AIR CONSTRUCTION PERMIT APPLICATION

Mobile Concrete Crushing Operation Statewide Project Sites

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MAR 3 0 2000

Prepared For:

BUREAU OF AIR REGULATION

Samsula Recycling, Inc. 363 State Road 415 New Smyrna Beach, Florida 32168

Prepared By:

COLELLA & ASSOCIATES, INC. 805 Smokerise Boulevard Port Orange, Florida 32127

March 2000



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INTRODUCTION / SUMMARY

- 1. Samsula Recycling, Inc. (Samsula) purchased and began operating a concrete crusher in February 2000 at various project sites within Florida. In March 2000, the operation was discontinued because an air operating permit was not obtained from the Florida Department of Environmental Protection (FDEP). Upon receipt of the air construction and subsequent air operating permits, Samsula plans to operate the mobile crusher at project sites across Florida as opportunities arise. Currently, Samsula has project sites in Seminole, Orange, and Volusia Counties. Samsula anticipates the crusher will primarily (more than 50 percent of the time) be operated at the Samsula Landfill in New Smyrna Beach, Volusia, Florida (see Site Location Map, Figure 1).
- 2. The crushing operation includes an Eagle 1200 Crusher, a rubber tired loader, and discharge conveyors. Concrete debris is delivered to the project site by trucks and stockpiled. The debris is sized if required to fit into the crusher's hopper. The loader feeds the hopper of the Eagle 1200 Crusher (see Appendix A for details and photographs) which has a potential to process debris at a rate of 120 tons per hour (see Appendix B). The concrete debris is crushed to obtain processed aggregate within a 3/8 and 1/2 inch range. Because of the various sized concrete debris being crushed and the desired size of the processed aggregate, Samsula achieves an operational rate of approximately 80 tons per hour. The processed materials are discharged on conveyors (2) into stockpiles (2) and/or trucks as aggregates less than and greater than 3/8 inch in size. A Process Flow Diagram is provided as Figure 2.
- 3. The potential emission from the crushing of the concrete debris and work area is particulate matter (PM), dust. The potential emissions from the fuel (diesel) powered loader and crusher's generator are PM, carbon monoxide, nitrogen oxides, sulfur dioxide, and volatile organic compounds.
- 4. Samsula operates water suppression equipment (water truck for the work area, water hoses for the stockpiles, and water spray nozzles in the concrete crusher's hopper and at the loading point from the crusher onto the discharge conveyors) when concrete debris is being crushed to minimize the potential of dust generation. Samsula's Watering Plan is presented in Appendix C.
- 5. The permit application (Tab 1.0) and reference materials (Figures 1 and 2, and Appendices A, B, and C) are provided to document the operation, equipment being used, emissions, and methods to control the emissions. The Samsula equipment and

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operational standards meet the FDEP requirements (62-210, 62-212, 62-296.711, and 62-297) for stationary sources and emissions monitoring. The Samsula crushing operation is exempt from the applicable federal regulation, 40 CFR 60.670 (Subpart OOO), because the crusher is mobile and its operating capacity is less than 150 tons per hour (40 CFR 60.670(c)(2)).

No - 000 is based on nameplate capacity of crusher - not after process; which even be by passed!



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - NON-TITLE V SOURCE

See Instructions for Form No. 62-210.900(3)

I. APPLICATION INFORMATION

Identification of	of Fa	cility
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IU	enuncation of Facility				_		
1.	1. Facility Owner/Company Name: Samsula Recycling, Inc.						
2.	2. Site Name: Statewide (facility is not fixed based)						
3.	Facility Identification Number:	[[X] Unknov	vn			
4.	Facility Location: Mobile Facility to be located at project site Street Address or Other Locator: Volusia, Seminole, and Orange Counties						
	City: County:			Zip Code:	_		
5.	Relocatable Facility?	6.	Existing Per	mitted Facility?			
	[X] Yes [] No		[] Yes	[X] No			
	Application Contact						
1.	Name and Title of Application Contact: Mr	·. Mic	hael Stokes	, Manager			
2.	Application Contact Mailing Address:						
w	Organization/Firm: Samsula Recycling, In	c.					
V	Street Address: 363 S. R. 415						
	City: New Smyrna Beach St	ate: F	L	Zip Code: 32168			
3.	Application Contact Telephone Numbers:						
	Telephone: (904) 423-6769 Fax: (904) 423-6769						
Aı	oplication Processing Information (DEP Us	se)					
1.	Date of Receipt of Application:						
2.	Permit Number:						



DEP Form No. 62-210.900(3) - Form

Purpose of Application

Air Operation Permit Application

Tŀ	is	Application for Air Permit is submitted to obtain: (Check one)
[]	Initial non-Title V air operation permit for one or more existing, but previously unpermitted, emissions units.
[]	Initial non-Title V air operation permit for one or more newly constructed or modified emissions units.
		Current construction permit number:
[]	Non-Title V air operation permit revision to address one or more newly constructed or modified emissions units.
		Current construction permit number:
		Operation permit number to be revised:
[]	Initial non-Title V 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):
[]	Non-Title V 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 number to be revised:
		Reason for revision:
A i	ir (Construction Permit Application
Tł	nis	Application for Air Permit is submitted to obtain: (Check one)
[]	Air construction permit to construct or modify one or more emissions units.
[]	Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
r 3	x 1	Air construction permit for one or more existing, but unpermitted, emissions units

Owner/Authorized Representative

			•
1.	Name and Title of Owner/Authoriz	ed Representative:	
	Mr. Michael Stokes, Manager		
2.	•	•	
	Organization/Firm: Samsula Recyc	cling, Inc.	
	Street Address: 363 S. R. 415		
	City: New Smyrna Beach	State: FL	Zip Code: 32168
3.	Owner/Authorized Representative	Telephone Numbers:	
	Telephone: (904) 423-6769	Fax: (9	04)423-6769
4.	Owner/Authorized Representative S	Statement:	
	I, the undersigned, am the owner of this application. I hereby certify, be inquiry, that the statements made in that, to the best of my knowledge, a are based upon reasonable technique emissions units and air pollution cooperated and maintained so as to coppllutant emissions found in the state Department of Environmental Protection permit, if granted by the Department Department, and I will promptly no permitted emissions unit.	ased on information as this application are ny estimates of emiss ues for calculating erentrol equipment descently with all applications of the State of Hection and revisions in cannot be transfer	and belief formed after reasonable true, accurate and complete and ions reported in this application missions. The air pollutant cribed in this application will be able standards for control of air florida and rules of the hereof. I understand that a red without authorization from the
	Signature		Date
	Signature		Date
* /	Attach letter of authorization if not cu	urrently on file	
		intentry on the.	
	ofessional Engineer Certification		
1.	Professional Engineer Name: Jame	s C. Colella	
	Registration Number: 41545		
2.	Professional Engineer Mailing Add		
	Organization/Firm: Colella & Asso		
	Street Address: 805 Smokerise Bou		
	City: Port Orange	State: FL	Zip Code: 32127
3.	Professional Engineer Telephone N	umbers:	
	Telephone: (904) 322-9080	Fax: (9	04) 322-0068

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4. Professional Engineer 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 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.

Signature C. Colella

21 MAROO

Date

(seal)

^{*} Attach any exception to certification statement.

Scope of Application

Emissions		Permit	Processing
Unit ID	Description of Emissions Unit	Type	Fee
001	Concrete Crusher and Associated Operations (Hopper Loading of Raw Material, Conveyor Stockpiling of Crushed Materials, Loading of Trucks of Crushed Materials)	AC1D (\$2,000
	1 de ser a red) reballing excur
	entropolitical ?	()
	Could Top general?		
	When our ?		

Application Processing Fee

Check one: [X] Attached - Amount: \$ 2,000 [] Not Applicable

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Construction/Modification Information

1. Description of Proposed Project or Alterations:

Samsula Recycling, Inc., operates a concrete crusher to recycle concrete debris. Concrete debris is received in various sizes, stockpiled and then processed through the crusher to produce sized aggregate for re-use. The concrete debris is loaded into the crusher by a rubber tired loader, crushed to the desired size, and discharged by conveyors into two distinct stockpiles (less than and greater than 3/8" diameter materials) for subsequent loading into trucks and/or into trucks. Water is applied to the raw and processed materials by spray nozzles at three (3) locations at a rate controlled by the crusher's operator. Depending on the type of concrete debris being handled, water is applied prior to the debris being loaded into the crusher's hopper, water is applied in the hopper as the material is crushed, and water is applied to the processed materials as they are loaded onto the discharge conveyors for stockpiling. Water is also applied to the stockpiled concrete debris and surrounding surface area to minimize dust generation from the wind and the truck and loader traffic. Samsula Recycling, Inc., operates the crushing activity relatively dust free; that is, applying an adequate volume of water to the raw and processed materials, stockpiles, and roads.

capacity with large with size gradual

2. Projected or Actual Date of Commencement of Construction: February 28, 2000

3. Projected Date of Completion of Construction: February 28, 2000

Application Comment

The existing Eagle 1200 concrete crusher (see Appendix A for equipment details) has the capacity to process 200 tons of raw material per hour without any screens. Based on the planned sizing to be performed, the maximum capacity of the crusher is approximately 120 tons per hour (see Appendix B for operating details).

Samsula Recycling, Inc., proposes to perform concrete debris crushing operations at various locations throughout Florida. Currently, Samsula Recycling, Inc., will operate the equipment at project sites in Volusia, Seminole, and Orange Counties.

Lesvally enforcable

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II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Mobile Facility - Various Locations					
	Zone:	•		th (km):	
2.	2. Facility Latitude/Longitude:				
	Latitude (DD/MM/	SS):	Longitude (DD/MN	M/SS):	
3.	Governmental	4. Facility Status	5. Facility Major	6. Facility SIC(s):	
ĺ	Facility Code:	Code:	Group SIC Code:		
<u> </u>	0	C	32		
Co	rious project sites acros unties. Based on projec	(limit to 500 characters): s the state of Florida, with constitutions, the crusher will be proposed to the county, Florida.	urrent projects in Volusia,	Seminole and Orange	

Facility Contact

1.	Name and Title of Facility Contact: Mr	. Michael Stok	es, Manager		
2.	Facility Contact Mailing Address: Organization/Firm: Samsula Recycling	g, Inc.			
	Street Address: 363 S. R. 415				
	City: New Smyrna BEach	State: FL	Zip Code: 32168		
3.	Facility Contact Telephone Numbers: Telephone: (904) 423-6769	Fax:	(904)423-6769		

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Facility Regulatory Classifications

Check all that apply:

1.	[] Small Business Stationary Source? [] Unknown
2.	[] Synthetic Non-Title V Source?
3.	[] Synthetic Minor Source of Pollutants Other than HAPs?
4.	[] Synthetic Minor Source of HAPs?
5.	[] One or More Emissions Units Subject to NSPS?
6.	[] One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?
sou B).	rce Th	acility Regulatory Classifications Comment (limit to 200 characters): The facility is a minor respective to particulate matter, is portable, and has a capacity of 120 tors per hour (see Appendix ne facility is not regulated by NSPS, 40CFR60.670 (Subpart OOO) because of an exemption, 860.670(c)(2).

Rule Applicability Analysis

- 62-204 General Provisions
- 62-210 Stationary Sources Stationary Sources
- 62-212 Stationary Sources Preconstruction Review
- 62-296 Stationary Sources Emissions Standards (62-296.711 Materials Handling, Sizing, Crushing and Grinding Operations)
- 62-297 Stationary Sources Emissions Monitoring

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B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions	5. Pollutant Comment	
Emilied	Classii.	lb/hour	tons/year	Cap	Comment	
PM	В		10.73	Other	Hours of operation times the emissions factor	
СО	В		4.5	Other	Hours of operation times the emissions factor	
NOX	В		21.1	Other	Hours of operation times the emissions factor	
voc	В		1.4	Other	Hours of operation times the emissions factor	
SO2	В		1.72	Other	Hours of operation times the emissions factor	
						

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C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

Area Map Showing Facility Location:
[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
Facility is mobile and will be located at project site. The crusher will primarily be based at the Samsula Landfill.
See Figure 1.
2. Facility Plot Plan:
[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s):
[X] Attached, Document ID: <u>FIG. 2</u> [] Not Applicable [] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
[X] Attached, Document ID: <u>APP. C</u> [] Not Applicable [] Waiver Requested
5. Supplemental Information for Construction Permit Application:
[] Attached, Document ID: [X] Not Applicable
6. Supplemental Requirements Comment: N/A
1

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Emissions Unit Information Section <u>1</u> of <u>1</u> III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G 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.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

 Type of Emissions Unit Addressed in This Section: (Check one) 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. 					
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). [X] 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					
process or production units and activities which has at least one definable emission point					
(stack of vent) but may also produce regitive compsions.					
[] 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.					
2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):					
Diesel powered equipment. Fugitive particulate emissions from concrete debris crushing operation.					
3. Emissions Unit Identification Number: [X] No ID					
ID: [] ID Unknown					
4. Emissions Unit Status 5. Initial Startup Date: 6. Emissions Unit Major					
Code: Group SIC Code:					
C February 28, 2000 32					
7. Emissions Unit Comment: (Limit to 500 Characters)					
7. Emissions Unit Comment: (Limit to 500 Characters) Fugitive emissions are possible from the handling of raw materials (concrete debris) as being placed into crusher's hopper, the crushing of the raw material into the desired size(s), the handling of the processed materials on conveyors (2) and loading the processed materials onto trucks. All handling and crushing equipment are diesel fueled with exhaust pipes.					

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Emissions Unit Information Section 1 of 1 Emissions Unit Control Equipment

1.	Control Equipment/Method	l Description	(limit to	200 characters	per device	or method):
----	--------------------------	---------------	-----------	----------------	------------	-------------

Fugitive Particulate Emissions - Spray bars are provided at the potential emissions points on the crushers equipment; hopper and loading points of the processed material conveyors (2). Stockpiles are watered by hoses and haul roads by water trucks.

2. Control Device or Method Code(s): **061**

Emissions Unit Details

1.	Package Unit: Concrete Crusher			
	Manufacturer: Eagle	Model Na	ımber: 1200	
2.	Generator Nameplate Rating: N/A	MW		
3.	Incinerator Information: N/A			
	Dwell Temperature:		°F	
	Dwell Time:		seconds	
	Incinerator Afterburner Temperature:		°F	

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: N	i/A		mmBtu/hi
2. Maximum Incineration Rate:	N/A	lb/hr	tons/day
3. Maximum Process or Throught	out Rate: 120 to	ns per hour (s	see Appendix B)
4. Maximum Production Rate: 12	0 tons per hour	(see Append	ix B)
5. Requested Maximum Operating	g Schedule:		
	16 hours/day		7 days/week
	52 weeks/yea	r	5,824 hours/year
6. Operating Capacity/Schedule C	Comment (limit t	o 200 characte	ers):
For flexibility, the proposed operating s	schedule is require	d.	

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Emissions Unit Information Section <u>1</u> of <u>1</u> B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

lot Plan or	2. Emission Po	oint Type Code:		
	1	4		
oints Comprising	g this Emissions l	Unit for VE Tracking (limit to		
100 characters per point): FUGITIVE PARTICULATE EMISSIONS - Crusher's Hopper, Processed Materials Conveyors (2), Stockpiles of Concrete Debris and Processed Materials, and Truck and Loader Traffic.				
DIESEL FUEL EXHAUST - Loader and Crusher's Generator				
s of Emission U	nits with this Emi	ssion Point in Common:		
	24			
) I			
6. Stack Heig	ht: N/A	7. Exit Diameter: N/A		
	feet	feet		
9. Actual Vol	umetric Flow	10. Water Vapor: N/A		
Rate: N/A		%		
Dute:	1	mission Point Height:		
11. Maximum Dry Standard Flow Rate: N/A dscfm), 15 (EQUIPMENT) feet		
dinates:	-			
East (km):	Nort	h (km):		
Zone: East (km): North (km): 14. Emission Point Comment (limit to 200 characters): The emissions are fugitive from the crusher's hopper and conveyors while handling the debris and processed materials and from the equipment's engine's exhausts. The exhaust pipes of the equipment's diesel engines are approximately 15 feet above the ground surface.				
	SSIONS - Crusher's Processed Material er and Crusher's Grusher's G	Points Comprising this Emissions SSIONS - Crusher's Hopper, Processe Processed Materials, and Truck and Ler and Crusher's Generator s of Emission Units with this Emison 001 6. Stack Height: N/A feet 9. Actual Volumetric Flow Rate: N/A ow Rate: dscfm 12. Nonstack Endscfm 4 (CONVEYORS dinates: East (km): Nort limit to 200 characters): The emissionle handling the debris and processed		

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Emissions Unit Information Section <u>1</u> of <u>1</u> C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Prod	cess/Fuel Type)	(limit to 500 ch	naracters):	
Diesel rubber tired loader to handle concrete debris and processed materials.				
2. Source Classification Cod	a (SCC):	3. SCC Units	Thousand Callons Durned	
2. Source Classification Code (SCC): 20400402 3. SCC Units: Thousand Gallons Burned				
4. Maximum Hourly Rate:	5. Maximum		6. Estimated Annual Activity	
N/A 6. Maximum % Sulfur:	7. Maximum	5 % Ach:	Factor: N/A 8. Million Btu per SCC Unit:	
N/A	N. Waximum		8. Million Btu per SCC Unit: N/A	
9. Segment Comment (limit	to 200 characters	s):		
Based on an approximate rate of (s gallons of diesel n	er hour to onerat	e the loader.	
	-	_		
6 gal/hr x 16 hr/day x 365 days/ye	ar + 1,000 = 35 tho	usand gallons bur	ned	
Segment Description and Ra	ite: Segment 2	of <u>2</u>		
1. Segment Description (Process/Fuel Type) (limit to 500 characters):				
Diesel generator to power the crus	sher and conveyors	i .		
g				
		<u>.</u>		
2. Source Classification Code 20400402	e (SCC):	3. SCC Uni	its: Thousand Gallons Burned	
4. Maximum Hourly Rate: N/A	5. Maximum 3		6. Estimated Annual Activity Factor: N/A	
6. Maximum % Sulfur:	7. Maximum		8. Million Btu per SCC Unit:	
N/A	N/		N/A	
9. Segment Comment (limit t	to 200 characters):		
Based on an approximate rate of 6	gallons of diesel p	er hour to operat	e the generator.	
6 gal/hr x 16 hr/day x 365 days/yea	ar + 1.000 = 35 tho	usand gallons bur	med	
g				

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Emissions Unit Information Section <u>1</u> of <u>1</u>
Pollutant Detail Information Page <u>1</u> of <u>7</u>

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

Pollutant Emitted: PM		2. Pollutant R	egulatory Code: WP	
3. Primary Control Device Code: 061	· · · · · · · · · · · · · · · · · · ·		5. Total Percent E of Control: N/A	•
6. Potential Emissions: Work			7. Synthetically Li	imited?
lb/h		9 tons/year_	<u> </u>	
8. Emission Factor: 6.2 lbs / miles vehicle travelled		led	9. Emissions Meth	nod Code:
Reference: FIRE 6.22	2/SCC 30502504		3	
10. Calculation of Emissions (limit to 600 cha	racters):	•	
The truck and loader traffic cover a relatively small area around the crusher. Assumes 8 miles per day of the equipment traffic movement. 8 miles per day x 6.2 lbs/mile x 365 days/year $+ 2,000$ lbs/ton $= 9$ tons/year				
10. Pollutant Potential Emissions Comment (limit to 200 characters): The emissions are based on no reduction by watering. Samsula Recycling will water the work area to minimize dust generation by the equipment traffic.			area to	
Allowable Emissions		of	N/A	
1. Basis for Allowable Emiss	ions Code:	2. Future E Emissio	Effective Date of Allowns:	vable
3. Requested Allowable Emis	ssions and Units	s: 4. Equivale	ent Allowable Emission	ns:
			lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):				
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):				

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Pollutant Detail Information Page 2 of 7

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM	2. Pollutant Regulato	ory Code: WP	
3. Primary Control Device 4. Secondary Code: 061 Code: N/A		Total Percent Efficiency of Control: N/A	
6. Potential Emissions: Crushing and Conveyin	Operations 7. O.25 tons/year	Synthetically Limited? []	
8. Emission Factor: 0.0007 lb. / ton of concrete of	ebris processed 9.	Emissions Method Code:	
Reference: FIRE 6.22 / SCC 30502001		3	
10. Calculation of Emissions (limit to 600 char	acters):		
The crushing operation consists of crushing concrete debris. The conveying operation consists of transporting processed aggregate to the stockpiles and/or trucks. At the maximum capacity of the crusher, 120 tons per hour, the potential emissions are calculated by: 120 tons per hour x 5,824 hours/year x 0.0007 lb/ton + 2,000 lbs/ton = 0.25 tons/year			
11. Pollutant Potential Emissions Comment (limit to 200 characters): The potential emissions are based on the equipment manufacturer's design. Based on actual operation, subject equipment generally produces approximately 80 tons per hour, reducing the potential emissions approximately 0.25 tons/year. The emissions are based on no reduction by watering. Samsula Recycling will utilize water sprays in th hopper and on the conveyors to minimize dust generation.			
Allowable Emissions Allowable Emissions _	of 1	N/A	
Basis for Allowable Emissions Code:	2. Future Effective Emissions:	e Date of Allowable	
3. Requested Allowable Emissions and Units	4. Equivalent All	owable Emissions:	
	lb/ho	our tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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Pollutant Detail Information Page 3 of 7

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: CO	2. Pollutant Reg	gulatory Code: EL	
l , , , , , , , , , , , , , , , , , , ,	Control Device	5. Total Percent Efficiency	
Code: N/A Code: N/A		of Control: N/A	
6. Potential Emissions: Crusher Generator an	d Loader	7. Synthetically Limited?	
lb/hour	4.5 tons/year	[]	
8. Emission Factor: 130 lb. / 1,000 gallons dies	sel	9. Emissions Method Code:	
Reference: FIRE 6.22 / SCC 20400402		3	
10. Calculation of Emissions (limit to 600 ch	aracters):	I	
Based on 12 gallons per hour (crusher generator a	nd loader), the potent	tial emissions are calculated by:	
	_		
12 gallons per hour x 5,824 hours/year x 130 lb/1,0	00gal + 2,000 lbs/ton	= 4.5 tons/year	
12. Pollutant Potential Emissions Comment	limit to 200 charac	eters):	
12. Fortular Following Common (mine to 200 orangelos).			
Allowable Emissions Allowable Emissions	of	N/A	
Basis for Allowable Emissions Code:		fective Date of Allowable	
	Emissions		
3. Requested Allowable Emissions and Uni	ts: 4. Equivalen	t Allowable Emissions:	
		lb/hour tons/year	
5. Method of Compliance (limit to 60 chara	cters):		
•			
6. Allowable Emissions Comment (Desc. o	f Operating Methor	d) (limit to 200 characters):	
o. Anowable Emissions Comment (Desc. o	· Operating Method	1) (mint to 200 characters).	

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Pollutant Detail Information Page 4 of 7

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: NOX	2. Pollutant Reg	gulatory Code: EL	
3. Primary Control Device 4. Secondary Code: N/A Code: N	y Control Device /A	5. Total Percent Efficiency of Control: N/A	
6. Potential Emissions: Crusher's Generator and Loader lb/hour 21.1 tons/year		7. Synthetically Limited?	
8. Emission Factor: 604 lb. / 1,000 gallons dies	el	9. Emissions Method Code:	
Reference: FIRE 6.22 / SCC 2040040.	2	3	
10. Calculation of Emissions (limit to 600 ch	naracters):		
Based on 12 gallons per hour (crusher generator a	nd loader), the potent	tial emissions are calculated by:	ļ
12 gallons per hour x 5,824 hours/year x 604 lb/1,0	_		
		•	
13. Pollutant Potential Emissions Comment	(limit to 200 charac	eters):	
Allowable Emissions Allowable Emissions	of	N/A	
1. Basis for Allowable Emissions Code:	2. Future Eff Emissions	fective Date of Allowable s:	
3. Requested Allowable Emissions and Uni	ts: 4. Equivalen	nt Allowable Emissions:	
		lb/hour tons/year	
5. Method of Compliance (limit to 60 chara	cters):		
6. Allowable Emissions Comment (Desc. o	f Operating Method	d) (limit to 200 characters):	

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D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: SOX	2. Pollutant Reg	gulatory Code: EL	ı
· · · · · · · · · · · · · · · · · · ·	, i i i i i i i i i i i i i i i i i i i		Efficiency V/A
6. Potential Emissions: Crusher's Generator and Loader		7. Synthetically	Limited?
lb/hour	1.4tons/year		
8. Emission Factor: 39.7 lb. / 1,000 gallons diesel		9. Emissions M	ethod Code:
Reference: FIRE 6.22 / SCC 20400402	3		
10. Calculation of Emissions (limit to 600 cha	aracters):	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Based on 12 gallons per hour (crusher generator an	d loader), the poten	tial emissions are cal	culated by:
12 gallons per hour x 5,824 hours/year x 39.7 lb/1,00	00gal + 2,000 lbs/ton	n = 1.4 tons/year	
14. Pollutant Potential Emissions Comment (imit to 200 charac	cters):	
Allowable Emissions Allowable Emissions	of	N/A	
	01	_ 1N/A	
Basis for Allowable Emissions Code:		fective Date of All	owable
1. Basis for Allowable Emissions Code:		fective Date of All	owable
 Basis for Allowable Emissions Code: Requested Allowable Emissions and Unit 	2. Future Ef Emissions	fective Date of All	
	2. Future Ef Emissions	fective Date of All	
3. Requested Allowable Emissions and Units	2. Future Ef Emissions: 4. Equivaler	fective Date of Alls: nt Allowable Emiss	sions:
	2. Future Ef Emissions: 4. Equivaler	fective Date of Alls: nt Allowable Emiss	sions:
3. Requested Allowable Emissions and Units	2. Future Ef Emissions: 4. Equivaler	fective Date of Alls: nt Allowable Emiss	sions:
3. Requested Allowable Emissions and Units5. Method of Compliance (limit to 60 character)	2. Future Ef Emissions: 4. Equivaler eters):	fective Date of Alls: nt Allowable Emiss lb/hour	sions: tons/year
3. Requested Allowable Emissions and Units	2. Future Ef Emissions: 4. Equivaler eters):	fective Date of Alls: nt Allowable Emiss lb/hour	sions: tons/year
3. Requested Allowable Emissions and Units5. Method of Compliance (limit to 60 character)	2. Future Ef Emissions: 4. Equivaler eters):	fective Date of Alls: nt Allowable Emiss lb/hour	sions: tons/year

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Pollutant Detail Information Page 6 of 7

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: VOC		2. Pollutant Reg	gulatory Code: El	L
3. Primary Control Device Code: N/A	7		5. Total Percer of Control:	~
6. Potential Emissions: Crusher's Generator and Loader lb/hour 1.72tons/year		7. Syntheticall	y Limited?	
8. Emission Factor: 49.3 lb. / 1	,000 gallons diese	İ	9. Emissions N	Method Code:
Reference: FIRE 6.22	2/SCC 20400402			
10. Calculation of Emissions (Based on 12 gallons per hour (crus		•	tial emissions are ca	lculated by:
12 gallons per hour x 5,824 hours/	year x 49.3 lb/1,00	00gal + 2,000 lbs/ton	= 1.72 tons/year	
11. Pollutant Potential Emission	11. Pollutant Potential Emissions Comment (limit to 200 chara-			
Allowable Emissions Allowable Emissions of			. N/A	
1. Basis for Allowable Emiss	ions Code:	2. Future Ef	fective Date of Al	lowable
3. Requested Allowable Emis	ssions and Units	: 4. Equivalen	t Allowable Emis	ssions:
			lb/hour	tons/year
5. Method of Compliance (lir	5. Method of Compliance (limit to 60 characters):			
				,
6. Allowable Emissions Com	ment (Desc. of	Operating Method	d) (limit to 200 ch	aracters):
		. •		·

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Pollutant Detail Information Page 7 of 7 D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM	2. Pollutant Reg	ulatory Code: EL		
3. Primary Control Device 4. Secondary Code: N/A Code: N/A		5. Total Percent Efficiency of Control: N/A		
6. Potential Emissions: Loader and Crusher's G lb/hour 1	enerator .48 tons/year	7. Synthetically Limited? []		
8. Emission Factor: 42.5 lb. / 1,000 gallons diesel		9. Emissions Method Code:		
Reference: FIRE 6.22 / SCC 20400402		3		
10. Calculation of Emissions (limit to 600 char	acters):			
Based on 12 gallons per hour (crusher generator and	loader), the potent	tial emissions are calculated by:		
12 gallons per hour x 5,824 hours/year x 42.5 lb/1,000				
12 gailons per nour x 5,024 nours/year x 42.5 lb/1,000	ogai + 2,000 ibs/toii	= 1.46tons year		
12. Pollutant Potential Emissions Comment (li	12. Pollutant Potential Emissions Comment (limit to 200 characters):			
Allowable Emissions _	of	N/A		
Basis for Allowable Emissions Code:	2. Future Eff Emissions	fective Date of Allowable s:		
3. Requested Allowable Emissions and Units:	4. Equivalen	t Allowable Emissions:		
		lb/hour tons/year		
5. Method of Compliance (limit to 60 charact	5. Method of Compliance (limit to 60 characters):			
		•		
6. Allowable Emissions Comment (Desc. of Comment	Operating Method	d) (limit to 200 characters):		
6. Allowable Emissions Comment (Desc. of C	Sperating Method	u) (minit to 200 characters).		

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En	Emissions Unit Information Section1 of1				
		IONS INFORMATION subject to a VE Limitation)			
<u>Vi</u>	sible Emissions Limitation: Visible Emissi	ons Limitation1 of1			
1.	Visible Emissions Subtype: RULE	2. Basis for Allowable Opacity: [X] Rule 62.296.711 [] Other			
3.	Requested Allowable Opacity: Normal Conditions: 5 % Maximum Period of Excess Opacity Allower	Exceptional Conditions: None % min/hour			
4.	Method of Compliance: EPA METHOD	9			
5.	Visible Emissions Comment (limit to 200 c	haracters):			
F. CONTINUOUS MONITOR INFORMATION (Only Emissions Units Subject to Continuous Monitoring)					
<u>Co</u>	Continuous Monitoring System: Continuous Monitor of N/A				
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement:	[] Rule [] Other			
4.	Monitor Information: Manufacturer:				

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Serial Number:

6. Performance Specification Test Date:

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Model Number:

5. Installation Date:

Effective: 2/11/99

7. Continuous Monitor Comment (limit to 200 characters):

Emissions	Unit	Information Section	1	of	1

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1.	Process Flow Diagram
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
2.	Fuel Analysis or Specification
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
3.	Detailed Description of Control Equipment
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
4.	Description of Stack Sampling Facilities
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
5.	Compliance Test Report To be submitted after construction permit is received and crusher can
орє	rate.
	[] Attached, Document ID:
	[] Previously submitted, Date:
	[] Not Applicable
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
7.	Operation and Maintenance Plan
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[] Attached, Document ID: [X] Not Applicable
9.	Other Information Required by Rule or Statute
	[] Attached, Document ID: [X] Not Applicable
10.	Supplemental Requirements Comment:
!	
!	

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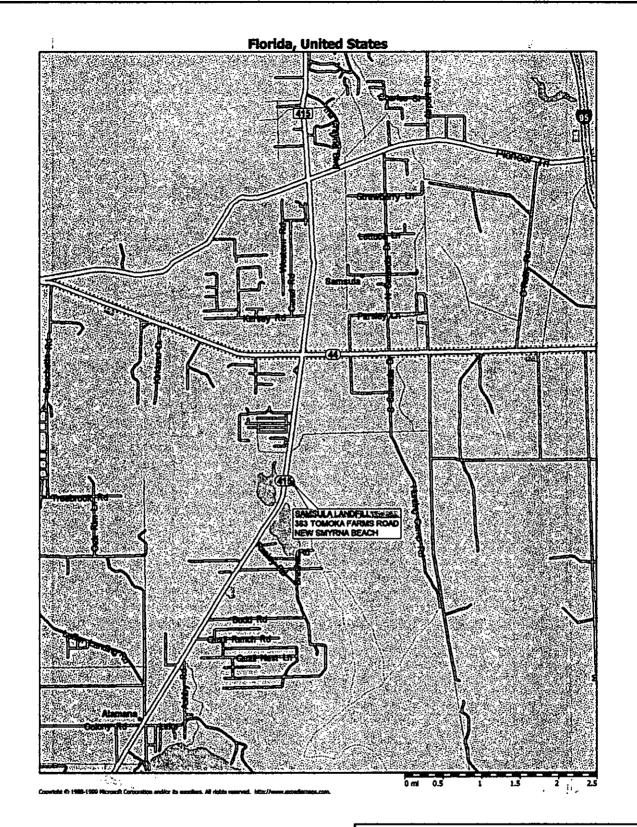
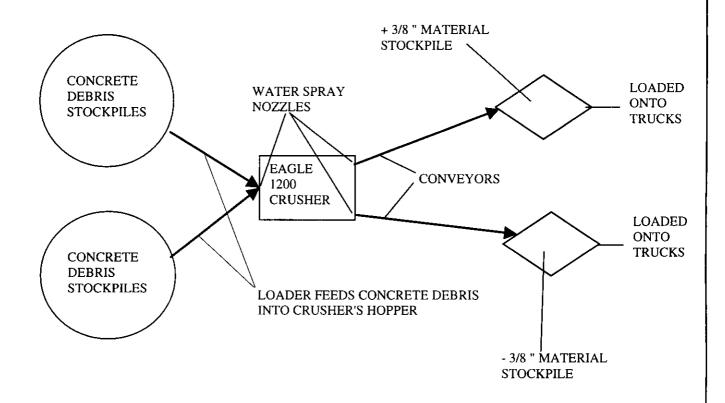


FIGURE 1 SITE LOCATION MAP SAMSULA RECYCLYING PRIMARY LOCATION SAMSULA LANDFILL 363 STATE ROAD 415 NEW SMYRNA BEACH, FLRORIDA

COLELLA & ASSOCIATES, INC.



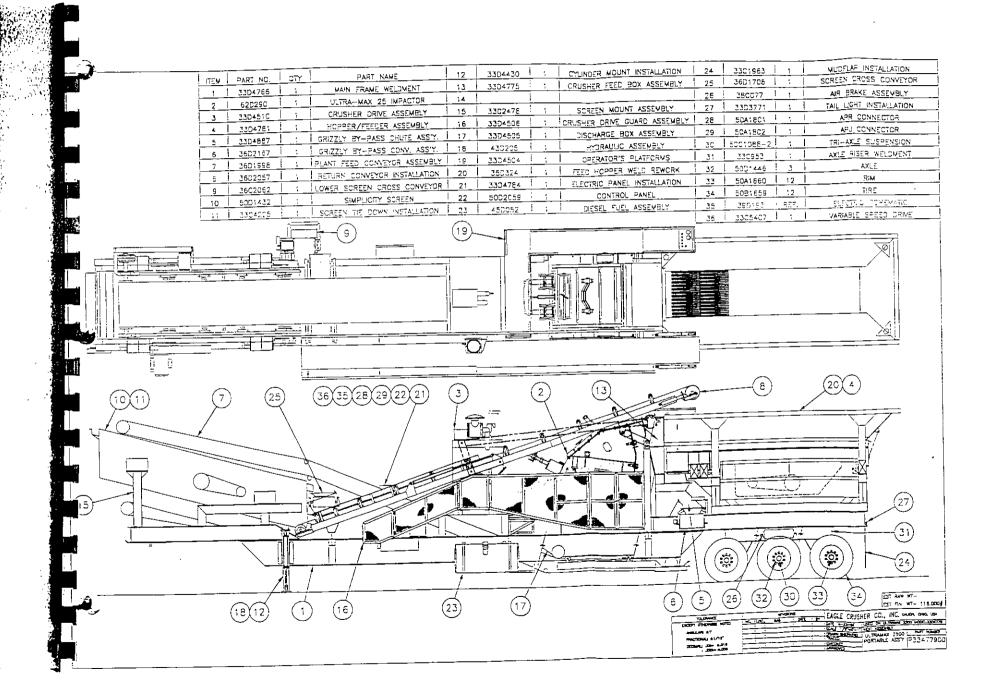
NOTE: STOCKPILES AND WORKING AREA WILL BE WATERED AS IS NECESSARY TO MINIMIZE THE GENERATION OF PARTICULATE EMISSIONS AS DUST.

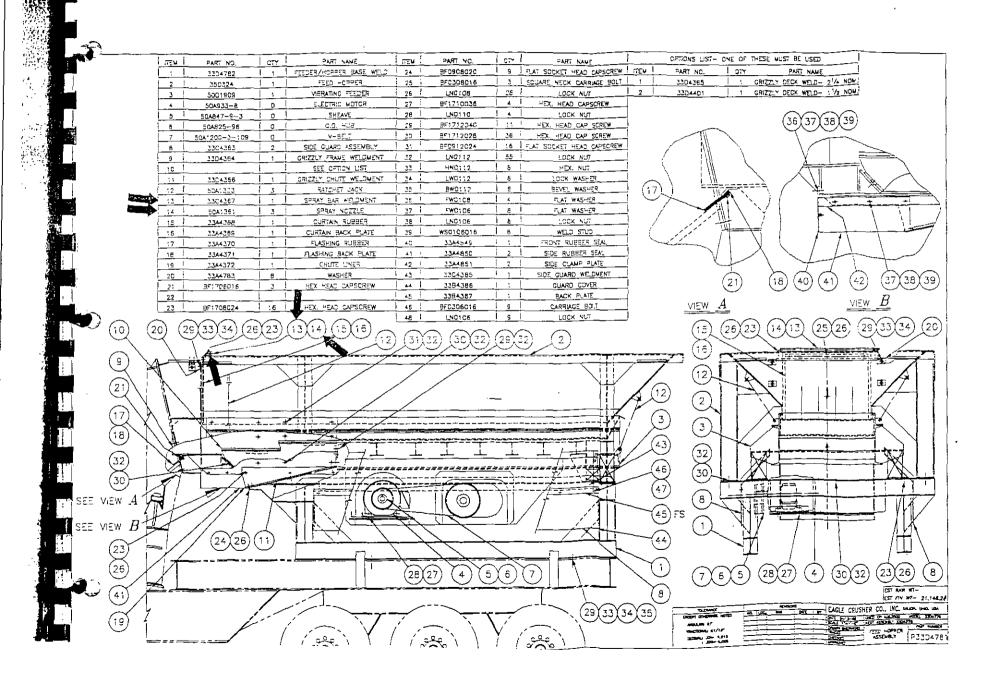
FIGURE 2 PROCESS FLOW DIAGRAM

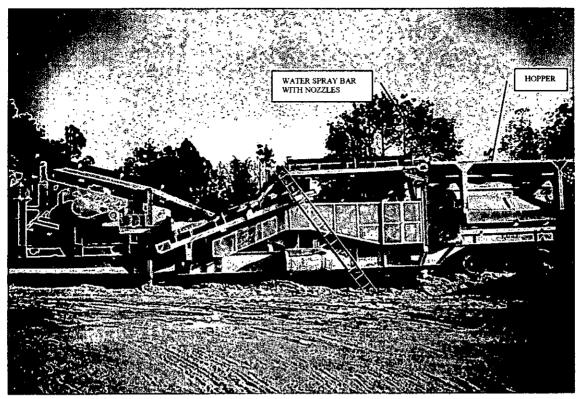
CONCRETE DEBRIS CRUSHING OPERATION SAMSULA RECYCLING, INC.

COLELLA & ASSOCIATES, INC.

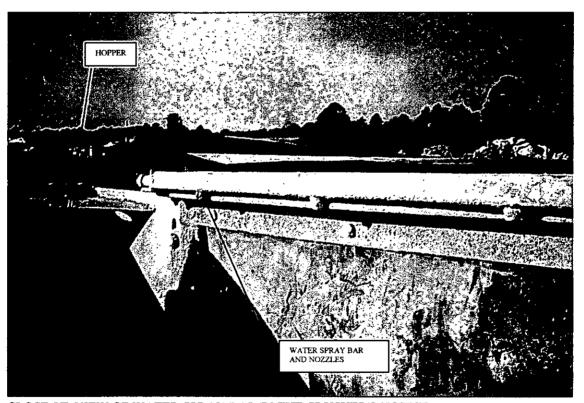
APPENDIX A EAGLE 1200 CRUSHER DETAILS AND PHOTOGRAPHS







EAGLE 1200 CRUSHER.



CLOSE-UP VIEW OF WATER SPRAY BAR IN THE CRUSHER'S HOPPER.

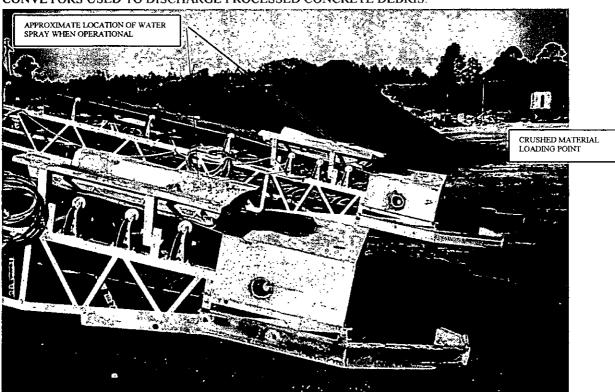
APPENDIX A-1 CRUSHER AND SPRAY BAR

EAGLE 1200 CRUSHER SAMSULA RECYCLYING, INC. NEW SMYRNA BEACH, FLORIDA

COLELLA & ASSOCIATES, INC.



CONVEYORS USED TO DISCHARGE PROCESSED CONCRETE DEBRIS



CLOSE-UP VIEW OF LOADING POINT AND WATER SPRAY AREAS ON CONVEYORS.

APPENDIX A-2 PROCESSED MATERIALS' CONVEYORS

EAGLE 1200 CRUSHER SAMSULA RECYCLYING, INC. NEW SMYRNA BEACH, FLORIDA

COLELLA & ASSOCIATES, INC.

APPENDIX B EAGLE 1200 CRUSHER OPERATING RANGE

NO.381 P.2 **2**001



P.O. Box 537 • Galion, Ohio 44833 • 800-25-EAGLE • 419-468-2288 • FAX: 419-468-4840 • www.eaglecrusher.com

Mike Remillard

March 16, 2000

Sansula Landfill, Inc. Yancey McDonald 363 State Road 415 New Smyrna Beach, FL 32168

Ref: UltraMax 1200-25

in your particular application the Eagle UltraMax 1200-25 Portable Plant with 1 1/2" top deck, and 3/8" bottom deck screen has a rated capacity of 120 tons per hour.

Eagle Crusher Company, Inc.

Jay Giltz

Applications Manager Team Eagle Sales

cc: Magness Machinery

APPENDIX C SAMSULA RECYCLING WATERING PLAN

APPENDIX C - DUST SUPPRESSION PLAN SAMSULA RECYCLING, INC.

1. Crusher

- Crusher's spray bar and associated nozzles in the hopper will be maintained operational.
- Water supply to be provided by tanker or hard piping to water supply prior to operating crusher.
- Crusher will not operate if the spray bar/nozzles or other devices to apply water in the hopper are not functioning.
- Water pressure to be maintained at least 135 psi to develop adequate misting and coverage.
- Crusher operator will operate the crusher in a manner to minimize dust generation during crushing by controlling the flow of water to the spray bar/nozzles.

2. Work Area

- A water truck or other water application system will apply water to the ground surface to minimize
 dust being generated from the delivery of concrete debris, from the loading of the crusher's
 hopper, from the conveying of processed materials, from stockpiling the processed materials, from
 loading the processed materials into trucks, and from the truck traffic hauling the processed
 materials.
- Crusher operator will control the water application rate onto the ground surface to minimize dust generation from wind erosion and/or equipment traffic.
- The crusher will not operate if dust suppression in the work area is not controlled.

3. Processed Materials Conveyors

- Maintain the water spray equipment operational at the loading point of the processed material from the crusher onto the discharge conveyors (2).
- Water supply to be provided by tanker or hard piping to water supply prior to operating crusher and conveyors.
- Crusher will not operate if the spray bar/nozzles or other devices to apply water at the loading points of the discharge conveyors are not functioning.
- Water pressure to be maintained at least 135 psi to develop adequate misting and coverage.
- Crusher operator will control the flow of water to the spray bar/nozzles to maintain a relatively dust free working environment.

4. Stockpiled Materials

- All stockpiles will be sprayed with water to minimize dust generation by wind erosion and/or the handling of the materials during loading operations.
- Water supply to be provided by tanker or hard piping to water supply prior to operating crusher and conveyors.
- Adequate spray heads will be provided for each stockpile and the water pressure will be maintained at least 135 psi to develop adequate misting and coverage.
- Crusher operator will control the water application rate onto the stockpiles to minimize dust generation from wind erosion and/or loading operations.

5. Exception

• Stockpiles and the work area watering can be suspended during rain events and subsequent to a rain event if dust is not being generated. Upon first notice of dust generation by wind erosion and/or equipment movement, water application will begin.