

RECEIVED

JUN 16 1999

BUREAU OF AIR REGULATION

June 11, 1999

Mr. Ross Pollock State of Florida Department of Environme 2600 Blair Stone Road Tallahassee, FL 32399

action

Re: Florida Departm

Application for Plant No. 1866

FDEP Construction Perm

OUS-AO Protection

_0-001-AC

Dear Mr. Pollock:

Enclosed please find three copies of the completed Florida Department of Environmental Protection, Application for Air Permit Short Form, as required to obtain a FDEP statewide operation permit for our relocatable concrete batch plant serial number 1866. The fee for this stage of permitting as paid with the construction permit application.

Sincerely,

JOHN CARLO, INC.

David Ammon Project Manager

John Carlo, Inc.
Post Office Box 1297
1643 State Road 200, Suite 6
East Yulee, Florida 32041-1297
904-225-3117
FAX: 904-225-3120

Central Florida Testing Laboratories, Inc.

Testing Development and Research

12625 - 40TH STREET NORTH • CLEARWATER, FL 33762

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

June 7, 1999

Mr. David Ammon John Carlo, Inc. Post Office Box 1297 East Yulee, FL 32041-1297

Subject:

Florida Department of Environmental Protection

Application for Operating Permit

Plant Number 1866

FDEP Construction Permit Number 7770210-001-AC

Dear Mr. Ammon:

Enclosed please find four copies of the completed Florida Department of Environmental Protection, Application for Air Permit Short Form, as required to obtain a FDEP statewide operation permit for your relocatable concrete batch plant serial number 1866, currently operating in Tampa, Florida.

Please review the permit application. Should you find it acceptable, please sign and date page 2 of each copy of the application. Retain one copy for your files and forward the other three copies to the Florida Department of Environmental Protection to the attention of Mr. Ross Pollock.. at their Tallahassee address as listed below.

Mr. Ross Pollock State of Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

The fee for this stage of permitting was paid with the construction permit application.

Thank you once again for this opportunity to be of service. Should you have any questions regarding the application, or if you need any additional assistance in this matter, please do not hesitate to contact our office.

Sincerely,

Central Florida Testing Laboratories, Inc.

Russell B. Keith, E.I.

Director of Environmental Services

RBK/rk

enclosure:

Four copies of the Application

RECEIVED

JUN 16 1999

BUREAU OF AIR REGULATION

John Carlo, Inc.

FDEP Operation Permit Application
Plant No. 1866
June 1999



Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - SHORT FORM

See Instructions for Form No. 62-210.900(2)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope of this application and the purpose for which this application is being submitted. This section also includes information on the owner or authorized representative of the facility 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				
	John Carlo, Inc.				
2.	Site Name:	·			
	John Carlo, Inc.				
3.	Facility Identification Number:	7770210		[] Unknown
	·				
4.	Facility Location: [Current Loc	cation]			
	Street Address or Other Locator:	: Tampa B	ay Blvd. & West	tshore	e Blvd.
	City: Tampa	County:	Hillsborough	Zi	p Code:
5.	Relocatable Facility?		6. Existing Pe	rmitte	ed Facility?
	[X] Yes [] No		[X] Yes	[] No
			<u> </u>		

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	6/14/99
2. Permit Number:	7770210 -002-AO

Effective: 3-21-96

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative:

David Ammon, Project Manager

2. Owner/Authorized Representative Mailing Address: (Present Mailing Address)

Organization/Firm: John Carlo, Inc.
Street Address: Post Office Box 1297

City: East Yulee State: Florida

Zip Code: 32041-1297

3. Owner/Authorized Representative Telephone Numbers: (Current Phone Numbers)

Telephone: (904) 225-3117

Fax: (904) 225-3120

4. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative* of the facility addressed in this Application for Air Permit. 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. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application 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.

Signature

Dáte

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

Scope of Application

Emissions Unit ID

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.

Description of Emissions Unit

Permit

Type

001	Relocatable concrete batch plant and a cement silo controlled by a C & W-RA-140 baghouse system.	AO2B
<u> </u>	·	
Purpose of Applica	ation	
This Application fo	r Air Permit is submitted to obtain (check one):	•
[] Initial air oper units.	ration permit for one or more existing, but previously unpermitt	ed, emissions
[X] Initial air open	ration permit for one or more newly constructed or modified em	nissions units.
Currer	nt construction permit number: 7770210-001-AC	
[] Air operation emissions uni	permit revision to address one or more newly constructed or motes.	odified
Currer	nt construction permit number:	
Operat	tion permit to be revised:	
[] Air operation	permit renewal.	
Operat	tion permit to be renewed:	

DEP Form No. 62-210.900(2) - Form

Effective: 3-21-96

Application Processing Fee
Check one:
[] Attached - Amount: [X] Not Applicable.
Construction/Modification Information
1. Description of Alterations:
The fee for the operating permit was submitting with the construction permit application.
This application is for a state wide operating permit for this relocatable concrete batch plant currently permitted under FDEP permit number 7770210-001-AC. This plant is currently operating in Tampa, Florida.
2. Date of Commencement of Construction:
~April 1,1999

Professional Engineer Certification

1. Professional Engineer Name: Mr. George C. Sinn, Jr. P.E.

Registration Number: 16911

2. Professional Engineer Mailing Address:

Organization/Firm: Central Florida Testing Laboratories, Inc.

Street Address: 12625 - 40th Street North

City: Clearwater

State: FL

Zip Code: **33762**

3. Professional Engineer Telephone Numbers:

Telephone:

(727) 572-9797

Fax:

(727) 299-0023

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein*1, 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 initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [X] 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

Date

(seal)

Attach any exception to certification statement.

¹Certification statement excludes any equipment manufacturers' guarantee or claim of control efficiency. Any equipment manufacturers' specifications submitted with this application are included as reference material only, not for certification by CFTL.

Application Contact

1. Name and Title of Application Contact:

Mr. Russell B. Keith, E.I., Environmental Engineer

2. Application Contact Mailing Address:

Organization/Firm: Central Florida Testing Laboratories, Inc.

Street Address: 12625 - 40th Street North

City: Clearwater

State: FL

Zip Code: 33762

3. Application Contact Telephone Numbers:

Telephone: (727) 572-9797

Fax:

(727) 299-0023

Application Comment

Relocatable REX Central Mix concrete batch plant with a cement silo capacity of 600 barrels and a batcher with a maximum rate of 200 cubic yards of concrete per hour. This plant also uses cement storage "pigs" for cement storage when needed.

This application is for a state wide operating permit for this relocatable concrete batch plant.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1.	Facility UTM Coor	dinates: Coordinates d	are for current location	only
	Zone:17	East (km): 350.351 No	orth (km): 3094.847
2.	Facility Latitude/Lo	ongitude:		
	Latitude (DD/MM/	SS): 27/58/20 L	ongitude (DD/MM/SS)	: 82/31/17
3.	Governmental	4. Facility Status	5. Facility Major	6. Facility SIC(s):
	Facility Code:	Code:	Group SIC Code:	
		A		
	0		32	3273
7	P '11'4 (C)	(limit to 500 abanastana)	•	
••	Facility Comment (innit to 500 characters,		
Th	•	r a state wide operating		atable concrete batch

Facility Contact

1.	Name and Title of Facility Contact:		
	Mr. Dennis Cor	nbs, Project Engin	ieer
2.	Facility Contact Mailing Address:		
	Organization/Firm: John Carlo, Inc.		
	Street Address: Post Office Box 1297		
	City: East Yulee	State: Florida	Zip Code: 32041-1297
3.	Facility Contact Telephone Numbers: Telephone: (904) 225-3117	Fax: (904) 225-3120

Facility Regulatory Classifications

1.	Small Business Stationary Sc	urce	?	
	[] Yes	[] No	[X] Unknown
2.	Title V Source?			
	[X] No			
_				
3.				f Previous Air Construction Permit?
	[] Yes	Į X] No	
	Construction Permit Number	/Leeu	a Data:	
	Construction I crimi Number	1550	ic Date	
4.	One or More Emission Units	Sub	iect to N	SPS?
	[] Yes	_] No	
5.	Facility Regulatory Classifica	tion	s Comm	ent (limit to 200 characters)
				, ,
		_		
	B. FACILI	FY :	SUPPLE	MENTAL INFORMATION
Tri '	1 4' CAL A 1' 4'	C	4. B	
In	s subsection of the Application	n for	r Air Peri	mit form provides supplemental information
				al information related to individual emissions units
				I-B of the form.) Supplemental information must
UC S	submitted as an attachment to	caci.	copy of	the form, in hard-copy or computer-readable form.
Sur	oplemental Requirements for	r Ali	l Annlies	itions
<u> </u>	promote to to	1 1 1 1	<u>. 71 7 711 C </u>	WIONS
1.	Area Map Showing Facility L	ocat	ion:	
	[] Attached, Document ID		1	Not Applicable [X] Waiver Requested
Cor	ncrete plant will be used at dij	fere	nt locati	
2.	Facility Plot Plan:			
	[] Attached, Document ID:_		[] Not Applicable [X] Waiver Requested
†Ty	pical plant layout submitted			
3.	Process Flow Diagram(s):			
] Not Applicable [X] Waiver Requested
	pical plant flow diagram layo			
	Precautions to Prevent Emissi			
] Not Applicable [] Waiver Requested
*Ya	urd and stockpiles will be dam	pen	ed as nec	eded to minimize fugitive emissions.

DEP Form No. 62-210.900(2) - Form Effective: 3-21-96

III. EMISSIONS I	UNIT INFORMATION
pplication form in hard copy, indicate, in the	n (including subsections A and B) must be nothing that this Application for Air Permit. If submitting the space provided at the top of each page, the number of the total number of Emissions Unit Information
A. GENERAL EMISSIO	ONS UNIT INFORMATION
ype of Emissions Unit Addressed in This S	<u>section</u>
Check one:	
-	addresses, as a single emissions unit, a single hich produces one or more air pollutants and point (stack or vent).
	addresses, as a single emissions unit, a r production units and activities which has at least nt) but may also produce fugitive emissions.
] This Emissions Unit Information Section process or production units and activities	addresses, as a single emissions unit, one or more which produce fugitive emissions only.
Emissions Unit Description and Status	
. Description of Emissions Unit Addressed i	n This Section (limit to 60 characters):
The emissions unit addressed in this applicant the control of the	tion consists of a concrete batch plant with a buse system.
	ouse system. [] No Corresponding ID [] Unknown
&W Manufacturing model RA 140 baghe	ouse system.

DEP Form No. 62-210.900(2) - Form Effective: 3-21-96

Emissions Unit Information Section 1 of 1
Emissions Unit Control Equipment
A.
1. Description (limit to 200 characters):
C&W Manufacturing, Model CW-RA 140 Baghouse System
2. Control Device or Method Code: 101
B. 1. Description (limit to 200 characters):
1. Description (mint to 200 characters).
2. Control Device or Method Code:
C .
1. Description (limit to 200 characters):
2. Control Davies on Mathed Code
2. Control Device or Method Code:

10

DEP Form No. 62-210.900(2) - Form Effective: 3-21-96

Emissions Unit Details	
Initial Startup Date:	
~April 1,199	9
2. Long-term Reserve Shutdown Date:	
Not Applical	ole
3. Package Unit: CW-RA 140 Baghouse System	
Manufacturer: C&W Manufacturing Company	Model Number: RA 140
1 6	MW
Not Applicat	
5. Incinerator Information: This Section Is Not App	°F
Dwell Temperature: Dwell Time:	•
Incinerator Afterburner Temperature:	seconds °F
	1
Emissions Unit Operating Capacity	
. Maximum Heat Input Rate: N/A	mmBtu/hr
	mmBtu/hr tons/day
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubi	tons/day c Yards Of Concrete Per Hour
	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubi	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approxim 4. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approxim 4. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approxim 4. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of Silo Operating Capacity Comment (limit to 200 character).	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approximate. Maximum Production Rate: 200 Cubic Yards Of Departing Capacity Comment (limit to 200 characters). 5. Operating Capacity Comment (limit to 200 characters).	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour
2. Maximum Incineration Rate: N/A lb/hr 3. Maximum Process or Throughput Rate: 200 Cubic Cement Silo/Cement Bin Filling Rate of Approxim 4. Maximum Production Rate: 200 Cubic Yards Of	tons/day c Yards Of Concrete Per Hour ately 27 tons per hour Concrete Per Hour

Emissions Unit Information Section ___1 __ of ___1

Emissions	Unit Information Section	1	of	1
	emit intermetten section		_ 01	

B. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
Ту	pical plant flow diagram layout submitted with previous application
	Fuel Analysis or Specification
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
3.	Detailed Description of Control Equipment
	[X] Attached, Document ID: [] Not Applicable [] Waiver Requested
4.	Description of Stack Sampling Facilities
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
5.	Compliance Test Report
	[X] Attached, Document ID:
	[] Previously submitted, Date:
	[] Not Applicable
Sec	e attached visible emission test report.
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [X] Not Applicable
7.	Operation and Maintenance Plan
	[X] Attached, Document ID: [] Not Applicable
8.	Other Information Required by Rule or Statute
	[] Attached, Document ID: [X] Not Applicable



CENTRAL FLORIDA TESTING LABORATORIES, INC.

VISIBLE EMISSIONS OBSERVATION FORM

METHOD USED (CIRCLE ONE) METHOD 9 203A 203B OTHER:	FORM NUMBER PAGE OF			
COMPANY NAME TAL COL T.	CONTINUED ON VEO NUMBER			
Targe Bay Blud, and Watcherz Blud. Tampa	OBSERVATION DATE START TIME END TIME			
MALENG ADDRESS	SEP 0 15 30 45 SEP 0 15 30 4			
CITY STATE ZIP	1 0 0 0 0 31 0 0 0 0			
	20000320000			
7770210-001-AC	3 00 0 0 33 0 0 0 0			
PROCESS EQUIPMENT Lex Catral Mix Conart Plant CONTROL EQUIPMENT OPERATING MODE OPERATING MODE	4 0 0 0 0 34 0 0 0			
Kex Control Mix Conarte Plant Silo Filling at 27toh CONTROL EQUIPMENT OPERATING MODE Baghouse Continuous	5 0 0 0 0 35 0 0 0			
DESCRIBE EMISSION PT.	6 0 0 0 0 36 0 0 0			
Horizontal vont on top at bayhouse	7 0 0 0 0 37 0 0 0 0			
DISTANCE TO EMISS. PT. DIRECTION TO EMISS. PT. (DEGREES)	8 0 0 0 0 38 0 0 0 0			
START ~ 100' END ~ 100' START ~ 300' END ~ 3000 HEIGHT OF EMISS PT. HEIGHT TO EMISS. PT. REL. TO OBSERVER	9 0 0 0 0 39 0 0 0 0			
START~25' END ~25' START~20' END ~20'	10 0 0 0 0 40 0 0 0 0			
VERTICAL ANGLE TO OBS. PT. DIRECTION TO OBS. PT. (DEGREES) START. 7	11 0 0 0 0 41 0 0 0 0			
STAR Check of Emission Pointend Same	12 0 0 0 0 42 0 0 0			
DESCRIBE EMISSIONS	13 0 0 0 0 43 0 0 0 0			
START END NOW EMISSION COLOR WATER DROPLET PLUME	14 0 0 0 0 44 0 0 0 0			
START NA END NA DATTACHED DETACHED NONE DESCRIBE PLUME BACKGROUND	15 0 0 0 0 45 0 0 0 0			
START SKY END BACKGROUND COLOR SKY CONDITIONS	16 0 0 0 0 46 0 0 0 C			
START Blue END Blue START SCATTERS END SCATTERS WIND SPEED WIND DIRECTION	17 0 0 0 0 47 Plant Sout Dan			
START 4-10 L END 4-18 START WIST END WEST BULB TEMP. PERCENT RH	18 0 0 0 0 48			
START ~ 840F END ~ 887 WET BULB TEMP. PERCENT RH	19 0 0 0 0 49			
SOURCE A OUT SKETCH DRAW NORTH ARROW MAGNETIC TRUE	20 0 0 0 50			
Balant Silver MAGNETIC TRUE	21 0 0 0 51			
A DESERVATION Contral	22 0 0 0 0 52			
hixe Carlot Inc.	23 0 0 0 0 53			
	24 0 0 0 0 54			
FT C	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
OBSERVER'S POSITION FT	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
SIDE VIEW	28 0 0 0 0 58			
STACK WITH PLUME	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
SUN LOCATION LINE	30 0 0 0 60			
LAT: LONG: DECLINATION				
ADDITIONAL INFORMATION	OBSERVER NAME (PRINT)			
Wo objectionably edocs delected Datching Russell B. Keith				
Consider and Silo tilling during Tost. Affroxions Coly Kussell B. Ket 5/27/1999				
77 yards concrets butched during text. CERTIFIED BY				
	ETA-Tampa 2/23/1999			
	• 1 •			

W

C & W Mfg. & Sales Co., Inc.

7356 Hwy. 1187 . MANSFIELD, TEXAS 76063

EPECIFICATIONS FOR CW-RA-140

DUST COLLECTION SYSTEM

MODEL NUMBER - CW-RA-140

NUMBER OF BAGS - 72

BAG DIAMETER - 8"

BAG LENGTH - 114"

TOTAL FILTRATION AREA - 1,433 SQ.FT.

MIN. DESIGN - EFFICIENCY OF DUST COLLECTOR - 99.8%

AIR TO CLOTH RATIO - 4.54 ACFM/FT.2

FILTRATION VELOCITY - 4.54 FT/MIN

BLOWER H.P. - 15 H.P.

STATIC PRESSURE DROP (INCHES OF WATER) - 6"

AIR CAPACITY - 6,500 C.F.M.

OUTLET AREA - 2.34 FT.2

OUTLET VELOCITY - 46.3 FT/SEC

OUTLET MOISTURE CONTENT - IDEALLY ZERO

CLEANING MECHANISM - REVERSE AIR

FREQUENCY OF CLEANING - VARIABLE

*INLET DUST CONCENTRATION (GR/MIN) - 97,500 GR/MIN

*OUTLET EMISSIONS (GR/MIN) - 195 GR/MIN

*OUTLET DUST LOADING - .015 GR/CFM

* - THESE CALCULATIONS BASED ON INLET DUST LOADING OF 15 GR/FT.3

OPERATIONS & MAINTENANCE PLAN

John Carlo, Inc.

C & W Manufacturing & Sales Company, Inc. Model CW-RA-140 Dust Collection System

GENERAL MAINTENANCE PROCEDURES

The exit of the baghouse collection unit is checked visually during silo filling and batching operations. Should any emissions be noticed, the dust collection is repaired promptly.

The baghouse collection system is thoroughly inspected on a monthly basis in accordance with the attached inspection report. Any maintenance deemed necessary during these inspections is performed directly.

All sprinklers systems are checked on a daily basis for leaks or repairs.

Recommended Spare Parts to Store On-Site

- 1.) Spare Bags
- 2.) Clamps for bags
- 3.) Seals and caulking materials
- 4.) Bag connecting rods
- 5.) Belt for Fan
- 6.) Sprinkler System Heads

MONTHLY INSPECTION REPORT

Component:	Check For:	Comments:
Bags	Worn, abraded, damaged bags, improper bag tension, loose, damaged or improper bag connections.	
Fan	Proper lubrication, excessive vibration, Proper mounting (loose bolts, etc.)	
Baghouse Structure	Loose bolts, cracks in welds, cracked, chipped or worn paint, corrosion. Accumulation of cement dust.	
Collector Doors	Worn, loose, damaged or missing seals, properly closed and tight, accumulation of cement dust. Hinges secure and not worn.	
Silo Structure	Loose bolts, cracks in welds, cracked, chipped or worn paint, corrosion. Accumulation of cement dust.	
Plenum Plate	Abrasion, excessive wear, or holes, aligned properly.	
Additional Comments:		
Person Performing Inspection:	Date:	

MAINTENANCE LOG

Description of Maintenance Performed	<u>Date</u>	<u>Initials</u>
		
	<u>.</u>	
 		