section 1.3 (1/95) for fuel oil combustion for industrial boilers between 10 mmBtu/hr and 100 mmBtu/hr. The fuel oil used during this period was # 2 with a sulfur content of 0.05 % by weight. Because the emission factors (EFs) for # 2 fuel oil are lower than the EFs for # 6 fuel oil for each criteria pollutant, the use of # 2 fuel oil will be allowed for banking.

$$EF_{VOC} = 2.784 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{NOx} = 140 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{CO} = 35 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{PM10} = 13.7 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{SOx} = 0.6 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{VOC} = 0.2 \text{ lbs/1,000 gallon of fuel oil}$$

$$EF_{NOx} = 20 \text{ lbs/1,000 gallon of fuel oil}$$

$$EF_{CO} = 5 \text{ lbs/1,000 gallon of fuel oil}$$

$$EF_{PM10} = 2 \text{ lbs/1,000 gallon of fuel oil}$$

$$EF_{SOx} = (142)(S) \text{ lbs/1,000 gallon of fuel oil where } S = \text{sulfur content of fuel} = 0.05 \\ = 7.1 \text{ lbs/1,000 gallon of fuel oil}$$

N-784-7-0 Vertical lime kiln with eighteen (18) 3 mmBtu/hr burners:

The emission factors for the combustion contaminants from this unit will be based on AP-42 Section 1.4 (1/95) for natural gas combustion for commercial boilers between 0.3 mmBtu/hr and 10 mmBtu/hr.

$$EF_{VOC} = 5.28 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{NOx} = 100 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{CO} = 21 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{PM10} = 12 \text{ lbs/mmft}^3 \text{ of natural gas}$$

$$EF_{SOx} = 0.6 \text{ lbs/mmft}^3 \text{ of natural gas}$$

The emission factor for the process emissions from this unit will be based on AP-42 Table 11.17-2 (1/95) for a lime atmospheric hydrator with wet scrubber (0.07 lbs PM/ton). The average particle size distribution listed in AP-42, Table 11.17-7 is for rotary lime kilns served by an ESP or fabric filter.

V. ERC CALCULATIONS (Continued):

Assuming that the size distribution will be similar for a vertical kiln served by a scrubber, 50% of the PM will be PM10. The emission factor would then be:

$$EF_{PM10} = (0.07 \text{ lbs PM/ton}) \cdot (0.5 \text{ lbs PM10/lb PM}) = 0.035 \text{ lbs PM10/ton of lime}$$

N-784-8-1 & N-784-22-1 Cogeneration plant with one (1) 136 mmBtu/hr boiler served by a low NOx burner and one (1) 159 mmBtu/hr boiler served by a low NOx burner:

The emission factors for PM10 and SOx for these units will be based on AP-42 Section 1.4 (1/95) for natural gas combustion for utility/large industrial boilers greater than 100 mmBtu/hr. For NOx, the emission factor will be based on the limit allowed by Rule 4305 (Boilers, Steam Generators, and Process Heaters). For VOC and CO, the emission factors will be based on the average of the source test results from 1994 and 1995 (see Appendix 1). During the baseline period, fuel oil was not used and therefore the following emission factors are only for natural gas.

$$\begin{aligned} EF_{VOC} & \\ 1994 & = 1.5 \text{ ppm @ 3\% O}_2 = 0.0006 \text{ lbs/mmBtu} = 0.6 \text{ lbs/mmcf} \\ 1995 & = 2.77 \text{ ppm @ 3\% O}_2 = 0.0012 \text{ lbs/mmBtu} = 1.2 \text{ lbs/mmcf} \\ \text{Avg} & = 0.9 \text{ lbs/mmcf} \\ EF_{NOx} & = 36 \text{ lbs/mmft}^3 \text{ (0.036 lbs/mmBtu as required by Rule 4305, Section 5.1)} \\ EF_{CO} & \\ 1994 & = 27.5 \text{ ppm @ 3\% O}_2 = 0.02 \text{ lbs/mmBtu} = 20 \text{ lbs/mmcf} \\ 1995 & = 8.95 \text{ ppm @ 3\% O}_2 = 0.007 \text{ lbs/mmBtu} = 7 \text{ lbs/mmcf} \\ \text{Avg} & = 13.5 \text{ lbs/mmcf} \\ EF_{PM10} & = 5 \text{ lbs/mmft}^3 \text{ of natural gas} \\ EF_{SOx} & = 0.6 \text{ lbs/mmft}^3 \text{ of natural gas} \end{aligned}$$

N-784-9-0 50 mmBtu/hr Trane boiler:

The emission factors for this unit will be based on AP-42 Section 1.4 (1/95) for natural gas combustion for small industrial boilers between 10 mmBtu/hr and 100 mmBtu/hr, except for NOx which will be based on the requirements of Rule 4305, Section 5.1.

$$\begin{aligned} EF_{VOC} & = 2.784 \text{ lbs/mmft}^3 \text{ of natural gas} \\ EF_{NOx} & = 36 \text{ lbs/mmft}^3 \text{ (0.036 lbs/mmBtu as required by Rule 4305, Section 5.1)} \\ EF_{CO} & = 35 \text{ lbs/mmft}^3 \text{ of natural gas} \\ EF_{PM10} & = 13.7 \text{ lbs/mmft}^3 \text{ of natural gas} \\ EF_{SOx} & = 0.6 \text{ lbs/mmft}^3 \text{ of natural gas} \end{aligned}$$

V. ERC CALCULATIONS (Continued):

N-784-10-0 Beet sugar drying and cooling served by a scrubber:

Per the 12/3/76 source test (see Appendix 2), the PM emission rate from the first run of the test was 2.9 pounds per hour at a process rate of 20.8 tons per hour (emission factor of $2.9 \div 20.8 = 0.14$ lbs/ton). For the second run, the emission rate was 3.6 pounds per hour (emission factor of $3.6 \div 20.8 = 0.17$ lbs/ton). The average PM emission factor is then 0.14 lbs/ton + 0.17 lbs/ton $\div 2 = 0.155$ lbs/ton.

Because the PM10 weight fraction for this process is not known, per Rule 2201 section 4.2.2.3, we will assume 50% of the PM to be PM10. The PM10 EF is then:

$$\begin{aligned} EF_{PM10} &= (0.155 \text{ lbs PM/ton}) * (0.5 \text{ lbs PM10/lb PM}) = 0.0775 \text{ lbs PM10/ton} \\ &= 0.08 \text{ lbs PM10/ton} \end{aligned}$$

N-784-11-0 Dry pulp handling system served by a wet additive suppression system:

Based on data for a similar operation (Holly Sugar), the PM emission rate after pelletizing sugar beet pulp is 0.795 pounds per hour at a process rate of 5 tons per hour (0.795 lbs/hr $\div 5$ tons/hr = 0.159 lbs PM/ton). For Spreckels, the pulp was not pelletized, however, a wet additive was used to control emissions with an assumed control efficiency of 75%. Therefore, we will assume that the control achieved via the wet additive will be equivalent to the control achieved via the pelletizing. Because the PM10 % for this process is not known, per Rule 2201 section 4.2.2.3, we will assume 50% of the PM to be PM10. The PM10 emission factor is then:

$$EF_{PM10} = (0.159 \text{ lbs PM/ton}) * (0.5 \text{ lbs PM10/lb PM}) = 0.08 \text{ lbs PM10/ton}$$

N-784-12-0 through N-784-17-0 Powdered sugar handling operation:

Per the 10/20/83 source test (See Appendix 3), the PM emission rate was 0.35 pounds per hour at a process weight of 7.05 tons per hour. This would equate to a PM emission factor of $0.35 \div 7.05 = 0.05$ lbs/ton. Per test data from Speckles, the PM10 percentage for powdered sugar is 26 %. The PM10 emission factor is then equal to:

$$EF_{PM10} = (0.05 \text{ lbs PM/ton}) * (0.26 \text{ lbs PM10/lb PM}) = 0.013 \text{ lbs PM10/ton}$$

N-784-19-0 112 hp diesel fired IC engine powering an air compressor:

The emission factors for this unit will be based on AP-42 Section 3.3 (10/92) for uncontrolled diesel industrial engines, except for NOx which will be based on a permit condition limit of 7.2 grams per horsepower-hour (gr/hp-hr).

V. ERC CALCULATIONS (Continued):

The emission factors will be converted from gr/hp-hr to lbs/1,000 gal because the fuel usage was reported in 1,000 gallons. In order to convert, a standard Brake Specific Fuel Consumption (BSFC) of 7,000 Btu/hp-hr and a standard Higher Heating Value (HHV) of 140,000 Btu/gallon of diesel fuel will be used.

$$EF_{VOC} = (1.14 \text{ gr/hp-hr})(\text{hp-hr}/7000 \text{ Btu})(140 \text{ kBtu/gal})(\text{lb}/453.6 \text{ gr})(1000 \text{ gal/kgal})$$

$$= 50.3 \text{ lbs/kgal}$$

$$EF_{NOx} = (7.2 \text{ gr/hp-hr})(\text{hp-hr}/7000 \text{ Btu})(140 \text{ kBtu/gal})(\text{lb}/453.6 \text{ gr})(1000 \text{ gal/kgal})$$

$$= 317.5 \text{ lbs/kgal}$$

$$EF_{CO} = (3.03 \text{ gr/hp-hr})(\text{hp-hr}/7000 \text{ Btu})(140 \text{ kBtu/gal})(\text{lb}/453.6 \text{ gr})(1000 \text{ gal/kgal})$$

$$= 133.6 \text{ lbs/kgal}$$

$$EF_{PM10} = (1.0 \text{ gr/hp-hr})(\text{hp-hr}/7000 \text{ Btu})(140 \text{ kBtu/gal})(\text{lb}/453.6 \text{ gr})(1000 \text{ gal/kgal})$$

$$= 44.1 \text{ lbs/kgal}$$

$$EF_{SOx} = (0.931 \text{ gr/hp-hr})(\text{hp-hr}/7000 \text{ Btu})(140 \text{ kBtu/gal})(\text{lb}/453.6 \text{ gr})(1000 \text{ gal/kgal})$$

$$= 41.0 \text{ lbs/kgal}$$

B. Baseline Period Determination and Data:

Per District Rule 2201, Section 3.7, the baseline period is the two consecutive years of operation immediately prior to the submission of the complete application unless the District determines that another time period of at least two consecutive years within five years immediately prior to the submission of the complete application is more representative of normal source operations.

Spreckels operated primarily during the second and third quarters of the year. Because the facility shut down in April 1996, the second quarter operations had not yet begun for 1996. Therefore, the complete years of 1994 and 1995 are more representative of normal operations and will be used as the baseline period.

The following are the actual throughputs and fuel usage during the baseline period for each permit unit for which credits are being applied for:

Permit # N-784-1-0 2.5 mmBtu/hr carbon regeneration kiln:

Year	Baseline Period Data (mmcf natural gas burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	4.78	7.14	0
1995	0	4.24	1.84	0
Average	0	4.5	4.5	0

V. ERC CALCULATIONS (Continued):

Permit # N-784-2-1 & N-784-3-0 Granular sugar finishing, storage, and bulk loadout operations served by a baghouse:

Year	Baseline Period Data (tons of product)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	18,863	18,863	18,863	18,863
1995	13,546	13,546	13,546	13,546
Average	16,205	16,205	16,205	16,205

Permit # N-784-5-0 & N-784-6-0 Two (2) 50 mmBtu/hr pulp dryers:

Year	Baseline Period Data (mmcf natural gas burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	152.27	122.45	0
1995	0	101.38	49.27	0
Average	0	126.8	85.9	0

Year	Baseline Period Data (kgal fuel oil # 2 burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	197.38	0	0
1995	0	0	0	0
Average	0	98.7	0	0

Permit # N-784-7-0 Vertical lime kiln with eighteen (18) 3 mmBtu/hr burners:

Year	Baseline Period Data (mmcf natural gas burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	83.8	99.13	0
1995	0	71.24	32.93	0
Average	0	77.5	66.0	0

Year	Baseline Period Data (tons of product)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	6,859	8,133	0
1995	0	7,099	3,025	0
Average	0	6,979	5,579	0

Permit # N-784-8-1 & N-784-22-1 Cogeneration plant with one (1) 136 mmBtu/hr boiler served by a low NOx burner and one (1) 159 mmBtu/hr boiler served by a low NOx burner:

Year	Baseline Period Data (mmcf natural gas burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	465.38	560.25	0
1995	0	465.13	300.96	0
Average	0	465.3	430.6	0

V. ERC CALCULATIONS (Continued):

Permit # N-784-9-0 One (1) 50 mmBtu/hr Trane boiler:

Year	Baseline Period Data (mmcf natural gas burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	6.56	0	0	6.56
1995	10.59	0	0	10.59
Average	8.6	0	0	8.6

Permit # N-784-10-0 Beet sugar drying and cooling served by a scrubber:

Year	Baseline Period Data (tons of product)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0	38,420	37,032	0
1995	0	34,602	19,582	0
Average	0	36,511	28,307	0

Permit # N-784-11-0 Dry pulp handling system served by a wet additive suppression system:

Year	Baseline Period Data (tons of product)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	9,730	9,730	9,730	9,730
1995	4,314	4,314	4,314	4,314
Average	7,022	7,022	7,022	7,022

Permit # N-784-12-0 Powdered sugar handling system:

Year	Baseline Period Data (tons of product)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	3,679	3,679	3,679	3,679
1995	8,280	8,280	8,280	8,280
Average	5,980	5,980	5,980	5,980

Permit # N-784-19-0 112 hp diesel fired IC engine powering an air compressor:

Year	Baseline Period Data (kgal of diesel burned)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
1994	0.088	0.088	0.088	0.088
1995	0.117	0.117	0.117	0.117
Average	0.1	0.1	0.1	0.1

V. **ERC CALCULATIONS (Continued):**

C. Historical Actual Emissions (HAE):

The HAEs are defined in Rule 2201, section 6.2.1 as emissions having actually occurred based on source tests or calculated using actual fuel consumption or process weight, recognized emissions factors, or other data approved by the APCO which most accurately represent the emissions during the baseline period.

The HAEs will be based on the actual fuel usage for any combustion devices and the actual process weights for the material handling. The emission factors will be based on a combination of source test data as well as recognized emissions factors.

Permit # N-784-1-0 2.5 mmBtu/hr carbon regeneration kiln:

	HAEs (combustion emissions)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
Natural gas usage	0	4.5	4.5	0
VOC EF (lbs/mmcf)	5.28	5.28	5.28	5.28
VOC HAE (lbs/qtr)	0	24	24	0
NOx EF (lbs/mmcf)	100	100	100	100
NOx HAE (lbs/qtr)	0	450	450	0
CO EF (lbs/mmcf)	21	21	21	21
CO HAE (lbs/qtr)	0	95	95	0
PM10 EF (lbs/mmcf)	12	12	12	12
PM10 HAE (lbs/qtr)	0	54	54	0
SOx EF (lbs/mmcf)	0.6	0.6	0.6	0.6
SOx HAE (lbs/qtr)	0	3	3	0

Permit # N-784-2-1 & N-784-3-0 Granular sugar finishing, storage, and bulk loadout operations served by a baghouse:

	HAEs (process emissions)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
Tons of product	16,205	16,205	16,205	16,205
PM10 EF (lbs/ton)	0.002	0.002	0.002	0.002
PM10 HAE (lbs/qtr)	32	32	32	32

V. ERC CALCULATIONS (Continued):

Permit # N-784-5-0 & N-784-6-0

Two (2) 50 mmBtu/hr pulp dryers:

HAEs (combustion emissions from natural gas)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Natural gas usage	0	126.8	85.9	0
VOC EF (lbs/mmcf)	2.784	2.784	2.784	2.784
VOC HAE (lbs/qtr)	0	353	239	0
NOx EF (lbs/mmcf)	140	140	140	140
NOx HAE (lbs/qtr)	0	17,752	12,026	0
CO EF (lbs/mmcf)	35	35	35	35
CO HAE (lbs/qtr)	0	4,438	3,007	0
PM10 EF (lbs/mmcf)	13.7	13.7	13.7	13.7
PM10 HAE (lbs/qtr)	0	1,737	1,177	0
SOx EF (lbs/mmcf)	0.6	0.6	0.6	0.6
SOx HAE (lbs/qtr)	0	76	52	0

HAEs (combustion emissions from fuel oil # 2)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Fuel oil usage	0	98.7	0	0
VOC EF (lbs/kgal)	0.2	0.2	0.2	0.2
VOC HAE (lbs/qtr)	0	20	0	0
NOx EF (lbs/kgal)	20	20	20	20
NOx HAE (lbs/qtr)	0	1,974	0	0
CO EF (lbs/kgal)	5	5	5	5
CO HAE (lbs/qtr)	0	494	0	0
PM10 EF (lbs/kgal)	2	2	2	2
PM10 HAE (lbs/qtr)	0	197	0	0
SOx EF (lbs/kgal)	7.1	7.1	7.1	7.1
SOx HAE (lbs/qtr)	0	701	0	0

Permit # N-784-7-0

Vertical lime kiln with eighteen (18) 3 mmBtu/hr burners:

HAEs (combustion emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Natural gas usage	0	77.5	66.0	0
VOC EF (lbs/mmcf)	5.28	5.28	5.28	5.28
VOC HAE (lbs/qtr)	0	409	348	0
NOx EF (lbs/mmcf)	100	100	100	100
NOx HAE (lbs/qtr)	0	7,750	6,600	0

V. ERC CALCULATIONS (Continued):

Permit # N-784-7-0 Continued:

HAEs Continued (combustion emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
CO EF (lbs/mmcf)	21	21	21	21
CO HAE (lbs/qtr)	0	1,628	1,386	0
PM10 EF (lbs/mmcf)	12	12	12	12
PM10 HAE (lbs/qtr)	0	930	792	0
SOx EF (lbs/mmcf)	0.6	0.6	0.6	0.6
SOx HAE (lbs/qtr)	0	47	40	0

HAEs (process emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Tons of product	0	6,979	5,579	0
PM10 EF (lbs/ton)	0.035	0.035	0.035	0.035
PM10 HAE (lbs/qtr)	0	244	195	0

Permit # N-784-8-1 & N-784-22-1 Cogeneration plant with one (1) 136 mmBtu/hr boiler served by a low NOx burner and one (1) 159 mmBtu/hr boiler served by a low NOx burner:

HAEs (combustion emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Natural gas usage	0	465.3	430.6	0
VOC EF (lbs/mmcf)	0.9	0.9	0.9	0.9
VOC HAE (lbs/qtr)	0	419	388	0
NOx EF (lbs/mmcf)	36	36	36	36
NOx HAE (lbs/qtr)	0	16,751	15,502	0
CO EF (lbs/mmcf)	13.5	13.5	13.5	13.5
CO HAE (lbs/qtr)	0	6,282	5,813	0
PM10 EF (lbs/mmcf)	5	5	5	5
PM10 HAE (lbs/qtr)	0	2,327	2,153	0
SOx EF (lbs/mmcf)	0.6	0.6	0.6	0.6
SOx HAE (lbs/qtr)	0	279	258	0

V. ERC CALCULATIONS (Continued):

Permit # N-784-9-0 One (1) 50 mmBtu/hr Trane boiler:

HAEs (combustion emissions from natural gas)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Natural gas usage	8.6	0	0	8.6
VOC EF (lbs/mmcf)	2.784	2.784	2.784	2.784
VOC HAE (lbs/qtr)	24	0	0	24
NO _x EF (lbs/mmcf)	36	36	36	36
NO _x HAE (lbs/qtr)	310	0	0	310
CO EF (lbs/mmcf)	35	35	35	35
CO HAE (lbs/qtr)	301	0	0	301
PM10 EF (lbs/mmcf)	13.7	13.7	13.7	13.7
PM10 HAE (lbs/qtr)	118	0	0	118
SO _x EF (lbs/mmcf)	0.6	0.6	0.6	0.6
SO _x HAE (lbs/qtr)	5	0	0	5

Permit # N-784-10-0 Beet sugar drying and cooling served by a scrubber:

HAEs (process emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Tons of product	0	36,511	28,307	0
PM10 EF (lbs/ton)	0.08	0.08	0.08	0.08
PM10 HAE (lbs/qtr)	0	2,921	2,265	0

Permit # N-784-11-0 Dry pulp handling system served by a wet additive suppression system:

HAEs (process emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Tons of product	7,022	7,022	7,022	7,022
PM10 EF (lbs/ton)	0.08	0.08	0.08	0.08
PM10 HAE (lbs/qtr)	562	562	562	562

Permit # N-784-12-0 through N-784-17-0 Powdered sugar handling system:

HAEs (process emissions)				
	1st quarter	2nd quarter	3rd quarter	4th quarter
Tons of product	5,980	5,980	5,980	5,980
PM10 EF (lbs/ton)	0.013	0.013	0.013	0.013
PM10 HAE (lbs/qtr)	78	78	78	78

V. ERC CALCULATIONS (Continued):

Permit # N-784-19-0 112 hp diesel fired IC engine powering an air compressor:

	HAEs (combustion emissions from diesel fuel)			
	1st quarter	2nd quarter	3rd quarter	4th quarter
Diesel usage	0.1	0.1	0.1	0.1
VOC EF (lbs/kgal)	50.3	50.3	50.3	50.3
VOC HAE (lbs/qtr)	5	5	5	5
NOx EF (lbs/kgal)	317.5	317.5	317.5	317.5
NOx HAE (lbs/qtr)	32	32	32	32
CO EF (lbs/kgal)	133.6	133.6	133.6	133.6
CO HAE (lbs/qtr)	13	13	13	13
PM10 EF (lbs/kgal)	44.1	44.1	44.1	44.1
PM10 HAE (lbs/qtr)	4	4	4	4
SOx EF (lbs/kgal)	41.0	41.0	41.0	41.0
SOx HAE (lbs/qtr)	4	4	4	4

Summary of HAEs:

Permit	Summary of VOC HAEs (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
1-0	0	24	24	0
2-1 & 3-0	0	0	0	0
5-0 & 6-0 (natural gas)	0	353	239	0
5-0 & 6-0 (fuel oil)	0	20	0	0
7-0	0	409	348	0
8-1 & 22-1	0	419	388	0
9-0	24	0	0	24
10-0	0	0	0	0
11-0	0	0	0	0
12-0 through 17-0	0	0	0	0
19-0	5	5	5	5
TOTAL	29	1,230	1,004	29

Permit	Summary of NOx HAEs (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
1-0	0	450	450	0
2-1 & 3-0	0	0	0	0
5-0 & 6-0 (natural gas)	0	17,752	12,026	0
5-0 & 6-0 (fuel oil)	0	1,974	0	0
7-0	0	7,750	6,600	0

V. ERC CALCULATIONS (Continued):

Summary of NOx HAEs Continued (lbs/qr)				
Permit	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
8-1 & 22-1	0	16,751	15,502	0
9-0	310	0	0	310
10-0	0	0	0	0
11-0	0	0	0	0
12-0 through 17-0	0	0	0	0
19-0	32	32	32	32
TOTAL	342	44,709	34,610	342

Summary of CO HAEs (lbs/qr)				
Permit	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
1-0	0	95	95	0
2-1 & 3-0	0	0	0	0
5-0 & 6-0 (natural gas)	0	4,438	3,007	0
5-0 & 6-0 (fuel oil)	0	494	0	0
7-0	0	1,628	1,386	0
8-1 & 22-1	0	6,282	5,813	0
9-0	301	0	0	301
10-0	0	0	0	0
11-0	0	0	0	0
12-0 through 17-0	0	0	0	0
19-0	13	13	13	13
TOTAL	314	12,950	10,314	314

Summary of PM10 HAEs (lbs/qr)				
Permit	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
1-0	0	54	54	0
2-1 & 3-0	32	32	32	32
5-0 & 6-0 (natural gas)	0	1,737	1,177	0
5-0 & 6-0 (fuel oil)	0	197	0	0
7-0	0	930	792	0
7-0 (process)	0	244	195	0
8-1 & 22-1	0	2,327	2,153	0
9-0	118	0	0	118
10-0	0	2,921	2,265	0
11-0	562	562	562	562
12-0 through 17-0	78	78	78	78
19-0	4	4	4	4
TOTAL	794	9,086	7,312	794

V. ERC CALCULATIONS (Continued):

Permit	Summary of SOx HAEs (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
1-0	0	3	3	0
2-1 & 3-0	0	0	0	0
5-0 & 6-0 (natural gas)	0	76	52	0
5-0 & 6-0 (fuel oil)	0	701	0	0
7-0	0	47	40	0
8-1 & 22-1	0	279	258	0
9-0	5	0	0	5
10-0	0	0	0	0
11-0	0	0	0	0
12-0 through 17-0	0	0	0	0
19-0	4	4	4	4
TOTAL	9	1,110	357	9

Pollutant	Summary of HAEs (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
VOC	29	1,230	1,004	29
NOx	342	44,709	34,610	342
CO	314	12,950	10,314	314
PM10	794	9,086	7,312	794
SOx	9	1,110	357	9

D. Actual Emission Reductions (AERs):

Section 6.5.2 of Rule 2201, New and Modified Stationary Source Review, defines the Actual Emission Reductions (AERs) due to the shutdown of an emissions unit as:

$$\text{AER} = \text{HAE (for the unit prior to shutdown)}$$

Summing up the previous HAEs, the Actual Emission Reduction per quarter will be:

Pollutant	Actual Emission Reductions (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
VOC	29	1,230	1,004	29
NOx	342	44,709	34,610	342
CO	314	12,950	10,314	314
PM10	794	9,086	7,312	794
SOx	9	1,110	357	9

V. **ERC CALCULATIONS (Continued):**

E. Air Quality Improvement Deduction:

Section 6.5 of Rule 2201, New and Modified Stationary Source Review, requires the District to set aside 10% of the Actual Emission Reductions for the Air Quality Improvement Deduction. Ten percent of the AERs would be:

Pollutant	Air Quality Improvement Deduction (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
VOC	3	123	100	3
NOx	34	4,471	3,461	34
CO	31	1,295	1,031	31
PM10	79	909	731	79
SOx	1	111	36	1

F. Increase in Permitted Emissions:

There will be no Increase in Permitted Emissions (IPE) as a result of this shutdown.

G. Bankable Emission Reductions:

The amount of bankable emission reductions is equal to the Actual Emission Reductions minus the 10% air quality improvement deduction:

Pollutant	Bankable Emission Reductions (lbs/qtr)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
VOC	26	1,107	904	26
NOx	308	40,238	31,149	308
CO	283	11,655	9,283	283
PM10	715	8,177	6,581	715
SOx	8	999	321	8

VI. **COMPLIANCE:**

In order to insure compliance with Rule 2301, all emission reductions must meet the following criteria to be bankable.

A. Real:

The proposed emission reductions occurred as a result of the shutdown of the emission units at this facility. The emissions were based on actual operating data provided by the applicant. The District is therefore satisfied that the emissions in the amounts calculated did indeed occur. Therefore, the reductions are real.

VI. COMPLIANCE (Continued):

B. Enforceable:

Each of the units for which emissions reductions are requested had valid District Permits. The applicable permits were surrendered by the facility. In order to activate the shutdown units, new applications for permits would be required. Operating without permits would result in enforcement action. Therefore, the reductions are enforceable.

C. Quantifiable:

The emissions were calculated based on actual operating history provided by the applicant and using the best available emission factors. Therefore, the reductions are quantifiable.

D. Permanent:

As was previously stated, the shut down units are no longer operational and the applicable permits were canceled. Should the facility wish to commence operation of similar units at this location in the future, they would first be required to obtain new Permits to Operate. Therefore, the reductions are permanent.

E. Surplus:

The shutdown of these units was voluntarily made and except for the following listed exception, were not required by any prohibitory rules in effect at the time of application, any workshopped rule or regulation, any agreement, or any control measure in an Air Quality Attainment Plan (AQAP).

The boilers under Permits to Operate N-784-8-1, N-784-9-0, & N-784-22-1 were subject to Rule 4305 (Boilers, Steam Generators, and Process Heaters). Therefore the NOx AERs from these boilers were adjusted down to the emission concentration requirements of the rule. Therefore, the emission reductions are surplus.

F. Timeliness:

The facility ceased operations on April 19, 1996 and applied for ERCs on September 25, 1996. Therefore, the application was submitted within the required time frame of 180 days after the reductions occurred. Therefore, the application is considered timely.

VII. RECOMMENDATIONS:

Issue Emission Reduction Credit Certificates to Spreckels Development Corporation, for actual emission reductions generated from the shutdown of emission units at the facility previously located at 18800 South Spreckels Road in Mantuca, CA. The certificates should reflect the following amount of reductions:

Certificate #	EMISSION REDUCTION CREDITS (ERCs)			
	First Qtr	Second Qtr	Third Qtr	Fourth Qtr
N-122-1	26	1,107	904	26
N-122-2	308	40,238	31,149	308
N-122-3	283	11,655	9,283	283
N-122-4	715	8,177	6,581	715
N-122-5	8	999	321	8

APPENDIX 1

N-784-8-1 & N-784-22-1

1994 & 1995 Source Test Result Summary

**TABLE 1-1
SUMMARY OF RESULTS
GAS-FIRED BOILER EMISSION TESTS
CE AND UNION BOILERS, COMMON STACK
SPRECKELS SUGAR COMPANY, MANTECA, CALIFORNIA
AUGUST 1994**

	Average Test Results	Permit Limits	
Process Conditions			
Total Natural Gas Flow, SCF/hr	224,500		
Total Steam Production, lb/hr	166,300		
Stack Gas Volumetric Flow, DSCFM	53,000 ✓		
Stack Gas Temperature, °F	343		
Emission Measurements			
O ₂ , % vol. dry	7.1		
CO ₂ , % vol. dry	7.9		
H ₂ O, % vol.	13.0	(Union)	(CE)
NO _x , ppm vol. dry	35.6	--	--
ppm @ 3% O ₂	46.2 ✓	85	85
lb/day as NO ₂	329.5 ✓	381.6	326.4
lb/MMBTU as NO ₂	0.056 ✓	0.1	0.1
CO, ppm vol. dry	21.2	--	--
ppm @ 3% O ₂	27.5 ✓	63	63
lb/hr	5.0 ✓	--	--
VOC, ppm vol. dry	1.1	--	--
ppm @ 3% O ₂	1.5 ✓	3.8	3.8
lb/hr as Methane	0.21 ✓	--	--

Note: See Section 4.0 for results from individual test runs.

**TABLE 1-1
SUMMARY OF RESULTS
GAS-FIRED BOILER EMISSION TESTS
CE AND UNION BOILERS, COMMON STACK
SPRECKELS SUGAR COMPANY, MANTECA, CALIFORNIA
MAY 1995**

	Average Test Results	Permit Limits	
Process Conditions			
Total Natural Gas Flow, SCF/hr	225,813		
Total Steam Production, lb/hr	171,017		
Stack Gas Volumetric Flow, DSCFM	40,772	<i>by Fuel Pass</i>	
Stack Gas Temperature, °F	329.0	<i>= 110692</i>	
Emission Measurements			
O ₂ , % vol. dry	3.39		
CO ₂ , % vol. dry	9.96		
H ₂ O, % vol.	18.3	(Union)	(CE)
NO _x , ppm vol. dry	43.0 ✓	--	--
ppm @ 3% O ₂	44.0 ✓	85	85
lb/day as NO ₂	305.9 ✓	381.6	326.4
lb/MMBTU as NO ₂	0.054 ✓	0.1	0.1
CO, ppm vol. dry	8.74 ✓	--	--
ppm @ 3% O ₂	8.95 ✓	63	63
lb/hr	1.58 ✓	--	--
VOC, ppm vol. dry	2.71 ✓	--	--
ppm @ 3% O ₂	2.77 ✓	3.8	3.8
lb/hr as Methane	0.28 ✓	--	--

Note: See Section 4.0 for results from individual test runs.

APPENDIX 2
N-784-10-0
1976 Source Test Result Summary

SAN JOAQUIN COUNTY AIR POLLUTION CONTROL DISTRICT
1601 E. HAZELTON AVENUE, P. O. BOX 2009, STOCKTON, CALIFORNIA 95201
Telephone: (209) 466-6781 and 462-8828

SOURCE TEST EVALUATION FORM

SOURCE: SPRECKELS SUGAR LOCATION: MANTELA
SOURCE TEST: DUCON SCRUBBER
TEST DATE: 12/31/76 EVALUATION DATE: 12/16/76
SOURCE TEST ORGANIZATION: CHEMICOLOGY
SOURCE TEST PERSONNEL: J. W. ALBERTSON

1. SUMMARY SELECTED RESULTS

Process Conditions:

Time: 9:45
Process weight, T/hr: 208
ACFM: 12287
SCFM: 11620
SDCFM: 11074

Gas Composition:

CO₂, % vol (dry): AIR
O₂, " " : _____
CO, " " : _____
N₂, " " : _____

Particulate Emissions:

	Test 1	Test 2	Test 3
Time:	<u>9:45</u>	<u>10:30</u>	_____
gr/SCF:	<u>0.029</u>	<u>7.6</u>	_____
lb/hr:	<u>2.90</u>	<u>3.0</u>	_____
% H ₂ O:	<u>5</u>	_____	_____

Sampling Conditions:

Sample duration, min.:	<u>60</u>	_____	_____
Volume collected, SDCF:	<u>38.21</u>	_____	_____
% Isokinetic:	<u>98.55</u>	_____	_____

Visible Emissions:

Pass: _____ Fail: _____ VE included: _____

Summary Notes:

TEST IS ACCEPTABLE AS IS.

18000 SOUTH SPRECKELS ROAD
AP 74-45
EE 121676

APPENDIX 3

N-784-12-0 through N-784-17-0
1983 Source Test Result Summary



CHEMECO
CORPORATION

Page 4 of 28

RESULTS SUMMARY

CLIENT: Spreckels Sugar, Manteca, California

UNIT: Powdered Sugar Baghouse Outlet

DATE: 10/20/83

TIME: 1057 - 1203 1356 - 1502

PROCESS CONDITIONS

Process Rate,	14160	14027
lb/hr. sugar:		
Volume Flow Rate,		
ACFM:	13900	14100
SCFM:	12000	12000
SDCFM:	11800	11800

PARTICULATE EMISSIONS ^{1/}

Concentration, gr/SDCF:	0.0038	0.0032
Emission Rate, lb/hr:	0.4	0.3

TEST PARAMETERS

Test Duration, min.:	60	60
% isokinetic rate:	93.8	97.1

^{1/} Results include both filterable and condensable particulate (filter catch and impinger catch).



San Joaquin Valley
Unified Air Pollution Control District
Northern Regional Office * 4230 Kiernan Ave., Suite 130 * Modesto, CA 95356

Emission Reduction Credit Certificate N-122-1

ISSUED TO: SPRECKELS DEVELOPMENT COMPANY

ISSUED DATE: JUNE 3, 1997

LOCATION OF REDUCTION: 18800 SOUTH SPRECKELS ROAD
MANTECA, CA

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
26 lbs	1,107 lbs	904 lbs	26 lbs

Conditions Attached

Method Of Reduction

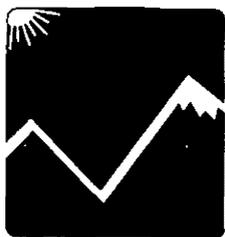
Shutdown of Entire Stationary Source

Shutdown of Emissions Unit

Other:

David L. Crow, APCO

Seyed Sadredin
Director of Permit Services



San Joaquin Valley
Unified Air Pollution Control District

Northern Regional Office • 4230 Kiernan Ave., Suite 130 • Modesto, CA 95356

Emission Reduction Credit Certificate
N-122-2

ISSUED TO: SPRECKELS DEVELOPMENT COMPANY

ISSUED DATE: JUNE 3, 1997

**LOCATION OF REDUCTION: 18800 SOUTH SPRECKELS ROAD
MANTECA, CA**

For NO_x Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
308 lbs	40,238 lbs	31,149 lbs	308 lbs

Conditions Attached

Method Of Reduction

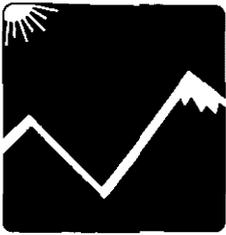
Shutdown of Entire Stationary Source

Shutdown of Emissions Unit

Other:

David L. Crow, APCO

Seyed Sadredin
Director of Permit Services



San Joaquin Valley
Unified Air Pollution Control District

Northern Regional Office * 4230 Kiernan Ave., Suite 130 * Modesto, CA 95356

Emission Reduction Credit Certificate
N-122-3

ISSUED TO: SPRECKELS DEVELOPMENT COMPANY

ISSUED DATE: JUNE 3, 1997

LOCATION OF REDUCTION: 18800 SOUTH SPRECKELS ROAD
Manteca, CA

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
283 lbs	11,655 lbs	9,283 lbs	283 lbs

Conditions Attached

Method Of Reduction

Shutdown of Entire Stationary Source

Shutdown of Emissions Unit

Other:

David L. Crow, APCO

Seyed Sadredin
Director of Permit Services



San Joaquin Valley
Unified Air Pollution Control District
Northern Regional Office * 4230 Kiernan Ave., Suite 130 * Modesto, CA 95356

Emission Reduction Credit Certificate N-122-4

ISSUED TO: SPRECKELS DEVELOPMENT COMPANY

ISSUED DATE: JUNE 3, 1997

LOCATION OF REDUCTION: 18800 SOUTH SPRECKELS ROAD
MANTECA, CA

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
715 lbs	8,177 lbs	6,581 lbs	715 lbs

Conditions Attached

Method Of Reduction

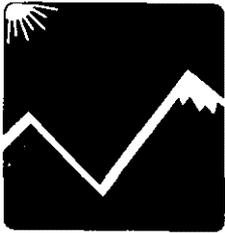
Shutdown of Entire Stationary Source

Shutdown of Emissions Unit

Other:

David L. Crow, APCO

Seyed Sadredin
Director of Permit Services



San Joaquin Valley
Unified Air Pollution Control District
Northern Regional Office * 4230 Kiernan Ave., Suite 130 * Modesto, CA 95356

Emission Reduction Credit Certificate N-122-5

ISSUED TO: SPRECKELS DEVELOPMENT COMPANY

ISSUED DATE: JUNE 3, 1997

LOCATION OF REDUCTION: 18800 South Spreckels Road
Manteca, CA

For SO_x Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
8 lbs	999 lbs	321 lbs	8 lbs

Conditions Attached

Method Of Reduction

Shutdown of Entire Stationary Source

Shutdown of Emissions Unit

Other:

David L. Crow, APCO

Seyed Sadredin
Director of Permit Services

Date: June 3, 1997

To: **Margaret (Legal Advertisement)**
The Record of SJ County (943-8560)

From: Brenda Alipaz

Re: ERC FINAL PUBLIC NOTICE
PROJECT # 960487

Please complete the following instructions:

- PUBLISH FOR **ONE DAY ONLY** BY: JUNE 6, 1997
- **FAX PROOF OF NOTICE TO:** PAUL HENSLEIGH
- **BILLING ADDRESS:** San Joaquin Valley Unified APCD
1999 Tuolumne Street-Suite 200
Fresno, CA 93721
Attn: Administrative Services
Phone: (209) 497-1000

Thank you for your cooperation.

The Record

**NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF EMISSION REDUCTION CREDITS**

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits to Spreckels Development Company for emission reductions generated by the shutdown of the facility previously located at 18,800 South Spreckels Road in Manteca, CA.

All comments received following the District's preliminary decision on this project were considered.

The application review is available for public inspection at the **SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4230 KIERNAN AVENUE, SUITE 130, MODESTO, CA 95356.**

Tools
options
SAVE
Right y digits
SAVE
New Name

NORTHERN REGION

CENTRAL REGION

SOUTHERN REGION

ERC/PUBLIC NOTICE CHECK LIST

PROJECT# 960487 MODEM FILE NAME: SPR60487.fbf

REQUEST COMPLETE

- _____ ERC TRANSFER OF PREVIOUSLY BANKED CREDITS
- _____ ERC PRELIMINARY PUBLIC NOTICE
- _____ ERC FINAL PUBLIC NOTICE
- _____ NSR/CECA PRELIMINARY PUBLIC NOTICE
- _____ NSR/CECA FINAL PUBLIC NOTICE

RECEIVED

MAY 30 1997

PERMIT SERVICES
SJVUAPCO

ENCLOSED DOCUMENTS REQUIRE:

- _____ Enter Correct Date, Print All Documents from Modemed File and Obtain Directors Signature
- _____ Send **FINAL** Notice Letters to CARB, EPA and Applicant; Including the Following Attachments:
 - Copies of ERC Certificates
 - Other Public Notice
- _____ Send **FINAL** Public Notice for Publication to The Record (San Joaquin County)
- _____ Send Signed Copies of **FINAL** Notice Letters to Regional Office
Attn: Anthony Mendes
- _____ Director's Signature and District Seal Embossed on ERC Certificates
- _____ Director's Signature on Cover Letter and Mail Cover Letter & ERC Certificates by Certified Mail to:
 - Applicant:
 - Applicant and Additional Addressees (see cover letters)
 - Other _____
- _____ Send Copies of Signed and Seal Embossed ERC Certificates and Signed cover letter to Regional Office Attn: Anthony Mendes
- _____ Other Special Instructions (please specify) _____

Date Completed _____ /By _____

Date Added to Seyed's Directory:
Upon Completion FAX to Regional Office Attn:

May 28, 1997
Paul Andrew Hensleigh

To: Anne Ogrey

Location: _____

FAX No. 209-836-3764

Number of pages: 1



MELVIN BOLINDER

MANAGER
CENTRAL TESTING LABORATORY
SPRECKELS SUGAR COMPANY, INC.

ROAD 18C • P.O. BOX 2240 • WOODLAND, CALIFORNIA 95696

667-2595
(916) ~~667-2595~~
FAX (916) ~~667-2595~~
662-1134

Message:

Anne - I vacationed Monday. Looking at the
particle size distribution today I get 25.68% < 10µ.

there is 24.4% < 9.63µ and an additional 5.1%
between 9.63 and 11.1µ. Interpolation indicates
1.28% between 9.63 and 10.0µ. So 24.4 + 1.28 = 25.68%

Mel Bolinder

Spreckels Development Company

18800 S. Spreckels Rd. P O Box 1287 Manteca, CA 95336

September 25, 1996

Seyed Sadredin
San Joaquin Valley Unified
Air Pollution Control District
4230 Kiernan Ave., Suite #130
Modesto, CA 95356

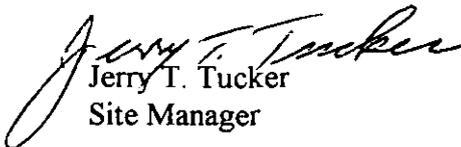
Dear Sir:

Spreckels Development Company assumed ownership of the Spreckels Sugar Company facility located at 18800 South Spreckels Road, Manteca, California on April 19, 1996, at which time the facility was permanently shut down with no further intentions of operating.

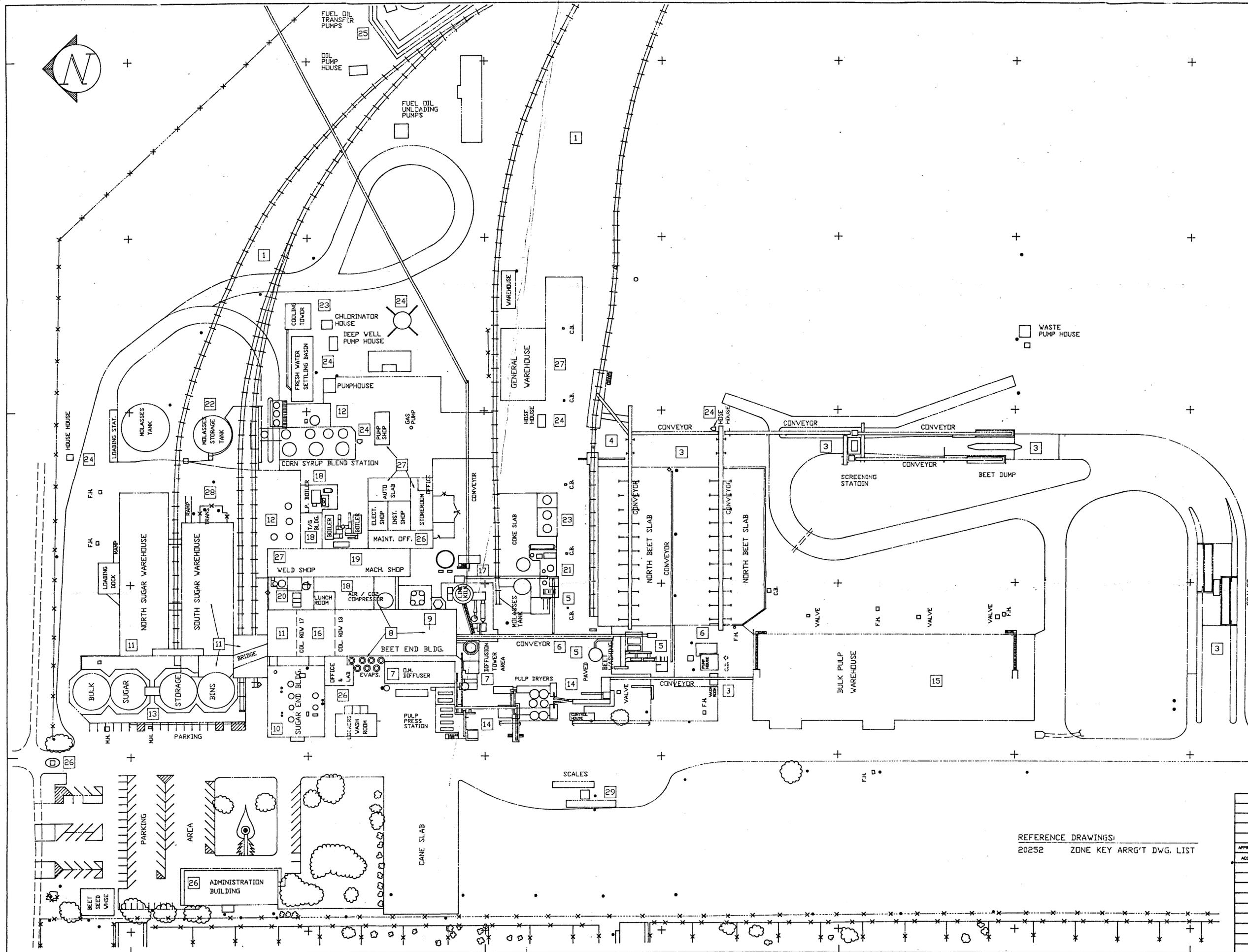
Mr. Mike Heydari, RMT, Inc. was commissioned to prepare the attached ERC application along with the supporting Emission Reduction Credit Documentation Package.

Our intent at this time is to bank these Emission Reduction Credits and solicit your support in doing so in a timely manner.

Should you have any questions, please feel free to call either myself at (209) 823-3121, ext. 221 or Mike Heydari at (310) 578-1241.


Jerry T. Tucker
Site Manager

Enc: Fees



ZONE NO.	FACTORY 2 NOMENCLATURE
1	PROPERTY & SURVEYING MAPS, PLOT PLAN, RAILROAD UNDERGROUND PIPING & UNDERGROUND ELECTRICAL, YARDS & GROUNDS, WELLS, WASTE PITS
2	OVERALL FLOW DIAGRAMS, MATERIAL BALANCE SHEET P & I.D.'S, GENERAL CHARTS, PUMP LIST
3	TRUCK BEET RECEIVING, WEIGHING, CONVEYING & SLAB STORAGE, YARD WASHROOM
4	RAIL BEET RECEIVING & SHIPPING
5	FLUME, ROCK & TRASH CATCHERS, TRASH REMOVAL, BEET WASHING, WATER SCREENS
6	WASTE & FLUME WATER PITS, PUMPS CLEAN BEET CONVEYOR
7	BEET HOPPER STORAGE, SLICING, CUSSETTE CONVEYORS, DIFFUSERS TO WET PULP SCROLLS
8	MAIN BLDG. BEET END & FIRST CARBONATION THICKENER, CENTRAL CONTROL ROOM, EVAPORATORS, HEATERS, CARBONATION FILTRATION, SO ₂ CAP. FACILITIES & CARBON REGEN.
9	MAIN BLDG. SUGAR END
10	SCREENING FACILITIES, PACKING & BULK SUGAR LOADING, LIQUID SUGAR MFG, PACKAGED SUGAR WAREHOUSE
11	LIQUID SUGAR STORAGE & SHIPPING STATION, TRUCK & R.R. TANK CAR WASHOUT FACILITIES & CORN SYRUP BLEND STATION
12	SUGAR STORAGE BINS, SLODS
13	PULP PRESSES, PRESSED PULP HANDLING, DRYING, COOLING & CONVEYING TO DRIED PULP WAREHOUSE
14	PULP MOLASSES
15	DRIED PULP WAREHOUSE & INTERIOR HANDLING FACILITIES
16	MAIN BLDG. OLD SUGAR END
17	LIME RECEIVING & STORAGE, LIME KILN & COOLER, LIME MILL & AUXILIARY EQUIPMENT, COLD LIMER & PRELIMER TANKS
18	BOILERS & ELECTRICAL POWER GENERATION
19	FACTORY MAIN COLD WATER SUMP, COOLING TOWER SUPPLY SUMP, BOILER FEED WATER TANK, WATER PUMPS & ACCESSORIES
20	WATER TREATMENT STATION
21	ACID & CAUSTIC STATION, BALAB & BASE 'C' OIL TANK SO ₂ STORAGE
22	MOLASSES STATION
23	COOLING TOWER, CHLORINATOR HOUSE
24	FIRE & PROCESS WATER SUPPLY BASINS & FIRE PUMPS, HOSE CART HOUSE
25	BULK OIL RECEIVING & STORAGE AREA, GASOLINE & DIESEL OIL TANK
26	ADMINISTRATION BLDG., MAIN GUARD HOUSE & PARKING AREA, LOCKER ROOM, OFFICES & LAB
27	STOREROOM, GENERAL WAREHOUSE, MAINTENANCE SHOP, OIL & PAINT STORAGE, WELD, ELECTRICAL & INSTRUMENTATION SHOPS
28	ELECTRICAL GENERATION POWER DISTRIBUTION, LIGHTING, MCC OUTLINE & ARRGT, CONDUIT TO ALL POWER UTILIZATION EQUIP. & TELEPHONE SYST.
29	TRUCK PRODUCT SCALE HOUSE
30	CONTROLS BOTH ELECTRICAL & INSTRUMENTATION WHICH INCLUDES OPERATOR PANELS, ELEMENTARIES AND INTERCONNECTIONS.
31	
32	
33	
34	

REFERENCE DRAWINGS:
20252 ZONE KEY ARRGT DWG. LIST

NO.	DESCRIPTION	DATE
22	REVISED & REDRAWN FROM 12/15/87 ORIGINAL TO NEW	1/29/93
21	ADDED CAP. COLUMN & CANE	12/30/86
20	ADDED NEW PULP PRESS STATION & ISSUED FOR BUILDING PERMIT	10/22/83
19	GENERAL UPDATE	7/18/83
18	GENERAL UPDATING	2/11/83

APPR.	CHK'D	REV. NO.	DESCRIPTION	BY	DATE

Spreckels Sugar Co.		
Factory #2 Mantua, OH.		
FACTORY YARD PLAN		
DRAWN BY	CHECKED BY	APPROVED BY
D.J. JAVERO		
SCALE	DATE	Drawing No.
1" = 60'-0"	1/29/93	20251
REF. DWG.	APPROX. NO.	
ZONE 1	FLY. V.	LTR. A

003364

INVOICE NO.	REFERENCE	AMOUNT	DISCOUNT	NET AMT.
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DATE

9/19/96 *Emission Reduction Credit*

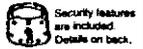
CHECK NUMBER

Application Pkg

\$650.00

CHECK AMOUNT

SPRECKELS DEVELOPMENT CO., INC.	WELLS FARGO BANK	003364
18800 SPRECKELS ROAD 209-823-3121 MANTECA, CA 95336	11-24 1210(8)	CHECK NO.
<i>Six hundred fifty and ^{no}/₁₀₀</i>	<i>9/25/96</i> DATE	<i>\$650.00</i> AMOUNT
PAY TO THE ORDER OF	<i>SJVUAPCD</i>	
	<i>Joseph Higgins</i>	



⑈003364⑈ ⑆121000248⑆4518 109798⑈

SPRECKELS DEVELOPMENT CO., INC. 18800 SPRECKELS ROAD 209-823-3121 MANTECA, CA 95336

003364

INVOICE NO.	REFERENCE	AMOUNT	DISCOUNT	NET AMT.
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DATE

CHECK NUMBER

CHECK AMOUNT

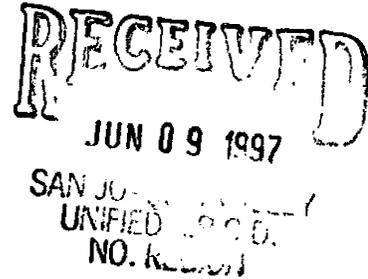
PAYEE



**San Joaquin Valley
Unified Air Pollution Control District**

June 3, 1997

Spreckels Development Company
Mr. Jerry Tucker
18800 South Spreckels Road
Manteca, CA 95336



**RE: Notice of Final Action - Emission Reduction Credits
Project Number: 960487**

Dear Mr. Tucker:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Spreckels Development Company for emission reductions generated by the shutdown of the facility previously located at 18,800 South Spreckels Road in Manteca.

Enclosed are the ERC Certificates and a copy of the notice of final action to be published approximately three days from the date of this letter.

All comments received following the District's preliminary decision on this project were considered.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Anthony Mendes at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • Fax (209) 233-2057

Northern Region

4230 Kiernan Avenue, Suite 130 • Modesto, CA 95356
(209) 545-7000 • Fax (209) 545-8652

Central Region

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721
(209) 497-1000 • Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 • Bakerfield, CA 93301
(805) 862-5200 • Fax (805) 862-5201



**San Joaquin Valley
Unified Air Pollution Control District**

June 3, 1997

Raymond Menebroker, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

**RE: Notice of Final Action - Emission Reduction Credits
Project Number: 960487**

Dear Mr. Menebroker:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Spreckels Development Company for emission reductions generated by the shutdown of the facility previously located at 18,800 South Spreckels Road in Manteca.

Enclosed are copies of the ERC Certificates and of the notice of final action to be published approximately three days from the date of this letter.

All comments received following the District's preliminary decision on this project were considered.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Anthony Mendes at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • Fax (209) 233-2057

Northern Region

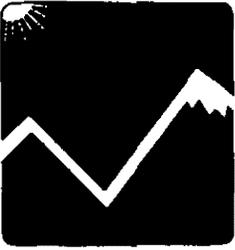
4230 Kiernan Avenue, Suite 130 • Modesto, CA 95356
(209) 545-7000 • Fax (209) 545-8652

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(209) 497-1000 • Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 • Bakersfield, CA 93301
(805) 862-5200 • Fax (805) 862-5201



San Joaquin Valley Unified Air Pollution Control District

June 3, 1997

Matt Haber, Chief
Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

**RE: Notice of Final Action - Emission Reduction Credits
Project Number: 960487**

Dear Mr. Haber:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Spreckels Development Company for emission reductions generated by the shutdown of the facility previously located at 18,800 South Spreckels Road in Manteca.

Enclosed are copies of the ERC Certificates and of the notice of final action to be published approximately three days from the date of this letter.

All comments received following the District's preliminary decision on this project were considered.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Anthony Mendes at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • Fax (209) 233-2057

Northern Region

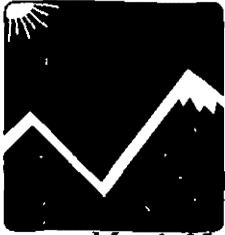
4230 Kiernan Avenue, Suite 130 • Modesto, CA 95356
(209) 545-7000 • Fax (209) 545-8652

Central Region

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(209) 497-1000 • Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 • Bakerfield, CA 93301
(805) 862-5200 • Fax (805) 862-5201



San Joaquin Valley
Unified Air Pollution Control District

March 25, 1997

Mr. Jerry Tucker
Spreckels Development Company
18800 South Spreckels Road
Manteca, CA 95336

RECEIVED
MAR 27 1997
SAN JOAQUIN VALLEY
UNIFIED A.P.C.D.
NO. REGION

Re: **Preliminary Public Notice - Emission Reduction Credit Certificates
Project # 960487**

Dear Mr. Tucker:

Enclosed for your review and comment is the District's analysis of Spreckels Development Company's request for emission reduction credits (ERCs) resulting from the shutdown of emission units at the facility previously located at 18800 South Spreckels Road in Manteca, California.

Also enclosed is a copy of the Preliminary Public Notice for this project which will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions please telephone Mr. Paul Andrew Hensleigh of Permit Services at the Modesto office at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager
Mike Heydari, RMT Inc.
4640 Admiralty Way Suite 301, Marina del Rey, CA 90292

David L. Crow
Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057

Northern Region

230 Kiernan Avenue, Suite 130 • Modesto, CA 95356
(209) 545-7000 • Fax (209) 545-8652

Central Region

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721
(209) 497-1000 • Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 • Bakersfield, CA 93301
(805) 861-3682 • Fax (805) 861-2060



San Joaquin Valley
Unified Air Pollution Control District

March 25, 1997

Ken Bigos, Chief
New Source Section
US EPA - Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: **Preliminary Public Notice - Emission Reduction Credit Certificates
Project # 960487**

Dear Mr. Bigos:

Enclosed for your review and comment is the District's analysis of Spreckels Development Company's request for emission reduction credits (ERCs) resulting from the shutdown of emission units at the facility previously located at 18800 South Spreckels Road in Manteca, California.

Also enclosed is a copy of the Preliminary Public Notice for this project which will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions please telephone Mr. Paul Andrew Hensleigh of Permit Services at the Modesto office at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager

David L. Crow
Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057

Northern Region

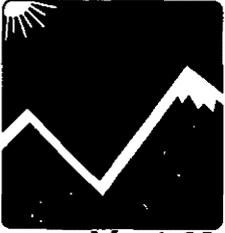
4230 Kiernan Avenue, Suite 130 • Modesto, CA 95356
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Central Region

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(209) 497-1000 • Fax (209) 233-2057

Southern Region

2700 M Street, Suite 275 • Bakerfield, CA 93301
(805) 861-3682 • Fax (805) 861-2060



San Joaquin Valley
Unified Air Pollution Control District

March 25, 1997

Raymond Menebroker, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812-2815

Re: **Preliminary Public Notice - Emission Reduction Credit Certificates**
Project # 960487

Dear Mr. Menebroker:

Enclosed for your review and comment is the District's analysis of Spreckels Development Company's request for emission reduction credits (ERCs) resulting from the shutdown of emission units at the facility previously located at 18800 South Spreckels Road in Manteca, California.

Also enclosed is a copy of the Preliminary Public Notice for this project which will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions please telephone Mr. Paul Andrew Hensleigh of Permit Services at the Modesto office at (209) 545-7000.

Sincerely,

Seyed Sadredin
Director of Permit Services

SS:PAH/bja
Enclosures

c: Anthony Mendes, Permit Services Manager

David L. Crow
Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057

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Southern Region

2700 M Street, Suite 275 • Bakersfield, CA 93301
(805) 861-3682 • Fax (805) 861-2060

16266 April 3
PRELIMINARY NOTICE
FOR THE PROPOSED IS-
SUANCE OF EMISSION
REDUCTION CREDIT
CERTIFICATES

NOTICE IS HEREBY GIV-
EN that the San Joaquin
Valley Unified Air Pollution
Control District solicits pub-
lic comment on the pro-
posed issuance of emission
reduction credit certificates
to Spretckels Development
Company for the shutdown
of the facility previously lo-
cated at 14800 South
Spreckels Drive in Man-
taca, California. The emis-
sion reduction credit
amounts are as follows:
2,063 pounds of VOC per
year, 72,003 pounds of
NOx per year, 21,504
pounds of CO per year,
16,188 pounds of PM10
per year, and 1,336 pounds
of SOx per year.
A copy of the analysis of
this Project #960487 is
available for public inspec-
tion at the District office at
the address below. Written
comments on this proposal
must be submitted within
30 days of the publication
date of this notice to SAN
JOAQUIN VALLEY UNI-
FIED AIR POLLUTION
CONTROL DISTRICT,
NORTHERN REGIONAL
OFFICE, 4230 KIERNAN
AVE., SUITE #130, MO-
DESTO, CA 95356 (209)
645-7000.

RECEIVED

APR 01 1997

SAN JOAQUIN VALLEY
UNIFIED A.P.C.D.
NO. REGION

*Please call me
if you have any questions
Thanks
Margaret
943-0253*

✓ NORTHERN REGION

CENTRAL REGION
SOUTHERN REGION

ERC/PUBLIC NOTICE CHECK LIST

PROJECT # 960487 MODEM FILE NAME: SPR60487.pbc

✓ ✓
REQUEST COMPLETE

- ERC TRANSFER OF PREVIOUSLY BANKED CREDITS
- ERC PRELIMINARY PUBLIC NOTICE
- ERC FINAL PUBLIC NOTICE
- NSR/CEQA PRELIMINARY PUBLIC NOTICE
- NSR/CEQA FINAL PUBLIC NOTICE

RECEIVED

MAR 21 1997

PERMIT SERVICES
SJVAPCD

ENCLOSED DOCUMENTS REQUIRE:

- Enter Correct Date, Print All Documents from Modemed File and Obtain Directors Signature
- Send **PRELIMINARY** Notice Letters to CARB, EPA and Applicant; Including the Following Attachments:
 - Application Review
 - Other Copy of Public Notice
- Send **PRELIMINARY** Public Notice for Publication to The Record (San Joaquin County)
- Send Signed Copies of **PRELIMINARY** Notice Letters to Regional Office Attn: Anthony Mendes
- Director's Signature and District Seal Embossed on ERC Certificates
- Director's Signature on Cover Letter and Mail Cover Letter & ERC Certificates by Certified Mail to:
 - Applicant:
 - Applicant and Additional Addressees (see cover letters)
 - Other
- Send Copies of Signed and Seal Embossed ERC Certificates and Signed cover letter to Regional Office Attn:
- Other Special Instructions (please specify)

Date Completed 3/25/97 By Brend

Date Added to Seyed's Directory:
Upon Completion FAX to Regional Office Attn:

March 20, 1997
Paul Andrew Hensleigh



California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



Winston H. Hickox
Secretary for
Environmental
Protection

Sacramento Main Office
Internet Address: <http://www.swrcb.ca.gov/~rwqcb5>
3443 Routhier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

Gray Davis
Governor

6 February 2003

RECEIVED
FER 11 2003

CERTIFIED MAIL
7001 2510 0003 5225 7569

Mr. E. Bingham Kirk
AKF Development LLC
1132 Norman Drive
Manteca, CA 95336

SAN JOAQUIN VALLEY
UNIFIED A.P.C.D.
NO. REGION

**NOTICE OF ADOPTION OF REVISED WASTE DISCHARGE REQUIREMENTS FOR
FORMER SPRECKELS SUGAR PLANT LIME PONDS, SAN JOAQUIN COUNTY (CASE NO.
860)**

Enclosed is an official copy of Order No. R5-2003-0024 as adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 January 2003.

VICTOR IZZO
Senior Engineering Geologist

Enclosure- Adopted Order
Standard Provisions (discharger only)

- cc: Mr. Joseph Mello, State Water Resources Control Board
Office of Drinking Water, Department of Health Services, Sacramento
Department of Health Services, Environmental Management Branch, Sacramento
- Mr. Geno Yekta, California Integrated Waste Management Board, Sacramento
- Department of Fish and Game, Region 2, Rancho Cordova
- Mr. Craig Mitchell, San Joaquin Valley, Unified Air Pollution Control District, Modesto
- Mr. Ben Canty, City of Manteca Development Services, Manteca
- Mr. Michael J. Infurna, San Joaquin Environmental Health Department, Stockton
- Mr. Tony Martin, Kleinfelder, Stockton.

N-784

CORRESPONDENCE

California Environmental Protection Agency

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0024

REVISED WASTE DISCHARGE REQUIREMENTS
For
AKF DEVELOPMENT LLC
FOR
POST-CLOSURE OF
FORMER SPRECKELS COMPANY MANTECA SUGAR PLANT LIME PONDS
SAN JOAQUIN COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds:

1. AKF LLC formerly Atherton Kirk Development Company, (hereafter Discharger) owns the Former Speckels Company Manteca Sugar Plant in San Joaquin County. The Former Manteca Sugar Plant has been decommissioned and the site is currently undergoing redevelopment.
2. The Former Spreckels Sugar Manteca Plant covers over 350 acres at the intersection of Highways 99 and 120 in portions of Sections 3 and 4, T2S, R7E, MDB&M, as shown on Attachments A and B, which are incorporated herein and made part of this Order. The property consists of Assessors Parcel Nos. 221-140-01, 221-180-04, 243-210-56, 243-210-56, 243-210-64, and 243-210-65.
3. The Former Spreckels Sugar Manteca Plant is currently regulated under Waste Discharge Requirements (WDRs) Order No. 97-204 for closure of lime ponds that contained designated waste. New WDRs are being proposed because the lime ponds have been closed and the facility is now in post-closure period. This revised Order prescribes post-closure requirements and revises the Monitoring and Reporting Program.
4. Lime ponds on the site contained approximately 348,900 cubic yards of spent lime left from operation of the sugar plant. The spent lime was classified as a designated waste as defined in Division 2 of Title 27, California Code of Regulations in previous WDRs. Additionally, storage of lime in the ponds caused downgradient groundwater to be degraded with elevated concentrations of bicarbonate and total dissolved solids. WDR Order No. 97-204 required removal of the spent lime, closure of the ponds, and evaluation of groundwater impacts.
5. The Discharger submitted a Closure Report on 8 March 2002 documenting the removal of designated waste and closure of the lime ponds. Confirmation sampling indicated that a 'hot spot' of contaminated soil had been left and staff required removal and re-closure of the 'hot spot' area. On 2 August 2002 the discharger submitted a report that the 'hot spot' area had been removed and the pond area completely closed.

6. The lime ponds were closed by over excavation of the pond area to remove all lime and approximately two feet of underlying soil. The pond area was subsequently graded to shed water. Spent lime was removed from the site for off-site use or used on-site as a soil amendment, which was an approved mix of spent lime, native soil and tare material. Confirmation samples were collected from the pond area and at areas that accepted the spent lime soil mix.

Waste Description

7. The sugar plant ceased operation in 1995, has been decommissioned, and the site no longer produces industrial wastewater. In previous WDRs, the spent lime remaining in unlined ponds was classified as Designated Waste. All remaining spent lime was removed and the ponds clean closed in August 2002. There is no designated waste remaining at this site.

Corrective Action

8. Discharge of wastewater to unlined lime ponds impacted groundwater quality at the site. Concentrations of Total Dissolved Solids, Bicarbonate, Chloride, Calcium, Sodium and Specific Conductance are elevated above background levels in groundwater. The selected corrective action is to remove the source of contamination by clean closing the ponds. Groundwater monitoring will continue to determine if corrective actions achieve water quality goals.

CEQA and Other Considerations

9. The action to revise WDRs for the facility is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Title 14, CCR, Section 15301.
10. This Order implements the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition.
11. The Board has notified the Discharger and interested agencies and persons of its intention to revise the WDRs for this facility.
12. In a public hearing, the Board heard and considered all comments pertaining to this facility and discharge.
13. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State

Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of issuance of this Order. Copies of the laws and regulations applicable to the filing of a petition are available on the Internet at http://www.swrcb.ca.gov/water_laws/index.html and will be provided on request.

IT IS HEREBY ORDERED that Order No. 97-204 be rescinded and that the AKF Development LLC, and their agents, successors and assignees, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of 'hazardous' wastes as defined in Title 27 to any onsite pond is prohibited.
2. The discharge of 'designated' wastes as defined in Title 27 to any onsite pond is prohibited.
3. The offsite discharge of liquid or solid wastes, except for discharges to an authorized disposal facility, or for use in a beneficial application that is not a threat to water quality is prohibited.
4. The discharge of wastes to surface waters or surface water drainage courses without WDRs that allow such discharge is prohibited.

B. FACILITY SPECIFICATIONS

1. Each facility groundwater monitoring well shall be locked to prevent unauthorized access and shall be equipped with a watertight well cap at the top of the well casing to prevent surface water infiltration in the event that the well is submerged during irrigation.

C. PROVISIONS

1. The Discharger shall comply with attached Monitoring and Reporting Program No. R5-2003-0024 and the Standard Provisions and Reporting Requirements dated August 1997, which are incorporated into and made part of this Order.
2. The Discharger shall submit all reports required by this Order pursuant to Section 13267 of the California Water Code. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the state Department of Water

Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with MRP No. R5-2003-0024, as required by Section 13750 through 13755 of the California Water Code.

3. The Discharger may be required to submit other technical reports as directed by the Executive Officer.
4. In the event of any change in control or ownership of land or waste discharge facilities presently described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
5. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
6. The Board will review this Order periodically and will revise requirements when necessary.
7. A copy of this Order shall be kept at the facility for reference.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, 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, Central Valley Region, on 31 January 2003.



THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2003-0024

FOR
AKC DEVELOPMENT LLC
FORMER SPRECKELS SUGAR COMPANY MANTECA PLANT
SAN JOAQUIN COUNTY

The Discharger shall submit reports required by this Monitoring and Reporting Program (MRP) and the Standard Provisions and Reporting Requirements dated August 1997 pursuant to Section 13267 of the California Water Code. Failure to submit the required reports can result in the imposition of civil monetary liability. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

GROUNDWATER MONITORING

The Discharger shall sample groundwater at background groundwater wells: MW-3r and MW-5; and at groundwater monitoring wells MWP-1r, -2r, -6r, -25, -26, and -27. The Discharger shall collect samples from the groundwater wells as specified in Table 1. Sample collection shall follow standard EPA protocol.

TABLE 1 - GROUNDWATER MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Groundwater Elevation	Feet (100ths), MSL	Semi-Annually
Specific Conductance	µmhos/cm	Semi-Annually
pH	Number	Semi-Annually
Turbidity	Turbidity Units	Semi-Annually
Monitoring Parameters		
Bicarbonate, as CaCO ₃	mg/l	Semi-Annually
Calcium	mg/l	Semi-Annually
Chloride	mg/l	Semi-Annually
Nitrate-N	mg/l	Semi-Annually
Hardness as CaCO ₃	mg/l	Semi-Annually
Potassium	mg/l	Semi-Annually
Sodium	mg/l	Semi-Annually
Sulfate	mg/l	Semi-Annually
Total Dissolved Solids	mg/l	Semi-Annually

The Discharger shall measure the water level in each monitoring well (in feet and hundredths, MSL) and determine groundwater gradient and direction at least semi-annually, including the times of expected highest and lowest water level elevations for the respective groundwater body. Groundwater elevations

shall be measured for a given groundwater body within a period of time short enough to avoid temporal groundwater flow variations which could preclude accurate determination of groundwater gradient and direction.

WATER QUALITY PROTECTION STANDARD

The Water Quality Protection Standard (Standard) shall consist of the following elements:

1. Constituents of Concern and Concentration Limits;
3. Monitoring Points (groundwater and surface water);
4. Point of Compliance; and
5. Compliance Period.

Each of these is described as follows:

1. Constituents of Concern and Concentration Limits

The Constituents of Concern are the monitor parameters listed in Table 1 above.

The discharger submitted a Revised Proposed Water Quality Protection Standard on 28 February 2002. Groundwater Concentration Limits were calculated from historical data collected at MW-5 (a background well) using tolerance factors for a normal data population. These MRPs adopt the discharger's proposed Concentration Limits for all constituents. The Constituents of Concern and Concentration Limits are listed in the following table:

CONCENTRATION LIMITS

<u>Constituent of Concern</u>	<u>Upper Tolerance Limit</u> (mg/l)
Total Dissolved Solids	1644
Bicarbonate	988
Chloride	289
Nitrate as N	52.6
Sulfate	153.5
Specific Conductance	2639
Calcium	420
Sodium	150

On an annual basis, Concentration Limits shall be revised for all Constituents of Concern for which there is sufficient data from the background Monitoring Point (MW-5), beginning with the 2003 Annual Report.

If the Discharger finds that the concentration of one or more Constituents of Concern have exceeded the approved Concentration Limit(s), the Discharger shall perform the tasks outlined under the heading "**RESPONSE TO A RELEASE**" located in the Standard Provisions.

2. Monitoring Points

Groundwater:

The current upgradient groundwater Monitoring Points are monitoring wells MW-5 and MW-3.

The corrective action Groundwater Monitoring Points shall be MW-1r, -2r, -6r, -25, -26, and -27. These Groundwater Monitoring Points shall also include any monitoring wells installed after the adoption of these MRPs. Groundwater monitor well locations are shown on Attachment B. Existing wells may be replaced with new wells constructed in the same manner and in a like hydrogeologic location with respect to the former lime ponds. Prior to replacement, a work plan must be submitted to the RWQCB which details the proposed abandonment of an existing and replacement well installation. All abandonment and installation shall also be in accordance with the San Joaquin County well ordinance.

REPORTING

The Discharger shall report field and laboratory test results in semi-annual monitoring reports. The Discharger shall submit the semi-annual monitoring reports to the Board by **31 July** and **31 January**. The Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. A discussion of the monitoring results shall precede the tabular summaries.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional engineer or geologist (or their subordinate) and signed by the registered professional.

Each semi-annual report is to include the following information:

- (a) a discussion of the monitoring results and compliance with this MRP and the WDRs;
- (b) tabulated cumulative monitoring data including depth to groundwater measurements, groundwater elevations above mean sea level, groundwater analytical data, wastewater analytical data, and monthly average wastewater discharge rate in gallons per day;
- (c) a groundwater contour map prepared using groundwater elevation data that shows the hydraulic gradient, flow direction and estimated flow velocity; and
- (d) a copy of the laboratory analytical reports and chain of custody.

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2003-0024
AKF DEVELOPMENT LLC
FORMER SPRECKELS SUGAR COMPANY MANTECA PLANT
SAN JOAQUIN COUNTY

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The results of any monitoring done more frequently than required at the locations specified in the MRP shall also be reported to the Board.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: Thomas R Pinkos
THOMAS R. PINKOS, Executive Officer

31 January 2003

Date

RDA

INFORMATION SHEET

ORDER NO. R5-2003-0024

AKF DEVELOPMENT LLC.

FORMER SPRECKELS SUGAR COMPANY MANTECA SUGAR PLANT LIME PONDS
SAN JOAQUIN COUNTY

The former Spreckels Sugar Company Manteca Sugar Plant is a former sugar manufacturing plant site owned by AKF Development LLC. The sugar manufacturing facilities have been decommissioned and the site is undergoing redevelopment.

As part of the sugar manufacturing process, wastewater containing spent lime was discharged to unlined ponds. When the facility closed 348,900 cubic yards of spent lime remained on site in the ponds. Subsequent investigation determined that groundwater beneath the ponds was contaminated and the spent lime was classified as a designated waste. Previous Waste Discharge Requirements (WDRs) Order No. 97-204 required closure of the lime ponds as a corrective action to cleanup contaminated groundwater.

The ponds have been closed by over excavating all the lime waste, backfilling and grading the pond area to shed water. The discharger has complied with the requirements for closure of the pond area. New WDRs are being considered to require continued groundwater monitoring to determine if the corrective actions are successful in achieving water quality goals.

RDA