United States Sugar Corporation

Post Office Box 1207 · Clewiston, Florida 33440-1207 Telephone 941/983-8121

June 9, 1997

Mr. Al Linero **New Source Review Section** Florida Dept. of Environmental Protection 2600 Blair Stone Road (MS5505) Tallahassee, Florida 32399-2400

Re: Construction Permit Application - Portable Rock Crusher

Dear Mr. Linero:

Enclosed are four (4) additional signed copies of the above-referenced application to include with the signed, original application form which we mailed to your office on June 2, 1997.

If you should have any questions or if we can be of further assistance, please contact Mr. Peter Briggs, (941)902-2224, or Mr. David Buff, P.E. (Golder Associates), (352)336-5600.

Sincerely,

Lawrence D. Worth

Vice-President, Engineering

LDW:js N:\ROCKPMT2.WPD

Enclosures

CC:

RECEIVED

Mr. David Buff, P.E.

Golder Associates

JUN 1 1 1997

BUREAU OF AIR REGULATION

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1: Facility Owner/Company Name:	United St	ates Sugar Corpo	ration
2. Site Name: Agricultural Property	1		
3. Facility Identification Number:			[x] Unknown
Facility Location Information: Street Address or Other Locator: City: Clewiston	111 Ponce County:	De Leon Avenue Hendry	Zip Code: 33440
5. Relocatable Facility? [x] Yes [] No	·	_	ermitted Facility? [x] No

Application Processing Information (DEP Use)

Date of Receipt of Application:	June 5th, 1997
2. Permit Number:	7775035-001-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

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DEP Form No. 62.210.900(1) - Form Effective: 03-21-96

Owner/Authorized Representative or Responsible Official

- 1. Name and Title of Owner/Authorized Representative or Responsible Official: Lawrence Worth, V.P. of Engineering
- 2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: United States Sugar Corporation

Street Address: 111 Ponce De Leon Ave.

City: Clewiston

State: FL

Zip Code:

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 983-8121

(941) 983-0223

- 4. Owner/Authorized Representative or Responsible Official Statement:
 - I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

UNITED STATES SUGAR CORPORATION

Vice-President, Engineering

6/3/97

Date

^{*} Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

missions un Emissions U		Description of Emiss	ions Unit	Permit Type
Unit # (nit ID		-	
1R	1	Portable Rock Crusher		ACID
		·		
				•
See indivi Multiple E	dual Emission U IDs indicate	s Unit (EU) sections for more d with an asterisk (*). Regula	detailed descriptions. Ited EU indicated with an "R".	

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This	Application for Air Permit is submitted to obtain:
[] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
[Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
	Current construction permit number:
[] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.
	Operation permit to be renewed:
[] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.
	Current construction permit number:
	Operation permit to be renewed:
	Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.
	Operation permit to be revised/corrected:
[Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.
	Operation permit to be revised:
	Reason for revision:

Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(2)(b),F.A.C.

Th	is Application for Air Permit is submitted to obtain:
[] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.
	Current operation/construction permit number(s):
[] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.
	Operation permit to be renewed:
[] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.
	Operation permit to be revised:
	Reason for revision:
	• • • • • • • • • • • • • • • • • • •
Ca	tegory III: All Air Construction Permit Applications for All Facilities and Emissions Units.
Th	is Application for Air Permit is submitted to obtain:
[x] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).
	Current operation permit number(s), if any:
[Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
	Current operation permit number(s):
	Current operation permit number(s).

Application 1 Toccissing 1 cc	
Check one:	
[x] Attached - Amount: \$\$2,000.00 [] Not Applicable.	
Construction/Modification Information	
1. Description of Proposed Project or Alterations:	
Application for a portable rock crusher. The rock crusher is used principally on Use (or its subsidiaries) controlled property to crush rocks, boulders, etc.	SSC
·	
2. Projected or Actual Date of Commencement of Construction:	
1 Jun 1997 3. Projected Date of Completion of Construction :	
1 Jun 1997	
	•
Professional Engineer Certification	
Professional Engineer Name: David A. Buff Registration Number: 19011	
2. Professional Engineer Mailing Address:	
Organization/Firm: Golder Associates Street Address: 6241 NW 23rd Street, Suite 500	
	32653-1500
3. Professional Engineer Telephone Numbers:	

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Fax: (352) 336-6603

5/20/97 9737536Y/F1/TVAI

Telephone: (352) 336-5600

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, except as particularly noted herein*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

· David a	J. Buff	5/20/97
Signature (seal)	//	Date

^{*} Attach any exception to certification statement.

Application Contact

Name and Title of Application Contact: Lawrence Worth, V.P. of Engineering	
2. Application Contact Mailing Address:	
Organization/Firm: United States Sugar Corporation Street Address: 111 Ponce De Leon Av;PO Dr1207 City: Clewiston State: FL Zip Code: 3344	
3. Application Contact Telephone Numbers:	
Telephone: (941) 983-8121 Fax: (941) 983-0223	

Application Comment				
		,		
	•			
				•
,				

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

Facility UTM Coord Zone:	dinates: East (km):	North (km):	
2. Facility Latitude/Lo Latitude (DD/MM		Longitude: (DD/MM	1/SS): 1 1
3. Governmental Facility Code:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
1422, 1421			

Facility Contact

1.	Name and Title of Facility Contact: Lawrence Worth, V.P. of Engineering
2.	Facility Contact Mailing Address: Organization/Firm: United States Sugar Corporation Street Address: 111 Ponce De Leon Av;PO Dr1207 City: Clewiston State: FL Zip Code: 33440
3.	Facility Contact Telephone Numbers: Telephone: (941) 983-8121 Fax: (941) 983-4255

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Facility Regulatory Classifications

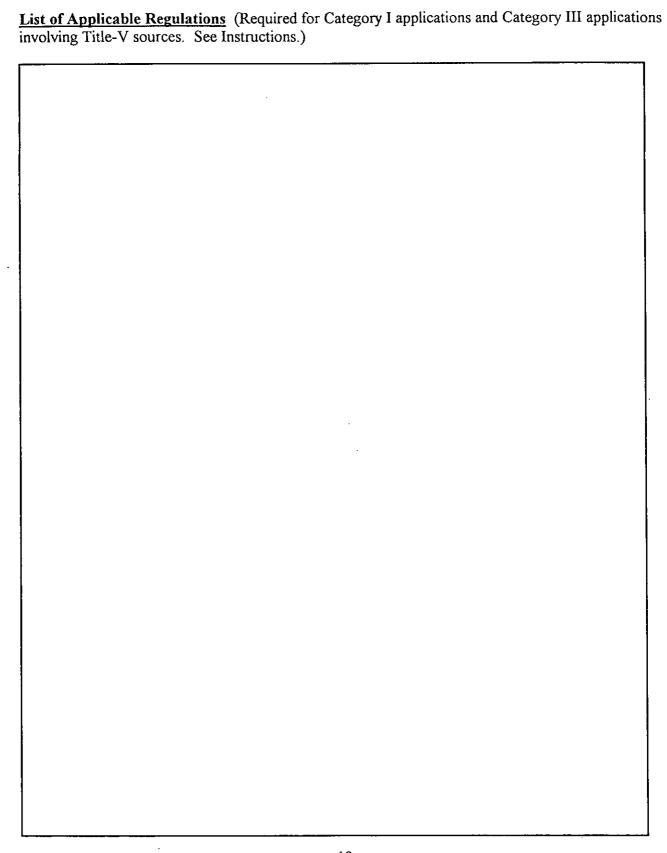
Small Business Stationary Sour [] Yes	ce? [x] No	[] Unknown
2. Title V Source? [] Yes	[x]No	-
3. Synthetic Non-Title V Source? [] Yes,	[x] No	
4. Major Source of Pollutants Oth [] Yes	ner than Hazardous Air Polluta	nts (HAPs)?
5. Synthetic Minor Source of Poll [] Yes	utants Other than HAPs? [x] No	
Major Source of Hazardous Air Yes	r Pollutants (HAPs)? [x] No	
7. Synthetic Minor Source of HAD [] Yes	Ps? [x] No	
8. One or More Emissions Units S [] Yes	Subject to NSPS? [x]No	·
9. One or More Emissions Units S [] Yes	Subject to NESHAP? [x] No	
10. Title V Source by EPA Design [] Yes	nation? [x]No	
11: Facility Regulatory Classificati	ons Comment (limit to 200 ch	aracters):

B. FACILITY REGULATIONS

<u>Rule Applicability Analysis</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

62-210.700(1) Excess Emissions 62-210.700(4) Excess Emissions 62-210.700(5) Excess Emissions 62-210.700(6) Excess Emissions 62-212.300 General Preconstruction Review Requirements 62-296.320(2) Objectionable Odor Prohibited 62-296.320(4)(a)2. Particulate Matter Emissions Standard 62-296.320(4)(b) General Visible Emissions Standard 62-296.320(4)(c) Unconfined Emissions of Particulate Matter 62-297.310(2)(b) Operating Rate During Testing 62-297.310(4)(a)2. Opacity Compliance Tests 62-297.310(5) Determination of Process Variables 62-297.310(7) Frequency of Compliance Tests 62-297.310(8) Test Reports 62-297.401(9)(a) EPA Method 9

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C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
PM Particulate Matter - Total PM10 Particulate Matter - PM10	В В
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<u>.</u> .	

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D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information:

1. Pollutant Emitted:			•
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)	
3. Basis for Emissions Cap Code:			
4. Facility Pollutant Comment (limit	to 400 characters):		

Facility Pollutant Detail Information:

(lb/hr)	(tons/yr)	
400 characters):		
	e e	

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: [x] Attached, Document ID: Attachment A [] Not Applicable [] Waiver Requested
2. Facility Plot Plan: [x] Attached, Document ID: Attachment B [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): [x] Attached, Document ID(s): Attachment A [] Not Applicable [] Waiver Requested
 4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [x] Attached, Document ID: <u>Attachment A</u> [] Not Applicable [] Waiver Requested
5. Fugitive Emissions Identification: [x] Attached, Document ID: Attachment A [] Not Applicable [] Waiver Requested
6. Supplemental Information for Construction Permit Application: [x] Attached, Document ID: Attachment A [] Not Applicable
Additional Supplemental Requirements for Category I Applications Only
7. List of Proposed Exempt Activities: [] Attached, Document ID: [] Not Applicable
8. List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [] Not Applicable
9. Alternative Methods of Operation: [] Attached, Document ID: [] Not Applicable
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5/5/97

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Identification of Additional Applicable Requirements:	
12. Compliance Assurance Monitoring Plan: [] Attached, Document ID: [] Not Applicable	
13. Risk Management Plan Verification:	
Plan Submitted to Implementing Agency - Verification Attached Document ID:	
[] Plan to be Submitted to Implementing Agency by Required Date	
[] Not Applicable	
14. Compliance Report and Plan [] Attached, Document ID: [] Not Applicable	•
15. Compliance Statement (Hard-copy Required) [] Attached, Document ID: [] Not Applicable	

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	R	egulated or Unregulated Emissions Unit? Check one:
[x]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2.	Si	ngle Process, Group of Processes, or Fugitive Only? Check one
[x]	This Emissions Unit information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[}	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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Emissions Unit Information Section	1	of 1	
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Portable Rock Crusher

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

Description of Emissions Unit Addressed in This Section (limit to 60 characters): Portable Rock Crusher						
2. Emissions Unit Identifica	2. Emissions Unit Identification Number: [x] No Corresponding ID [] Unknown					
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [x] No	5. Emissions Unit Major Group SIC Code: 14				
6. Emissions Unit Comment	6. Emissions Unit Comment (limit to 500 characters):					
This emissions unit represents a portable rock crusher. This is a relocatable emissions unit.						
		•				

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:	
2. Long-term Reserve Shutdown Date:	
Package Unit: Manufacturer: lowa Manufacturing Company	Model Number: 3633
4. Generator Nameplate Rating:	MW
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	°F seconds °F

Emissions Unit Operating Capacity

Maximum Heat Input Rate:		1	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr		tons/day
3. Maximum Process or Throughput Rate:		325	tons rock/hour
4. Maximum Production Rate:	•		
5. Operating Capacity Comment (limit to 20	•		
Rock Crusher has a 318 H.P. diesel engine			

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:				
20	hours/day	7	days/week	
52	weeks/yr	7,280	hours/yr	

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

62-210.700(1) Excess Emissions
62-210.700(4) Excess Emissions
62-210.700(5) Excess Emissions
62-210.700(6) Excess Emissions
62-212.300 General Preconstruction Review Requirements
62-296.320(2) Objectionable Odor Prohibited
62-296.320(4)(a)2. Particulate Matter Emissions Standard
62-296.320(4)(b) General Visible Emissions Standard
62-296.320(4)(c) Unconfined Emissions of Particulate Matter
62-297.310(2)(b) Operating Rate During Testing
62-297.310(4)(a)2. Opacity Compliance Tests
62-297.310(5) Determination of Process Variables
62-297.310(8) Test Reports
62-297.401(9)(a) EPA Method 9

Emissions Unit Information Section	of <u>'</u>	Portable Rock Crusher
List of Applicable Regulations (Regu	uired for Category Lan	olications and Category III
<u>List of Applicable Regulations</u> (Requapplications involving Title-V sources.	See Instructions.)	phoacions and Category III
·		
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		•
		···
	22	

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Emissions Unit Information Section	of	Portable Rock Crusher
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E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

1.	Identification of Point on Plot Plan or Flow Diagram: RC1									
2.	En	nission Point	Ty	pe Code:						
	[] 1	[] 2		[] 3		[x]	4
3.		escriptions of 100 characte				Com	prisir	ng this E	missio	ons Unit for VE Tracking (limit
	1.	Exhaust on	dies	el engine.	2. Ro	ck (Crush	er		
								,		
4.	ID	Numbers or	De	scriptions	of Em	nissi	on U	nits witl	n this E	Emission Point in Common:
5.	Di	scharge Type								
	[] D] R	[x]F]V	[]	H W	l] P	
6.	Sta	ack Height:								feet
7.	Ex	it Diameter:		•						feet
8.	Ex	it Temperati	іге:						77	°F .

Sou	rce Information Section 1 of	1	Portable Rock Crusher
9.	Actual Volumetric Flow Rate:		acfm
10.	Percent Water Vapor:		%
11.	Maximum Dry Standard Flow Rate:	,	dscfm
12.	Nonstack Emission Point Height:	9	feet
13.	Emission Point UTM Coordinates:		
	Zone: East (km):	North ((km):
14.	Emission Point Comment (limit to 200	-	
	This emissions unit is a portable source Emissions.	e. The emission	point is identified as Fugitive PM
:			
l		•	

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ___2

· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):						
Mineral Products - Stone Quarrying-Processing; Primary Crushing						
2. Source Classification Code (SCC):						
	-05-020-01					
2 000 XX 1						
3. SCC Units:						
Tons Raw Material						
4. Maximum Hourly Rate:	5. Maximum Annual Rate:					
325	2,366,000					
6. Estimated Annual Activity Factor:	•					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:					
9. Million Btu per SCC Unit:						
. William But per dece office.						
10.0						
10. Segment Comment (limit to 200 chara	acters):					

1 of 1 Portable Rock Crushe
ent <u>2</u> of <u>2</u>
Type and Associated Operating Method/Mode) al: Distillate Oil
2-02-001-02
lons Burned
5. Maximum Annual Rate: 73
8. Maximum Percent Ash:
140
aracters):

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G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Pollutant Emitted	Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Code
PM PM10 NOx CO			ns ns ns
	·		
• .		÷.	

Emissions Unit Information Section	of .	1	
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H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1.	1. Pollutant Emitted: PM														
2.	То	tal Perce	nt E	ficiency	of C	ontrol:				%					
3.	Po	tential E	missi	ons:		(0.93 11	o/hour			3.38	3 tor	ıs/year		
4.	Sy	nthetical	lly Li	mited?	[x] Yes	[] N)				•		
5.	Ra	ange of E	Estim	ated Fu	gitive	/Other]	Emissi	ions:							
	[] 1	[] 2	[] 3			to			_ tor	ns/yr		
6.	Er	nission F	acto	r:		7 E	-04 lb/	ton						<u> </u>	
	·Re	eference:	AP-4	2											
7.	Er	nissions	Metł	od Cod	e:									•	•
	[] 0	[] 1	[] 2	{ x]3	[] 4		[] 5		
· 8	Са	lculation	of F	mission	s (lim	it to 60	0 chai	racters)						•	
	R	Rock Crus PY; Dies PY	hing:	325 TPH	x 0.0	007 lb/to	on = 0.3	23 lb/hr;	0.23 lt						
9.	Po	llutant P	otent	ial/Estir	mated	Emissi	ons C	ommen	t (limi	t to 20	00 chai	racte	rs):		
ı															

Emissions Unit Information Section _____ of _____ Allowable Emissions (Pollutant identified on front page)

1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operating	g Method/Mode).
В.			
1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operating	g Method/Mode)

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Emissions	Unit Information Section	1	of	1	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: PM10						
2. Total Percent Efficiency of Control: %						
3. Potential Emissions: 0.93 lb/hour 3.38 tons/year						
4. Synthetically Limited? [x] Yes [] No						
5. Range of Estimated Fugitive/Other Emissions:						
[] 1 [] 2 [] 3totons/yr						
6. Emission Factor: 7 E-04 lb/ton						
Reference: AP-42						
7. Emissions Method Code:						
[]0						
8. Calculation of Emissions (limit to 600 characters):						
Rock Crushing: 325 TPH x 0.0007 lb/ton = 0.23 lb/hr; 0.23 lb/hr x 7,280 hr/yr x 1 ton/2,000 lb = 0.83 TPY; Diesel Combustion: 318 hp x 0.0022 lb/hp-hr = 0.70 lb/hr; 0.70 lb/hr x 7,280 x 1 ton/2,000 = 2.55 TPY						
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):						
·						

Α.	wable Emissions (I onutant identified on front	pager	
1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5;	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operating	Method/Mode)
В.		· · · · · · · · · · · · · · · · · · ·	. · · -
1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operating	Method/Mode)

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Emissions	Unit	Information	Section	1	of	1

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: NOx			
2. Total Percent Efficiency of Control: %			
3. Potential Emissions: 9.9 lb/hour 35.9 tons/year			
4. Synthetically Limited? [x] Yes [] No			
5. Range of Estimated Fugitive/Other Emissions:			
[]1 []2 []3totons/yr			
6. Emission Factor: 0.031 lb/hp-hr			
Reference: AP-42			
7. Emissions Method Code:			
[]0			
8. Calculation of Emissions (limit to 600 characters): 318 hp x 0.031 lb/hp-hr = 9.9 lb/hr; 9.9 lb/hr x 7,280 hr/yr x 1 ton/2,000 lb = 35.9 TPY			
3 10 Hp x 0.03 1 ID/Hp-H = 3.3 ID/H , 3.3 ID/H x 7,200 HByl x 1 (0H/2,000 ID = 35.3 1P1			
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters).			

Emissions Unit Information Section 1 of 1 Allowable Emissions (Pollutant identified on front page)

•	
•	
/T.	

1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. of (limit to 200 characters):	of Related Operating M	ethod/Mode)
	·		
В.			
1.	Basis for Allowable Emissions Code:	,	
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. o	of Related Operating M	ethod/Mode)

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(limit to 200 characters):

Emissions Unit Information Section	1	of	1
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H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: CO				
2. Total Percent Efficiency of Control: %				
3. Potential Emissions: 2.1 lb/hour 7.7 tons/year				
4. Synthetically Limited? [x] Yes [] No				
5. Range of Estimated Fugitive/Other Emissions:				
[]1 []2 []3totons/yr				
6. Emission Factor: 0.0067 lb/hp-hr				
Reference: AP-42				
7. Emissions Method Code:				
[]0 []1 []2 [x]3 []4 []5				
8. Calculation of Emissions (limit to 600 characters):				
318 hp x 0.00668 lb/hp-hr = 2.12 lb/hr; 2.12 lb/hr x 7,280 hr/yr x 1 ton/2,000 lb = 7.7 TPY				
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	_			

Emissions Unit Information Section _____ of ____1 Allowable Emissions (Pollutant identified on front page)

A	
$\boldsymbol{\Lambda}$	

1,	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operation	g Method/Mode)
			•
В.			
1.	Basis for Allowable Emissions Code:		•
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4	T ' 1 (All 11 E ' '	11 /1	
	Equivalent Allowable Emissions:	lb/hour	tons/year
	Method of Compliance (limit to 60 characters):	ib/nour .	tons/year

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(limit to 200 characters):

Emissions Unit Information Section	1	of 1
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Portable Rock Crusher

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

<u>Visible</u>	Emissions Limitations: Visible Emissions Limitation 1 of 1
1.	Visible Emissions Subtype: VE20
2.	Basis for Allowable Opacity: [x] Rule [] Other
	Requested Allowable Opacity Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment (limit to 200 characters): Rule 62-296.320(4)(b), F.A.C.
Visible	Emissions Limitations: Visible Emissions Limitation of of
1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [] Rule [] Other
	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment (limit to 200 characters):
	·

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5/5/97

Emissions Unit Information Section of	Emissions Unit Information Section	1	of	1	Portable Rock Crushe
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Cont	ontinuous Monitoring System Continuous Monitor of					
1.	Parameter Code:	2. Pollutant(s):				
3.	CMS Requirement: [] Rule []	Other				
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:				
5.	Installation Date:					
6.	Performance Specification Test Date:					
7.	Continuous Monitor Comment (limit to	200 characters):				
Cont	inuous Monitoring System Continuou	is Monitor of				
1.	Parameter Code:	2. Pollutant(s):				
3.	CMS Requirement: [] Rule []	Other				
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:				
5.	Installation Date:					
6.	Performance Specification Test Date:					
7.	Continuous Monitor Comment (limit to	200 characters):				

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/E PM SO ₂ NO ₂	xpanding Code: [] C [] C [] C	<pre>[x] Unknown [x] Unknown [x] Unknown</pre>
4.	Baseline Emissions: PM SO ₂ NO ₂	lb/hour lb/hour	tons/year tons/year tons/year
5.	PSD Comment (limit to	200 characters):	

33

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Emissions	Unit	Information	Section	1	of 1	
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L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[x] Attached, Document ID: Attachment A [] Not Applicable	[] Waiver Requested
2.	Fuel Analysis or Specification	
	[x] Attached, Document ID: Attachment A [] Not Applicable	[] Waiver Requested
3.	Detailed Description of Control Equipment	, , , , , , , , , , , , , , , , , , , ,
	[] Attached, Document ID:	[] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[] Attached, Document ID:	[] Waiver Requested
5.	Compliance Test Report	
	[] Attached, Document ID:	[x] Not Applicable
6.	Procedures for Startup and Shutdown	
	[] Attached, Document ID:	[x] Not Applicable
7.	Operation and Maintenance Plan	
	[] Attached, Document ID:	[x] Not Applicable
8.	Supplemental Information for Construction Perm	it Application
	[X] Attached, Document ID: Attachment A	[] Not Applicable
9.	Other Information Required by Rule or Statute	
	[X] Attached, Document ID: Attachment A	[] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alt	ern	ative Methods of Operation
	[]	Attached, Document ID: [] Not Applicable
11.	Alt	ern	ative Modes of Operation (Emissions Trading)
	[]	Attached, Document ID: [] Not Applicable
12.	Ide	ntif	ication of Additional Applicable Requirements
	[]	Attached, Document ID: [] Not Applicable
13.	Co	mpl	liance Assurance Monitoring Plan
	[]	Attached, Document ID: [] Not Applicable
14.	Aci	d P	Rain Permit Application (Hard Copy Required)
	[]	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
	[]	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
	[]	New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
	[]	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
	[]	Not Applicable

ATTACHMENT A

ATTACHMENT A

1.0 PROJECT DESCRIPTION

United States Sugar Corporation (USSC) currently controls several thousand acres of property located principally in Palm Beach, Hendry and Glades counties (see Figure 1). The majority of the property is agricultural land, such as sugar cane fields, citrus groves, and vegetable farms. Several operations are conducted in maintaining these agricultural areas, including construction and maintenance of limerock roads. From time to time, rocks and boulders are encountered in the operations, which must be removed in order to prevent damage to other operating equipment. In order to remove and dipsose of the rocks and boulders, USSC utilizes a portable rock crusher.

USSC is applying for an after-the-fact construction permit for a portable rock crusher. In addition, it is requested that the initial air operating permit be issued concurrently with the construction permit. The rock crusher will be operated primarily on property controlled by USSC. The extent of USSC's property, as of 1996, is shown in Figure 1. Although this map shows the extent of USSC's property as of 1996, it is noted that USSC frequently purchases and sells property. As a result, USSC's property holdings are frequently changing, and the USSC area denoted in Figure 1 could change in the future. As shown, the vast majority of property is located in Palm Beach county, with property also in Hendry and Glades counties. The portable rock crusher may also occasionally be operated outside of USSC's property, primarily to assist other cane field or citrus grove operators.

The maximum design capacity of the rock crusher is 325 tons per hour. Current actual operating time of the rock crusher is about 6 hr/day, 5 days/week and 48 weeks per year (about 1,440 hr/yr). Maximum expected operating time is 7,280 hr/yr. Under normal operating conditions, the rock crusher will not be operated at these maximum conditions.

Manufacturer's literature and specifications for the rock crusher are contained in Attachment B. A process flow diagram for the portable rock crusher is presented in Figure 2. A schematic and dimensions of the rock crusher is also contained in the manufacturer's literature.

2.0 AIR EMISSIONS

Estimated air emissions due to the diesel-fired engine associated with the portable rock crusher are presented in Table 1. These emissions are based upon the size of the diesel engine (318 hp), expected maximum operating hours, and USEPA publication AP-42 emission factors for diesel internal combustion engines. As shown, the maximum estimated emissions for any pollutant is less than 36 tons per year (TPY).

PM/PM10 emissions from the rock crushing operations are presented in Table 2. The emissions are based upon AP-42 emission factors for the crushed stone processing industry, which specifically includes limestone crushing. Being located in south Florida, the material processed by USSC's rock crusher is primarily limestone. As shown in Table 2, the maximum estimated PM/PM10 emissions from the portable rock crusher are 0.83 TPY.

3.0 APPLICABILITY OF NSPS

Federal new source performance standards (NSPS) for nonmetallic mineral processing plants (NMMPP) have been promulgated by EPA in 40 CFR 60, Subpart OOO. The Subpart OOO NSPS is applicable to NMMPP for which construction, reconstruction or modification commenced after August 31, 1983. Nonmetallic minerals defined under the NSPS includes limestone. The NSPS applies to portable rock crushers with capacities greater than 150 tons per hour.

USSC purchased the portable rock crusher in 1973. Since this date is prior to the Subpart OOO applicability date of August 31, 1983, the NSPS does not apply to USSC's portable rock crusher.

Table 1. Potential Emissions for the Portable Rock Crusher Diesel Engine

Parame	ter		Specification	
OPERATING DA	ATA			
Operating Time ((hr/yr)		7,280	
Power Output (318.0	
Maximum Fuel	Sulfur Content (W	lt %)	0.5	
		· · · · · · · · · · · · · · · · · · ·	No. 2 Fuel (Dil
Pollutant	Emission Factor a		lb/hr	TPY
EMISSIONS DAT	ΓΑ			
SO2	2.05E-03	lb/hp-hr	0.65	2.37
NOx	0.031	lb/hp-hr	9.86	35.88
PM/PM10	2.20E-03	lb/hp-hr	0.70	2.55
со	6.68E-03	lb/hp-hr	2.12	7.73
VOC b	2.51E-03	lb/hp-hr	0.80	2.91

Note: NA = not applicable.

a Emission factors based on AP-42 Table 3.3-1.

b VOC emissions include emissions from exhaust, evaporative, crankcase, and refueling.

Table 2. Potential PM Emissions from the Rock Crusher

OPERATING DATA		SPECIFICATION	
Operating Time (hr/y)	r)	7,280	
Material Throughpu	,	325	
Material Throughpu	t (ton/yr)	2,366,000	
		PM/PM10	
Activity	Emission Factor 2	lb/hr	TPY
EMISSIONS DATA			
Primary Crushing	7.00E-04 lb/ton	0.23	0.83

Note: NA = not applicable.

a Emission factors based on AP-42, Table 11.19.2-2.

Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES^a

	Gasoline Fuel Diesel Fuel (SCC 2-02-003-01, 2-03-003-01) (SCC 2-02-001-02, 2-03-001-01)				
Pollutant	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	EMISSION FACTOR RATING
NO _x	0.011	1.63	0.031	4.41	a
со	0.439	62.7	6.68 E-03	0.95	d
so _x	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10 ^b	7.21 E-04	0.10	2.20 E-03	0.31	D
CO ₂ c	1.08	154	1.15	164	В
Aldehydes	4.85 E-04	0.07	4.63 E-04	0.07	D
тос					
Exhaust	0.015	2.10	2.47 E-03	0.35	D
Evaporative	6.61 E-04	0.09	0.00	0.00	E
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	E
Refueling	1.08 E-03	0.15	0.00	0.00	E

^a References 2,5-6,9-14. When necessary, an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code. TOC = total organic compounds.

b PM-10 = particulate matter less than or equal to 10 μm aerodynamic diameter. All particulate is assumed to be ≤ 1 μm in size.

^c Assumes 99% conversion of carbon in fuel to CO₂ with 87 weight % carbon in diesel, 86 weight % carbon in gasoline, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and gasoline heating value of 20,300 Btu/lb.

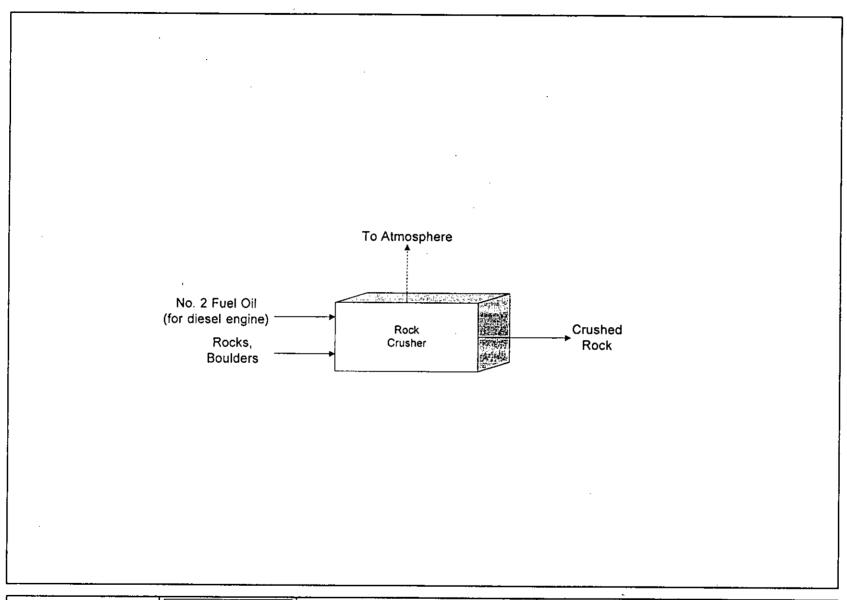
Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS^a

Sourceb	Total Particulate Matter	EMISSION FACTOR RATING	Total PM-10 ^c	EMISSION FACTOR RATING
Screening (SCC 3-05-020-02,-03)	_d		0.015°	C
Screening (controlled) (SCC 3-05-020-02-03)	_d		0,00084°	C .
Primary crushing (SCC 3-05-020-01)	0.00070 ^f	E	NDg	
Secondary crushing (SCC 3-05-020-02)	ND		NDg	
Tertiary crushing (SCC 3-05-020-03)	_d		0.0024 ^b	С
Primary crushing (controlled) (SCC 3-05-020-01)	ND		NDg	NA
Secondary crushing (controlled) (SCC 3-05-020-02)	ND		NDg	NA
Tertiary crushing (controlled) (SCC 3-05-020-03)	_d		0.00059h	С
Fines crushingi (SCC 3-05-020-05)	d		0.015	E
Fines crushing (controlled) (SCC 3-05-020-05)	d		0.0020	E
Fines screening ^j (SCC 3-05-020-21)	d		0.071	E
Fines screening (controlled) ^j (SCC 3-05-020-21)	d		0.0021	E
Conveyor transfer point ^k (SCC 3-05-020-06)	,d		0.0014	D
Conveyor transfer point (controlled) ^k (SCC 3-05-020-06)	_d		4.8x10 ⁻⁵	D
Wet drilling: unfragmented stone ^m (SCC 3-05-020-10)	ИД		8.0x10 ⁻⁵	E
Truck unloading: fragmented stone ^m (SCC 3-05-020-31)	ИД		1.6x10 ⁻⁵	E
Truck loading-conveyor: crushed stone ⁿ (SCC 3-05-020-32)	ND	. ,	0.00010	E .

Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/ton of material throughput. SCC = Source Classification Code. ND = no data.

^c Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions. No data are available to make these estimates. However, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.



Attachment UC-EU1-L1 U. S. Sugar Corporation Process Flow Diagram Clewiston, Florida

Process Flow Legend:
Solid / Liquid
Gas
Steam

Emission Unit: Rock Crusher

Filename: CRUSHER.VSD

Latest Revision Date: 5/15/97



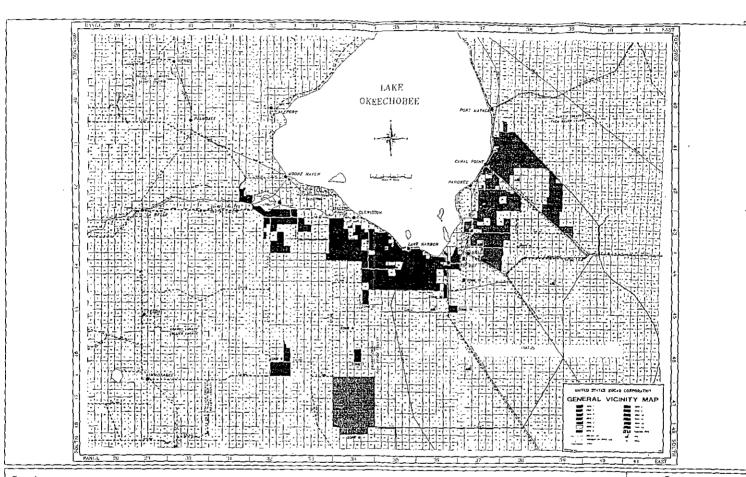


Figure 1 Agricultural Area Under the Control of United States Sugar Corporation or its Subsidianes (as of 1996)



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ATTACHMENT B

SINGLE IMPELLER IMPACT BREAKER SPECIFICATIONS

1. OVERAIL DIMENSIONS	3020 SECONDARY	3026 PEMARY NB. Fooder)	3623 SECONDAIN	3633 PERMATY All Footen)	4325 SECONDARY	4326 SECONDARY	4336V PRIMARY PRI Feeden	4340 PRIMARY (All Factor)	5348 PELKART (All Fooders)	6360 PENART
Hetah	.02	91 1/4."	12	2 P- 6	476	8'-5"	7.6	10'-6"	12, 0,	16.0%
Length	62 4,"	62 ½, " 77	- -	.;.e	F 001	, O .	<u>8</u> 2	, o .	<u>.</u>	12.8"
tologo saloj		30" × 34"	36" × 23"	36" × 48"	43" x 25"	43" × 26"	43" × 45"	13. × SK		2 × × × × × × × × × × × × × × × × × × ×
Outer opening	30" × 37"	30" × 37"	36" x 36" 25.000	36" × 36" 29,850	31,300 31,300	43" x 46" 38,620	34,070	43" x 46" 44,135	71,900	160,300
and us subjects	7									
2. IMPELLERS		-			<u> </u>					
Total waight with		4,575	6,725	6,725		10,700	10,160	10,700	17,440	35,700
Die, outside bars			74.E	37.5"	72%		42%	42%	7 7 7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Core [material]	ī	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 t 1 t 1 t 1 t 1 t 1 t 1 t 1 t 1 t 1 t			8.360	7.525	8.360	12,570	26,300
Weight The Base		Mangenese	3	Manganese		Manganete	Mangemen	Manganese	Manganese	Memberton
Weight	'n	8.	430	7	530	200	5	200	ξ.,	
Number Marie Codeses	~ ~	N	· -	٧	٠.	-	1	. –	, _	-
P CUANTE										
		*	3 33 4	77 11.7	* 1. 7	7 12. "	A12 "	7 17 0	10.	14 1/2"
Dia. through impeller	**************************************	4 th	o 4	-	**	**************************************	**	*	, ,	11 % " taper
Keyways at ends	7, Sq.	7, " Sq.	1 1/2 " \$4.	17.7 \$	- ½.	1%. %	·	Ż.	X F	
4. BEARINGS - Heavy	Duty,	Spherical Di	Dauble Raw	Self Aligning	guir					
BREAKER BAR	ı									
Material	1045 H.R.S.	Š	1045 H.R.S.	1045 H	è	1045 H.R.S.	1045 H.R.S.	1045 H.R.S.	1045 H.R.S.	H. Carb. See
Diameter	5	5	6 1/2 "	6 1/3 "	91,12	6%	4,0	0,12		200
6. SIEEVES				L	- 1	- 1	- I_	L	L	44.00.00
Material	Manganase 7	Mangenete 7"	.Yenganese	Manganese 9"	Manganese 9"	Manganose 9"	Mangakese 9"	Manganase 9"	12"	161/2
Marifelet										
7. LINER FLAIES				7 4 2 2 7 7				-	MangA.R.S.	MangA.RS.
Material Thickness	Mang. A. R.S.	MangA.x.S.	Mang. A. K.S.		1.6	13,6	1 %	1,1,1	1,4,"	1,1/2
8. SIDE PLATES] 4
Monrial	H. R. S.	H. R. S.	H. R. S.	H. R. S.	H. 2. 5.	H. R. S.	H. R. S. 2"	H. R. S.	y ¥ ¥	χ., Υ.,
THE RECITIONAL	MTS Far	Ž	Outout					,		
7. f. redoinment			Ί.	-	000	950 300	260.300	350.300	300.400	200-600
The state of the s	125-150	125-150	002-051			225.057	220.057	250 450	350.500	100.450
R.P.M. Breaker	350-550	350-550	350-575 900-1200	900-1200	900-1200	900-1200	900-1200	900-1200	900-1200	900-1200
10. MINIMUM PRODUCT	CT SIZE —	. Depandent	t.an Type	₽uŧ	Characteristics of	Material	Processed			
	:	1	11% " 1850118	1 V. " Minus	2" Mines	2" Minus	2" Minus	2" Alinus	3" Minus	6" Minus
Closed Circum	anders or	1	4~	70	Ę,Ę	Sed				
II. CAFACAIES De	Neperioris o	1			25.05.0	260 500	250.500	250.500	500.1000	1000-1500
Tone per hour	100-200	100.200	200-350	200-350	750-500	ארכי ארכי	200-007	222		┥
			Specificatio	Specifications Subject to	Change Without Notice	Notice.				
*Maximum without feeder. Breakers will accept feed size according to model designation. ***Weights do not include feed churs, chain outiain, discharge chure, drives or skid. ****If new frame motors are used, increase electric HP requirements by 25 %.	Breakers will a ad chute, chair sed, increase	uccept feed size a curtain, disci electric MP req	e according to varge chute, utrements by	o model designatives or skid.	nation. For exa	mple, a Model	ters will accept feed size according to model designation. For example, a Model 3633 will accept rock of maximum size of 36" x 33". Increase electric HP requirements by 25 %.	aptrock of m	e oda mumon	1 36" × 33".
twodel 4336A (Apron Free	der] helghi 10	.2"; welght	76,050 IBI. 7	al orner otte						

Specifications subject to change without notice.



IOWA MANUFACTURING COMPANY

CEDAR RAPIDS, IOWA . U.S.A. . 52402

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Sales Manual Section 5 Div. 3 Form No. 12874-IMCO-3-71

Apr 29'97

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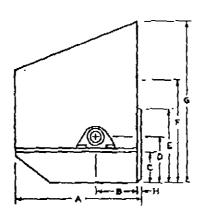
Replaces Form No. 112580

SPECIFICATIONS

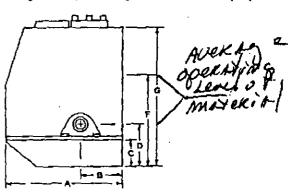
SINGLE IMPELLER IMPACT BREAKER

ENGINEERED FOR GREATER PRODUCTION OF SPECIFICATION MATERIALS

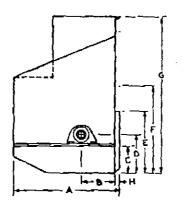
Use engineering drawlngs for Installation purposes.



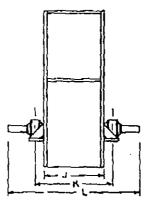
MODELS - 3020 & 4325



MODELS - 3623, 3633, 4326, 4340, 5348 & 6360



MODELS -- 3026, 4336A (VIBRATING FEEDER) ---- 4336 (APRON FEEDER)



ALL MODELS - END VIEW

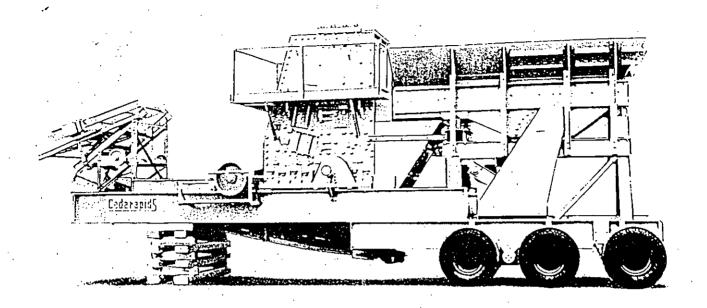
DIMENSIONS All dimensions in Inches unless noted.

Medel	A 1	•	C	(12)	E	k++4	G	н	3	K_	<u> </u>
3020	62 4.	20	151/1	21 7/4	36	50%	80	21/4	35	45 Y ₁	77
3024**	624	24	15 1/1	21 1/4	36	501/4	91 %	2 1/4	35	45 1/2	77
3423	68	24	15 1/3	231/4		53.	87		41	54	91
3633	68	24	15 7/2	23 1/4		53	9'-4"		41	54	91
4325	74%	24	18	26%	43	593/4	94	2 4,	50	64	100
4324	75	27	18	27 7/,		591/4	8'-5"		50	64	9*-0
4136**	744	24	18	261/4	43	59 1/4	9'.4"	2 1/2	50	64.	100
4334*	74 1/1	24	16	26 1/4	43	593/,	10'-2"	2 1/2	50	64	100
4340	75	27	18	27 1/5		593/4	10'-6"		50	64	9'-0'
5348	90	30	18	30 1/4		62 1/3	12'-0"		62	BÓ	10'-0'
6360	120	42	25	43	<u></u>	82 %	16'-07,"		74	94	12'-8'

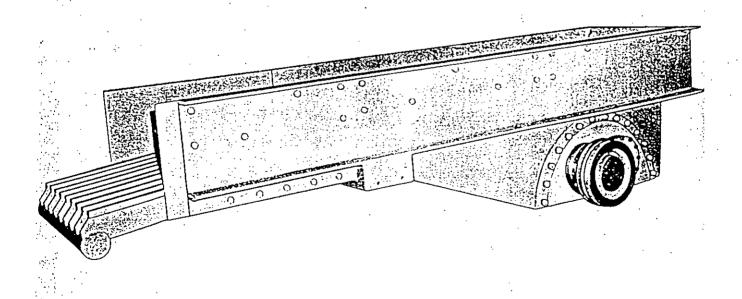
^{*}Model 4336 available with apron funder.

**Models 4336 and 3026 available with vibrating feeder. Models 5348 and 3633 evailable with all funders.

***Olimension **F** to bottom of feed opening.

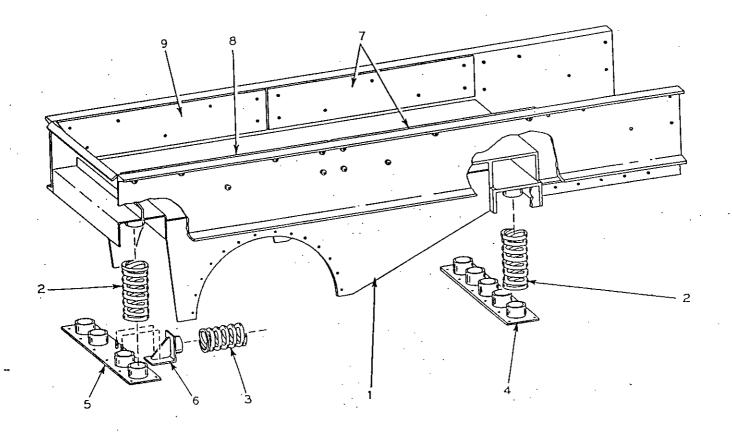


Single Impeller Primary with 15' Vibrating Scalping Feeder



View of 12' Vibrating Scalping Feeder

VIBRATING FEEDER BOX



Ref. No.	Description	Quantity
1	Box, Feeder	1
2	Spring	Variable
3	Spring	1
4	Guide, Spring—Front	1
5	Guide, Spring—Rear	1
6	Guide, Spring—Horizontal	1
*7	Liner, Center	2
8	Liner, Rear—RH	1
9	Liner, Rear—LH	1

^{*}Liner not used on 10'-6" feeders.

DESCRIPT	ION	DATE	GROSS AMOUNT	DISCOUNT	NET AMOUN
6203052297	482280	05/22/97	2000.00	0.00	2000.0
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PERFORATION		1	2000.00	0.00	2000.0

THIS CHECK IS VOID IF BLUE COLORED BACKGROUND IS ABSENT



United States Sugar Corporation P.O. Drawer 1207 Clewiston, FL 33440 .(941),983-8121

DATE

DATE 05/27/97
PAY TWO THOUSAND DOLLARS AND OO CENTS ******

FL DEPARTMENT OF ENVIRONENTAL ORDER PROTECTION - SOUTH DISTRICT
OF 2295 VICTORIA AVE. SUITE 364
FORT MYERS FL 33901-3881

Eirst Union National Bank of Florida Pensacola, Fl 32534

_#63²-1012

CHECK 00834090



AMOUNT 🧇 *******\$2,000.00

VOID OVER \$2,000.00