

CONCRETE BATCHING PLANT  
AIR GENERAL PERMIT REGISTRATION FORM

RECEIVED

SEP 02 2009

Part II. Notification to Permitting Office

(Detach and submit to appropriate permitting office; keep copy onsite) Bureau of Air Monitoring & Mobile Sources

**Instructions:** To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. (\$100 as of the effective date of this form)

7775608-001

Registration Type

Check one:

**INITIAL REGISTRATION** - Notification of intent to:

Construct and operate a proposed new facility.

Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).

**RE-REGISTRATION** (for facilities currently using an air general permit) - Notification of intent to:

Continue operating the facility after expiration of the current term of air general permit use.

Continue operating the facility after a change of ownership.

Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only

If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.

All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s): \_\_\_\_\_

No air operation permits currently exist for this facility.

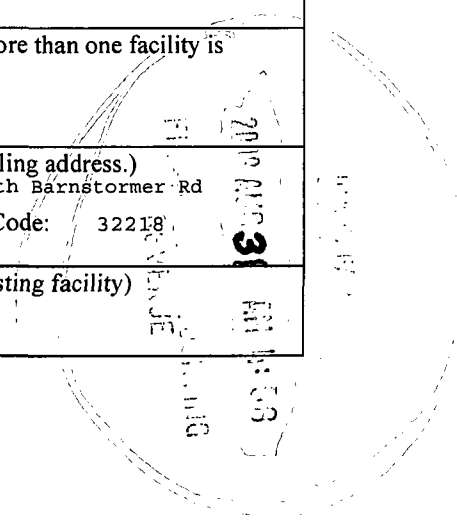
General Facility Information

**Facility Owner/Company Name** (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)  
The Scruggs Company

**Site Name** (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.)  
Concrete Plant 1

**Facility Location** (Provide the physical location of the facility, not necessarily the mailing address.)  
Street Address: -400' NW of Pecan Park Rd N @ NW corner of intersection with Barnstormer Rd  
City: Jacksonville County: Duval Zip Code: 32218  
14228 PECAN PARK RD N

**Facility Start-Up Date** (Estimated start-up date of proposed new facility.)(N/A for existing facility)  
November 1, 2009



**Owner/Authorized Representative**

Name and Position Title (Person who, by signing this form below, certifies that the facility is eligible to use this air general permit.)

Print Name and Title: Larry Wisenbaker, Vice President

Owner/Authorized Representative Mailing Address

Organization/Firm: The Scruggs Company

Street Address: P.O. Box 2065

City: Valdosta, GA

County: Lowndes

Zip Code: 31604

Owner/Authorized Representative Telephone Numbers

Telephone: 229-242-2388

Fax: 229-242-7109

Cell phone (optional):

**Facility Contact (If different from Owner/Authorized Representative)**

Name and Position Title (Plant manager or person to be contacted regarding day-to-day operations at the facility.)

Print Name and Title:

Facility Contact Mailing Address

Organization/Firm:

Street Address:

City:

County:

Zip Code:

Facility Contact Telephone Numbers

Telephone:

Fax:

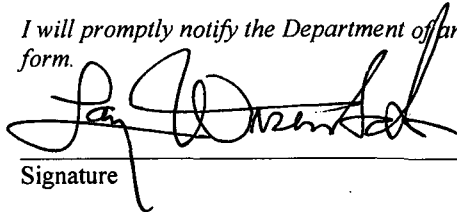
Cell phone (optional):

**Owner/Authorized Representative Statement**

This statement must be signed and dated by the person named above as owner or authorized representative

*I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Registration Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the facility addressed in this registration form is eligible for use of this air general permit and that the statements made in this registration form are true, accurate and complete. Further, I agree to operate and maintain the facility described in this registration form 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 will promptly notify the Department of any changes to the information contained in this registration form.*

  
Signature

8/27/09  
Date

2009 AUG 21 11:45 AM  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR PERMITTING

**Type of Facility**

Check one:

Stationary Facility

Relocatable Facility

**Type(s) of Reasonable Precautions Used to Prevent Unconfined Emissions**

Check all precautions to be used for the management of roads, parking areas, stock piles and yards:

Pave Roads

Pave Parking Areas

Pave Yards

Maintain Roads/Parking/Yards

Use Water Application

Use Dust Suppressant

Remove Particulate Matter

Reduce Stock Pile Height

Install Wind Breaks

Check all precautions to be used for the management of drop points to trucks:

Spray Bar

Chute

Enclosure

Partial enclosure - Dust Collector

**Description of Reasonable Precautions**

Below, or as an attachment to this form, provide details of all types of reasonable precautions to be used to prevent unconfined emissions at the facility.

Attached is the CS Johnson Uni Rover 1048 product literature including a flow diagram. Also, attached is the technical data for the CSJ1850 dust collector used for plant operation.

The plant site will be kept wet by means of a water truck to keep dust to a minimum. The stockpiles will also be kept wet by means of a sprinkler system to keep dust to a minimum.

2007 JUN 21 AM 4:58  
DEP  
OFFICE OF ENVIRONMENTAL CONSERVATION

**Description of Facility**

Below, or as an attachment to this form, provide a description of the concrete batching plant operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Describe all air pollutant-emitting processes and equipment at the facility, and identify any air pollution control measures or equipment used.

The CS Johnson Uni Rover 1048 portable concrete plant will be used to produce concrete and econocrete base for a concrete parking apron at the Jacksonville International Airport. The project will be completed in approximately 8 months.

Raw materials to be used:

Cement	3271 tons
Coarse Aggregate (#57)	9530 tons
Fine Aggregate (Sand)	7976 tons
Graded Aggregate Base (Recycled Concrete)	8447 tons

Amount of final product to be produced:

Concrete	10578 CY
Econocrete Base	4440 CY

The plant will operate during normal business hours - 7:00am - 6:00pm.

*\* SEE ATTACHED E-MAIL AS AN  
APPENDUM TO THIS REGISTRATION  
FORM - POWER UNIT DATA*

2007 AUG 31 AM 4:59  
REVENUE

*\* ADDENDUM TO SCRUGGS REGISTRATION*

*DATED AUG 31, 2009, # 7775608-001-AG*

Dibble, Dickson

**From:** lwisenbaker@scruggscompany.com  
**Sent:** Wednesday, September 16, 2009 3:36 PM  
**To:** Dibble, Dickson  
**Subject:** RE: Concrete Batch Plant Air General Permit Registration (The Scruggs Company - Jacksonville)

Hello:

The motor is diesel, 540 hp, Serial #81Z06123 (Cat Model # 3412)

Let me know if you need anything else.

Thank you,

Larry Wisenbaker, VP  
The Scruggs Company  
P.O. Box 2065  
Valdosta Ga., 31604  
229-242-2388, 229-242-7109 fax  
www.scruggscompany.com  
lwisenbaker@scruggscompany.com

Note: The information contained in this message may be privileged and confidential and protected from disclosure. If the reader of this message is not the intended recipient, or an employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by replying to the message and deleting it from your system. Thank you.

"Dibble, Dickson"  
<Dickson.Dibble@d  
ep.state.fl.us>  
To  
<lwisenbaker@scruggscompany.com>  
09/16/2009 06:54 .cc  
AM "Ajhar, Rebecca"  
<Rebecca.Ajhar@dep.state.fl.us>  
Subject  
RE: Concrete Batch Plant Air  
General Permit Registration (The  
Scruggs Company - Jacksonville)

Dear Mr. Wisenbaker,

Good morning and thank you for providing the information requested.

I do have two additional questions in order to complete the registration form.

1. I hate to assume, but since Caterpillar does make a gas engine, what is the fuel supply for the engine, diesel or gas?
2. For identification purposes could you provide the engine horsepower rating (Hp) and serial number (S/N)?

Thank you for your assistance and have a great day!

Sincerely,

Dickson E. Dibble

Dickson E. Dibble, ES III  
FL Dept of Environmental Protection  
Div. of Air Resource Management  
Bureau of Air Monitoring & Mobile Sources Air General Permit Program Tel. (850) 921-9586 FAX (850) 922-6979  
ICG-#345  
Dickson.Dibble@dep.state.fl.us

Please note: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure

The Department of Environmental

Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and

improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Copy the url below to a web browser to complete the DEP

survey:

<http://survey.dep.state.fl.us/?refemail=Dickson.Dibble@dep.state.fl.us>

Thank you in advance for completing the survey.

From: lwisenbaker@scruggscompany.com  
[mailto:lwisenbaker@scruggscompany.com]  
Sent: Tuesday, September 15, 2009 3:46 PM  
To: Dibble, Dickson  
Subject: Concrete Batch Plant Air General Permit Registration (The Scruggs Company - Jacksonville)

Mr. Dibble:

We had spoken over the telephone regarding our Permit Registration Form related to our concrete batch plant to be located at the Jacksonville Airport. specifically you had asked about our source of electricity.

We will have a generator on site to supply power for the concrete plant.  
The Generator is a Caterpillar brand, Model SR-4, 475 KVA, 480 volt.

Please let me know if you need more information - my contact numbers are below.

Thanks you,

Larry Wisenbaker, VP  
The Scruggs Company  
P.O. Box 2065  
Valdosta Ga., 31604  
229-242-2388, 229-242-7109 fax  
[www.scruggscompany.com](http://www.scruggscompany.com)  
[lwisenbaker@scruggscompany.com](mailto:lwisenbaker@scruggscompany.com)

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# JOHNSON UNI-ROVER 1048

For fast job site moves the Johnson Uni-Rover 1048 has no equal. The plant features highly mobile sections which transport easily and erect with minimal effort. The batching and storage section tilts-up in one lift. The mixer unit can be self-erecting — requiring only a 110 volt power source for the 2 H.P. hydraulic system. This system, in an emergency, can be used to discharge the mixer drum. Concrete foundations can be eliminated by using steel pads.

The large storage capacities for both cement and aggregate along with fast, accurate batching combine to provide a smooth overall operation.

Member



The Johnson Selectronic Weighsystems and mass-pour type tilting mixer offer an exceptionally high degree of product quality control.

The Uni-Rover 1048 is just another example of the attention to engineering detail that has made Johnson a leader in the field.

#### FEATURES:

- Fast set-up — self-erecting mixer.
- High production — big capacity.
- Low profile.
- Total mobility.
- Full automation.
- Low maintenance.
- Johnson Selectronic Weighsystems
- Emergency hydraulic tilt system for mixer.



C.S. JOHNSON CO.  
SINCE 1921

P.O. BOX 9067, CHAMPAIGN, ILLINOIS 61826-9067 TEL. (217) 356-3781 FAX (217) 356-3786

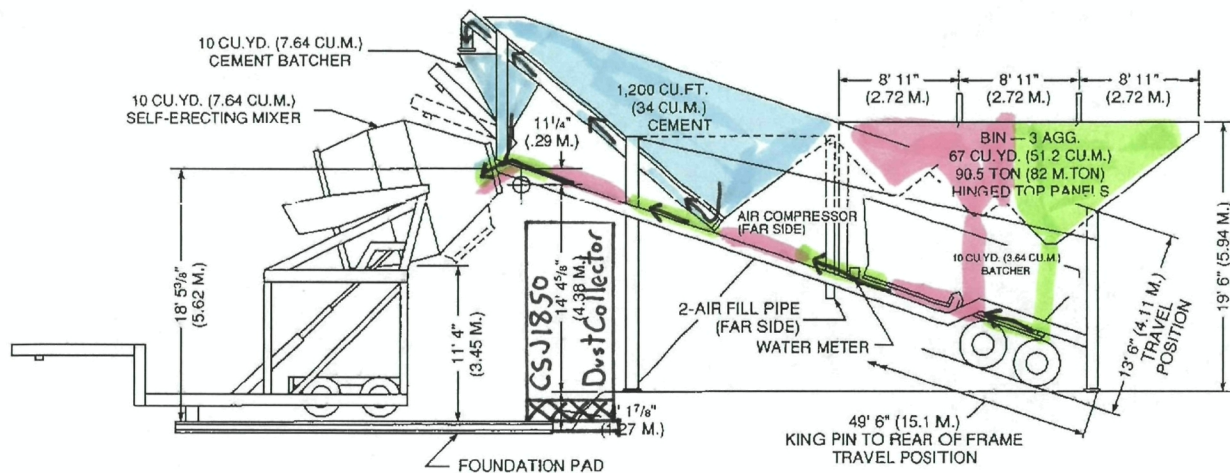


# JOHNSON UNI-ROVER 1048

# Flow Diagram

## SPECIFICATIONS

Cement -   
 Coarse Agg -   
 Fine Agg -



<b>Production</b> .....	Up to 300 Cu. Yd./Hour* (229.4 Cu. M./Hour)
<b>Storage capacities</b>	
Aggregate .....	67 Cu.Yd. (51.2 Cu.M.) 90.5 Ton (82 M.Ton)
Cement .....	1200 Cu.Ft. (34 Cu.M.) 56.4 Ton (51.2 M.Ton)
<b>Batching capacity</b> .....	10 Cu. Yd. (7.64 Cu. M.)
<b>Aggregate conveyor</b> .....	48" (1.22 M.) 60 H.P. (47.7 Kw.)
<b>Cement Screw conveyor</b> .....	14" (.35 M.) 50 H.P. (37.3 Kw.)
<b>Air Compressor</b>	
Capacity .....	81 C.F.M. (38.23 L./Sec.)
Drive .....	15 H.P. (11.2 Kw.)
Receiver .....	120 Gal. (454 L.)
<b>Water Meter</b> .....	4" Dia. (0.10 M.)
Capacity .....	800 GPM (50.5 L./Sec.)

<b>Mixer</b> .....	10 Cu. Yd. (7.64 Cu. M.)
Drive .....	2 — 50 H.P. motors (37.3 Kw.)
Hydraulic .....	40 H.P. (29.8 Kw.)

### Transportation Dimensions

<b>Plant Unit</b>	
Towing Length .....	51' 9" (15.77 M.)
Towing Height .....	13' 6" (4.11 M.)
Towing Width .....	11' 0" (3.35 M.)
Travel Weight .....	53,700 lbs. (24,360 Kg.)
Kingpin .....	19,500 lbs. (8,845 Kg.)
Axle .....	34,200 lbs. (15,513 Kg.)
<b>Mixer Unit</b>	
Towing Length .....	24' 9" (7.54 M.)
Towing Height .....	14' 0" (4.27 M.)
Towing Width .....	12' 0" (3.66 M.)
Travel Weight .....	48,860 lbs. (22,163 Kg.)
Kingpin .....	15,660 lbs. (7,103 Kg.)
Axle .....	33,200 lbs. (15,060 Kg.)

\*Based on a 10 cu.yd. batch, 60 second mix time, and 3" slump.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, Expressed or implied.

**C.S. JOHNSON CO.**  
 P.O. BOX 9067  
 CHAMPAIGN, ILLINOIS 61826-9067  
 TEL. (217) 356-3781  
 FAX (217) 356-3786

SPECIFICATIONS - CSJ 1850

Number of bags	90
Size of bags	8" x 120"
Bag Material	Dacron Polyester
Usable filter area	1850 sq. ft.
Blower fan	24 1/2" air foil w/25 HP motor (11,968 CFM capacity @ 2,218 RPM)
Inlet duct size	22" Dia.
Electrical requirements:	
Fan motor	230/460 V, 3 Ph, 60 Hz
Screw motor	230/460 V, 3 Ph, 60 Hz
Solenoid valves	110 V, 1 Ph, 60 Hz
Air Diverter Valve	Valve: Ram extension time - 6 sec. Ram retraction time - 6 sec. Total pulse cycle - 12 sec.
	Compartment Cleaning cycle: Duration - 1 1/2 min./compartment Delay - 3 1/2 min. between comp't
	Dust Collector Cleaning cycle: Duration - 15 min. Delay - 2 to 60 min. between cyc
Collecting method	Hopper w/screw conveyor & butterfly va

EMISSION CALCULATION TABLE

BASED ON PORTLAND CEMENT DUST:

- 34% (1-10 MICRONS)
- 52% (10-50 MICRONS)
- 14% (LARGER THAN 50 MICRONS)

OVERALL DESIGN EFFICIENCY 99.9%

---

<u>UNIT SIZE</u>	<u>CLOTH A SQ. FT.</u>	<u>AIR TO CLOTH RATIO</u>	<u>INLET CONCEN. #/MIN.</u>	<u>OUTLET EMISS. #/MIN.</u>	<u>AIR VOL SCFM (FREE AIR)</u>
CSJ 125	125	3.0 to 1	0.80	.0008	375
CSJ 250	250	3.0 to 1	1.60	.0016	750
CSJ 1000	1000	6.0 to 1	12.84	.0128	6000
CSJ 1500	1500	6.3 to 1	20.31	.0203	9500
CSJ 1850	1850	6.2 to 1	24.58	.0246	11500
18 CDS	18	6.0 to 1	0.23	.00023	108

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BASED ON 15 GRAINS PER CU. FT. DUST LOADING

PERFORMANCE EFFICIENCY EMISSIONS GUARANTEE

C.S. JOHNSON COMPANY  
502 SOUTH KENWOOD ROAD  
CHAMPAIGN, IL 61821

THE UNITS LISTED BELOW WILL MEET AN EFFICIENCY FOR EMISSIONS FOR 99.9% WHEN INSTALLED FOR THE PROPER APPLICATION AS ENGINEERED BY C.S. JOHNSON COMPANY.

THE EQUIPMENT AS LISTED BELOW, IS DESIGNED FOR CEMENT PLANTS TO HANDLE CEMENT AND AGGREGATE DUST. PARTICLE SIZE DISTRIBUTION FROM 10 TO 100 MICRONS. DUST LOADING WILL VARY FROM 5 TO 15 GR/CF.

BAGHOUSES	CSJ1000, 1500, <u>1850</u>
FILTER VENTS WITHOUT BLOWERS	CSJ125, 250
WEIGH BATCHER FILTER VENTS	18VDS, 18CDS

PLEASE CONSULT THE FACTORY IF YOU HAVE ANY QUESTIONS CONCERNING THE ABOVE.

With the foundation properly installed and anchor bolts projecting as needed, lift the 1850 unit so the fifth wheel towing frame is at the top and the 22" diameter inlet pipe is pointed toward the conveyor on the batch plant (see drawing 9210D14). Position it so the anchor bolts in the concrete foundations project up through the holes in the base plates on the support legs. Level as necessary and secure to anchor bolts. Attach to this main assembly the following components:

ladder and safety cage

fan support platform and braces

fan and drive assembly with belt guard

90° duct elbow

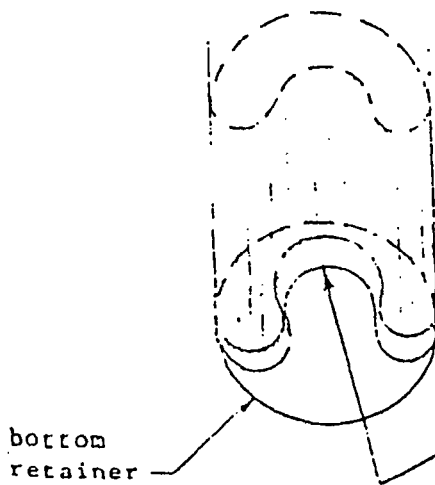
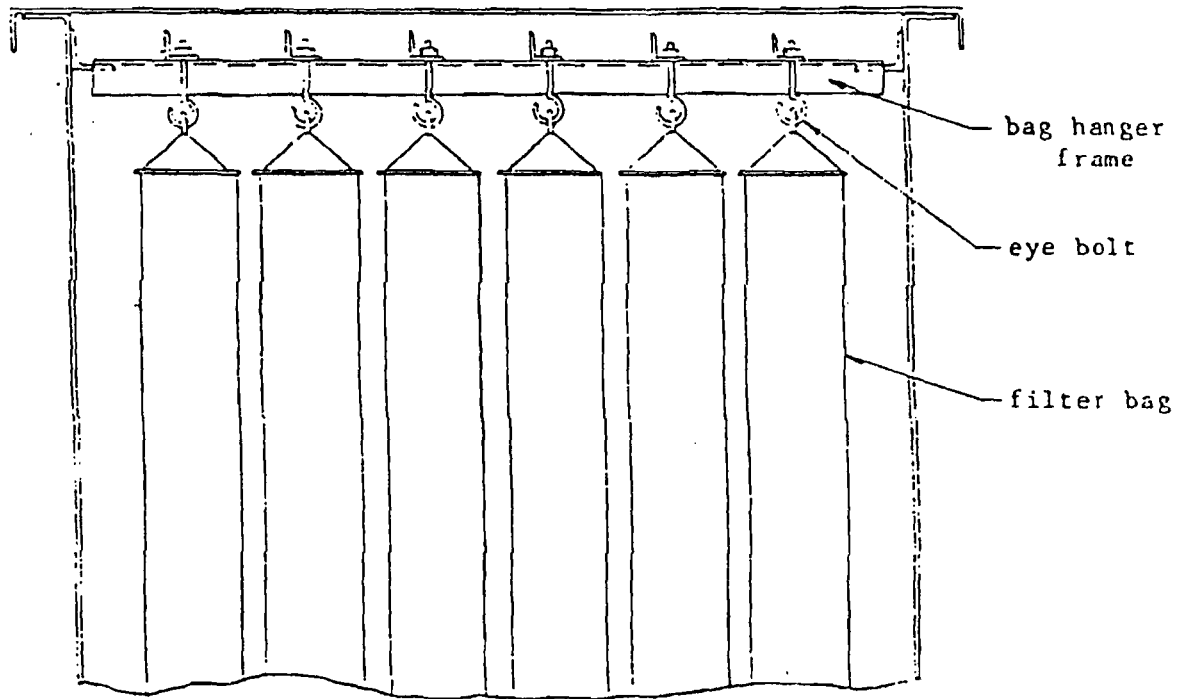
duct transition plenum

reclaim blower

magnahelic gage

Refer to drawing 10438-4301 for piece marks and installation dimensions. Install ductwork according to drawings 9210D13 and 9210D14. Any special dust collection hoods on scoops should be properly located and connected into the duct system.

FIGURE 2  
Filter Bag Replacement



For Removal

Push bottom ring toward center and pull up and out of retainer. Unhook from eye bolt at top.

For Installation

Hook bag on eye bolt at top. Fold bag in on itself, push it in the retainer and let it snap open to lock in. Adjust bag tension using eye bolt.

2007 AUG 21 PM 1:09  
ENVIRONMENTAL HEALTH SERVICES  
CAMPUS HEALTH SERVICES

OPERATION AND MAINTENANCE

The CSJ 1850 Dust Collector is designed to automatically clean the filter media without interrupting the dust collection process. This is made possible by dividing the baghouse enclosure into three separate compartments, each with an air diverter valve located in the ductwork between the compartment and the blower unit. When any one of the three compartments is operating its cleaning cycle, the remaining two compartments continue dust collection and filtration. (See Figure 3)

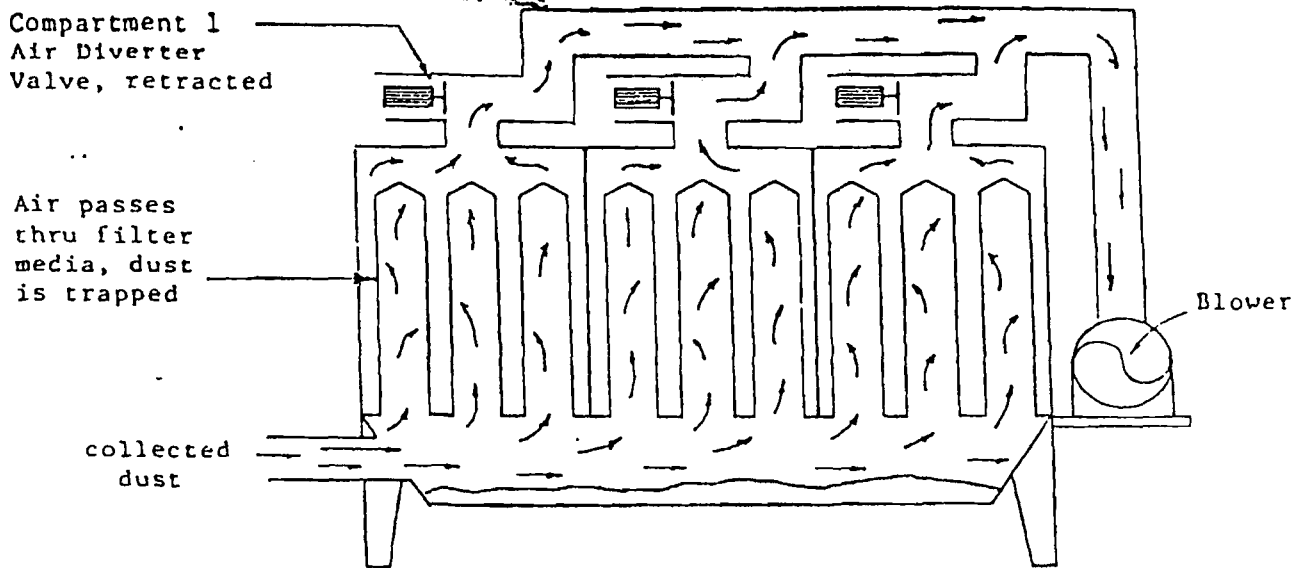
The air diverter valve atop each compartment is responsible for cleaning the filter media by alternating air pressure from one side of the bags to the other. The changes from positive to negative air pressure cause the bags to expand and collapse, thus shaking accumulated dust loose from the inside surface of the bags.

Each compartment cleaning cycle lasts 4 minutes with the air diverter valve pulsing every 12 seconds during the cycle. A sixty second delay separates cleaning cycles between compartments, and an adjustable delay (from 2 to sixty minutes) separates the end of one complete dust collector cleaning cycle from the beginning of the next cycle.

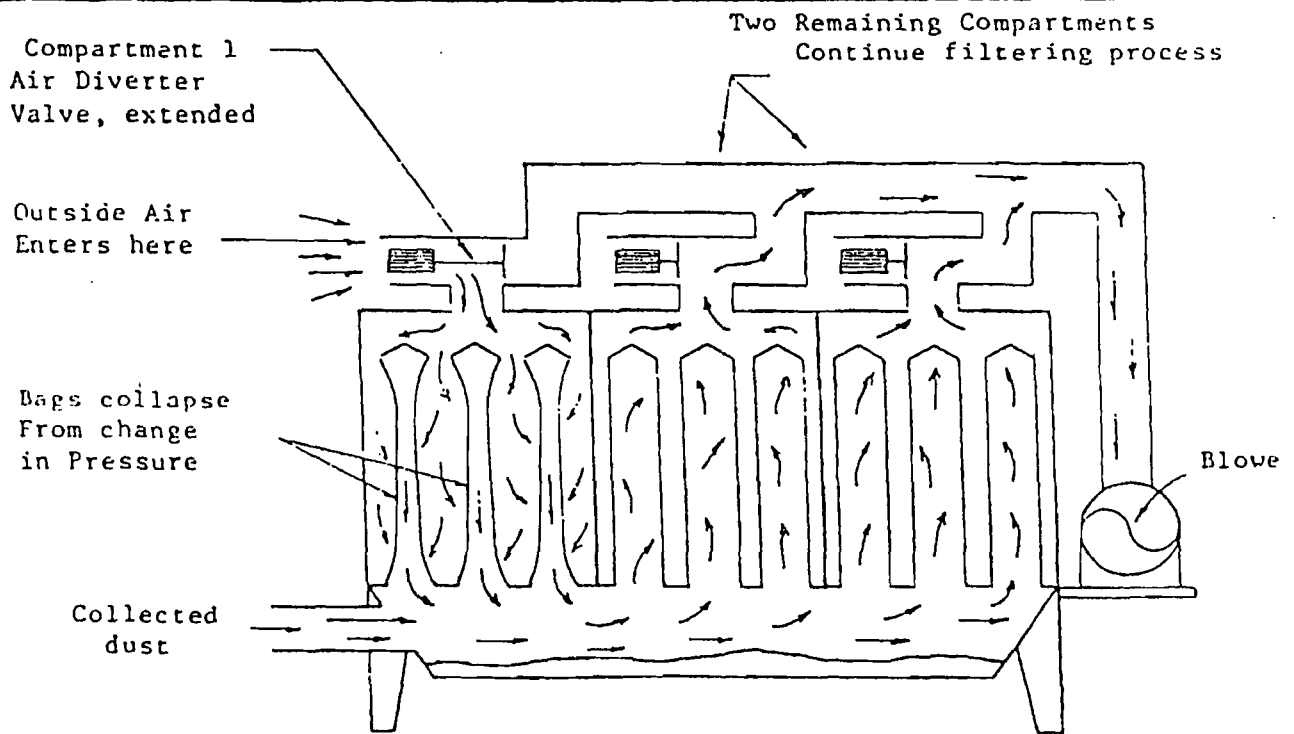
Over a period of time, the filter bags will become impregnated with material to the point they will not allow the proper amount of air to pass. The time it takes for this to occur will depend on the amount of usage and the physical properties of the material being filtered. Signs of this condition will be fine wisps of dust coming out of the bin safety valve during filling or uncaptured dust appearing in areas near system pick-up points. If these conditions occur, the bags should be replaced.

FIGURE 3

AIR DIVERTER VALVE OPERATION -  
CLEANING CYCLE IN COMPARTMENT 1



AIR FLOW WITH DIVERTER VALVE RETRACTED  
(Schematic only)



AIR FLOW WITH DIVERTER VALVE EXTENDED  
(Schematic only)



To replace the bags, remove the bottom of the bags from the ring retainer by folding the bag in on itself and pulling up, as shown in Figure 2. When all of the bags are out of the bottom retainer, remove the bags from the bag hanger frame eye bolts at the top. When installing the new bags in a compartment, it is advisable to temporarily install the two front rows of bags nearest the access door first. Hook the bag eyelets on the eye bolts at the top end first. Install the bottom of the bags into the bottom retainers by folding each bag in on itself and pushing it into the retaining ring. Adjust the eye bolts for individual bag tension. After the front two rows have been adjusted for length, remove the bottom ends from the retainers immediately in front of the access door and let those bags hang on the eye bolts until the remainder of the bags have been completely installed. Installation of the remaining bags in the compartment should begin in the back, completing one row at a time. Hook the bags at the top end, snap the bottom ends into the retainers and adjust the eye bolts for tension. When all remaining bags have been installed and adjusted, the bottoms of the bags immediately inside the door can be snapped in the retainer from outside the compartment. Use the same procedure for the remaining compartments.

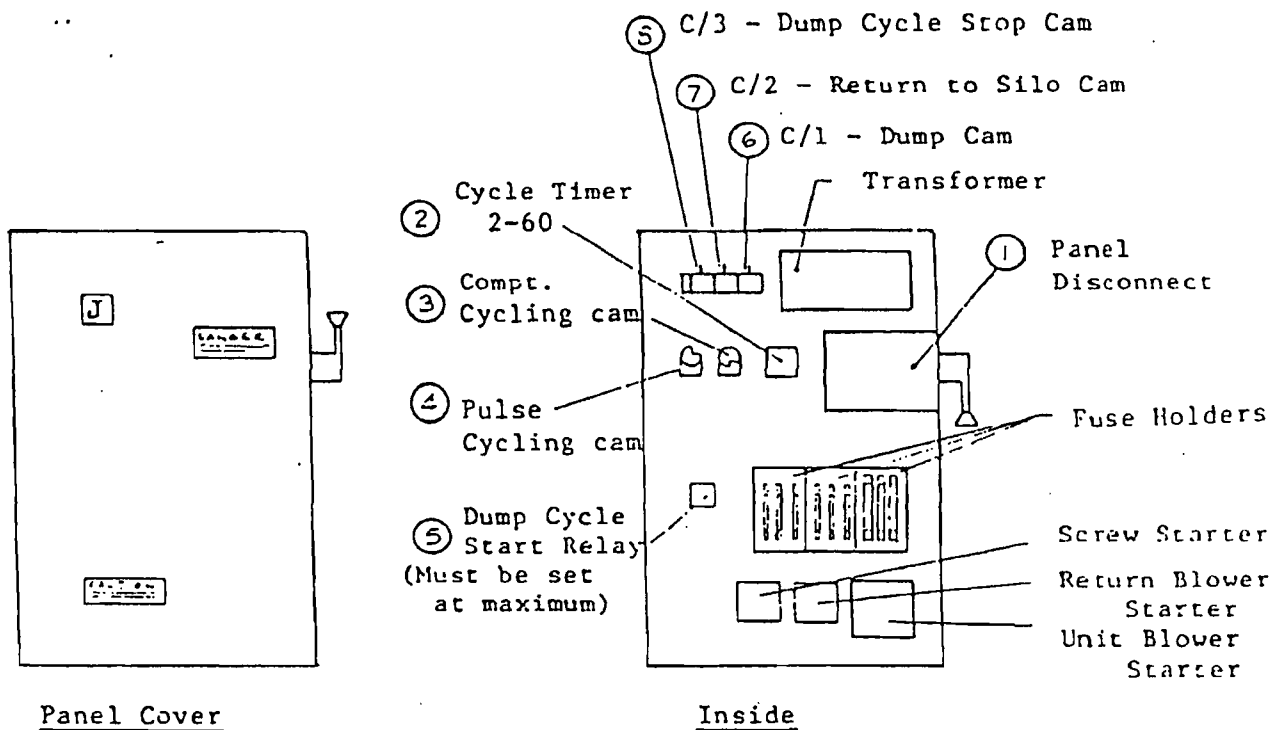
Accumulated dust in the hopper below the bags will require emptying occasionally, depending on the bag condition and the properties of the material being filtered. When the unit is newly installed, a close check should be kept on the rate at which the hopper fills up and the discharge operation scheduled accordingly. Discharge from the hopper is accomplished through use of the butterfly valve and discharge screw.

Several points to consider for scheduling the dumping of reclaimed material are the following:

1. Do not let the hopper fill up entirely because the inlet may be shut off, bags may begin to fill with material and impregnation of the media will occur much more quickly.
2. Do not automatically decide to dump the hopper at the end of the day. The amount of material reclaimed may demand dumping more frequently.
3. Never allow cement to remain in the hopper for an extended period, regardless of how full the hopper may be. Packing of cement on the screw could possibly overload the drive mechanism or damage the butterfly valve.

CONTROLS

The basic motor control and operator panel for the CSJ 1850 with the cement return blower option package is shown below. Refer to drawing 10533-4899, motor control and operator panel for more information.



The panel disconnect ① is to be used to turn the unit off when not in use. When the disconnect is 'On', the blower operates and dust collection takes place in the hopper. At the signal from a preset cycle timer ②, the bag cleaning cycle ③ begins consisting of two minutes of pulse cleaning per compartment with an adjustable 2 to 60 minute time delay ② after all compartments have completed the cleaning cycle. The time delay occurs only between the third and first compartment pulse cycles, and should be adjusted in length for the dusting conditions needing control.

The hopper discharge cycle is activated automatically by the start relay ⑤ when reclaimed material is to be discharged from the collection hopper at the bottom of the unit. The discharge cycle is cam controlled and is factory set at 30 seconds. The discharge valve opens, the screw motor starts simultaneously and the material is discharged from the hopper and into the air-vac. When the control cam ⑥ on the discharge operation has completed its cycle, the discharge valve closes and the screw drive motor stops simultaneously. When cam C/2 ⑦ advances to its detented area the butterfly valves on each side of the air-vac hopper will open and the return blower unit starts automatically, returning reclaimed dust from the air-vac hopper to a storage area. At the end of the cam detent period ⑦, the return blower turns off and both line butterfly valves close. The dump cycle stop cam ⑧ stops the entire dump-return procedure and resets.

To adjust the time delay between cleaning cycles for a particular dusting condition, rotate the timer indicator, ②. The period between compartment cleaning cycles can be shortened or lengthened to accommodate actual dust conditions being controlled.

To change the duration of the discharge screw operation, readjust the control cam marked C/1 ③ in the upper left quadrant of the panel box. Increasing the detent length will lengthen the screw running time. The discharge screw cam should be adjusted to stop the screw when the air-vac hopper is full, which usually takes 20-30 seconds. Allowing the screw to continue operation with the air-vac hopper full will pack cement at the screw discharge end and possibly push the reclaimed material out the air inlet opening. Relay ⑤ at left center of the box must be kept set at its maximum position for cams to function properly.

Note: During the initial check-out period and as a matter of preventive maintenance, the level of reclaimed material in the hopper should be observed occasionally to make sure the automatic discharge is keeping up with the amount of material collected. Should the reclaimed material accumulate faster than the air-vac returns it to storage, simply shorten the cycle timer setting (2), which will cause faster return to storage.