

vm

NOTE TO: License Fee Management Branch, ADM

FROM: Region 3

SUBJECT: VOIDED APPLICATION

87

RECEIVED

'88 JAN 11 11:34

Control Number 82655

Applicant Monsanto Co.

Date Voided 1/7/88

Reason for Void Combined w/

CN 82474 after

review

47

Signature

P. J. W. Dunion

Dec 18 1987

Attachment:
Application

*OK LFM B
no refund due*



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION III
 799 ROOSEVELT ROAD
 GLEN ELLYN, ILLINOIS 60137

BETWEEN: William O. Miller, Chief
 License Fee Management Branch
 Office of Administration

Regional License Section
 Material Licensing Branch
 FCMS, Office of Nuclear Material
 Safety & Safeguards

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: Mossents B.

Application Dated: 11/26/86

Control No.: CONTROL NO. 82655

License No.: 24-01113-14

2. FEE ATTACHED

Amount: 120.00

Check No.: 277570

3. COMMENTS

Signed J.O.

Date 12/18/86

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 32 (120) ~~FEE NOT REQUIRED~~

2. Correct Fee Paid. Application may be processed for: Supplemental info.

Amendment ✓

Renewal _____

License _____

Signed M. Messer

Date 12/22/86

Monsanto

PHYSICAL SCIENCES CENTER

Monsanto Company
700 Chesterfield Village Parkway
St. Louis, Missouri 63198
Phone: (314) 694-1000

November 26, 1986

RECEIVED
85 DEC 22 19:45

Ms. P. J. Whiston
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Ms. Whiston:

We request approval for compaction of radioactive waste at Monsanto Co. Research Laboratories, 700 Chesterfield Village Parkway, St. Louis, Missouri, 63198 by amendment 24 to our NRC License 24-01113-14. This license is one of three held by Monsanto Co. on the Chesterfield Village Parkway site. All three licenses will use the same compactor. The waste generated by the different licenses are packaged and will be compacted separately.

Enclosed, in duplicate, are responses to inquiries for more information requested by the NRC in a letter dated October 9, 1986 (Attachment 1) to Dr. C. P. Rodi, Monsanto Co., Biological Sciences Laboratories, concerning radioactive waste compaction. Dr. Rodi is a Radiation Safety Supervisor on one of the three above mentioned NRC licenses. Since all three licenses will be operating under the same radioactive waste compaction program, we felt identical responses to the NRC inquiries was an appropriate way to apply for an amendment for compaction on the other licenses. Each licensee, however, will keep their own records of surveys, exposures and waste content for NRC inspection.

If further information is necessary, please contact me at (314) 537-6138.

Sincerely,

W. J. Litschgi

W. J. Litschgi
Radiation Safety Officer
Physical Sciences Center

RECEIVED BY LFMS	
Date	<i>12/22/86</i>
Log	<i>Dec 12 1986</i>
By	<i>Messier</i>
Date Completed	<i>12/22/86</i>

~~FEE NOT REQUIRED~~

WJL/pak

Check No.	<i>3775.20</i>
Amount	<i>120.30</i>
Category	<i>Amendment</i>
Type of Fee	<i>Amendment</i>
Date Check Rec'd	<i>12/22/86</i>
Received By	<i>M. M.</i>

26.17

CONTROL NO. 82655

RECEIVED
DEC 18 1986
REGION III



ATTACHMENT A
UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 09 1986

Monsanto Company, BB3B
Biological Sciences Laboratory
ATTN: Charles Rodi
Senior Research Biologist
700 Chesterfield Village Parkway
St. Louis, MO 63198

Gentlemen:

Enclosed is Amendment No. 08 to your NRC License No. 24-19531-01 in accordance with your request.

Please note that we have not added the individuals listed in your May 1, 1986 letter (Radiation Safety Supervisors) to your license as authorized users. In order to authorize these individuals to use materials, it will be necessary for you to submit a description of each individual's training in basic radiation safety and their experience using/handling radioactive materials. This description should include the types and quantities of radioactive materials used as well as a description of the use (e.g., 5 microcuries of hydrogen-3 for tracer study).

Also note that we have not authorized your request to compact radioactive waste in-house. In order to authorize this request it will be necessary for you to submit the following information:

- A. The type of compactor you will use. If it is the Consolidated Baling Machine Company's Model DOS-RAW-W1, please specify this in your response. If you will be receiving another compactor, please specify the manufacturer's name and model number as well as submitting a diagram of the device.
- B. The types, quantities, and concentrations of waste to be compacted.
- C. An analysis of the potential for airborne release of radioactive material, especially radioiodines.
- D. A description of the ventilation and filtering system used in conjunction with the compactor. The system must be capable of handling the type of radionuclides in the waste to be compacted (e.g., charcoal filter for iodines). Please also include a description of your procedures for monitoring filters and filter blockage.

CONTROL NO. 82655

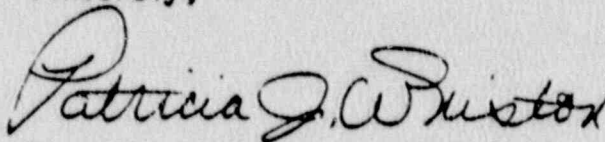
RECEIVED
DEC 18 1986
REGION III

- E. Describe your procedures for monitoring concentrations of radioactive material released into breathing zones or exhaust systems.
- F. Specify the anticipated frequency of use for the compactor. Note that if you plan to use the compactor daily or weekly, you need to modify the frequency at which surveys will be performed. Also, please submit a detailed description of the survey to be performed. Include locations to be surveyed, type of survey, and action levels necessitating decontamination.
- G. Specify the location of the compactor at your facility and describe your methods of controlling access into this area during compaction. Also describe the area where drums will be stored prior to shipment.
- H. The step-by-step instruction provided to compactor operators. In addition to protective clothing, the instructions should address checking proper function of equipment, the method of "handling" waste in the "parent" drum, and the method of examining defects in drums after compaction.

Information submitted in response to this letter should state that it is additional information and not a new amendment request.

Please review your license carefully to assure that you understand and are in compliance with the terms and conditions contained therein. If you have questions, please contact our office at (312) 790-5625.

Sincerely,



Patricia J. Whiston
Materials Licensing Section

Enclosures:

- 1. Amendment No. 08
- 2. Regulatory Guide 8.20 (per addition of License Condition 15.)

RADIOACTIVE WASTE COMPACTION

ITEMS AND RESPONSES

Item A:

The type of compactor you will use. If it is the Consolidated Bailing Machine Company's Model DOS-RAW-W1, please specify this in your response. If you will be receiving another compactor, please specify the manufacturer's name and model number as well as submitting a diagram of the device.

Response:

The compactor is from Consolidated Bailing Machine Co., Model DOS-RAW-W1. It is equipped with a Flanders model P-007-C-04-00N LCNZ Z72 209C Nuclear Grade HEPA filter and before compaction of radioiodines with a 2V-N63-G16 charcoal filter. Specifications and diagrams of the compaction system as supplied by the vendor are attached. (Figures 1 and 2 and Attachments 1, 2 and 3).

Item B:

The types, quantities and concentrations of waste to be compacted.

Response:

The type of material that will be compacted is laboratory trash. The trash consists of non-reusable items such as paper, plastic, syringes, metal, cloth, etc. In the majority of cases, the trash will contain less than 1-2 mCi per cubic foot. Typical radioisotopes, in the laboratory trash, to be compacted are carbon-14, hydrogen-3, sulfur-35 and iodine-125. The above listed radioisotopes are ones most frequently used in our Research Laboratories, however, we will also occasionally compact other radioisotopes listed on our license.

Item C:

An analysis of the potential for airborne release of radioactive materials, especially radioiodines.

Response:

Airborne release of radioactive material, including radioiodines, should never exceed the values listed in CFR Title 10, Part 20, Appendix B. Laboratory procedures require radioactive laboratory trash be packaged in bags and be put in a radioactive waste disposal drum kept in the users' laboratory. When the laboratory drum is full, it is transferred to the radioactive waste handling site described in Item G. The contents of the laboratory drum are transferred to the compaction drum. The bags of radioactive trash are not opened, but placed sealed into the compaction drum. The compactor is fitted with a Nuclear Grade HEPA filter and a

Nuclear Grade charcoal filter. The exhaust stack from the compactor extends four feet above the building's roof top.

Item D:

A description of the ventilation and filtering system used in conjunction with the compactor. The system must be capable of handling the type of radionuclides in the waste to be compacted (e.g., charcoal filter for iodines). Please include a description of your procedures for monitoring filters and filter blockage.

Response:

As seen in Figures 1 and 2, the compactor is equipped with an exhaust fan system. The fan draws air through a HEPA filter and a charcoal filter at a rate of 350 cubic feet per minute from the drum compartment. The filtered exhaust air is ducted to a stack that extends four feet above the roof of the building. A magnehelic gauge, installed by the manufacturer, is between the exhaust fan and the HEPA filter for measuring the suction applied to the filter. The pre-filter and HEPA will be replaced before the pressure drop across the filter, as measured by the gauge, has increased to the manufacturer's recommended limits. Attachment 2 describes the charcoal filter used on the compactor. At our request, Mr. R.K. Holloman of Flanders Filters, Inc. furnished us further information so we could determine when to change the filter. Mr. Holloman stated that the charcoal filter (2V-N63-G16) holds seventy-five pounds of charcoal with a capacity for I-131 of 100 micrograms for a gram of charcoal. This capacity calculates to 3.4 grams of iodine for the filter. The approximate specific activity of the radioiodine used at our Research Site is 17 curies per milligram. Since the possession limit of all licenses located at this site for radioiodine is less than one curie, we will never exceed the capacity of the filter. We will, however, inspect the filter routinely to determine any physical damage or blockage.

Item E:

Describe your procedures for monitoring concentrations of radioactive materials released into breathing zones or exhaust systems.

Response:

In Item C, we indicated that the potential for the release of radioactive materials into breathing zones is minimal. In order to verify this judgement, we are fitting the personnel running the compactor with respirators containing Comfo+II type GMC-H cartridge. Attachment 4 describes the cartridge. The cartridges will be analyzed for radioiodine content. If any readings above background are determined, thyroid scans and urine bioassays will be performed on the operator. A log of the analyses will be kept.

Item F:

Specify the anticipated frequency of use for the compactor. Note that if you plan to use the compactor daily or weekly, you need to modify the frequency at which surveys will be performed. Also, please submit a detailed description of the survey to be performed. Include locations to be surveyed, type of survey and action levels necessitating decontamination.

Response:

We anticipate using the compactor weekly. At the end of each day of compacting radioactive material, the compactor and surrounding area are to be surveyed for contamination. The areas to be surveyed include: the compactor platen, the drum support and cover, inside surfaces, the compactor door handle, the compactor control handle and buttons and the floor within one meter of the compactor (which includes the area where material transfer is to take place). In addition, the entire area, including the storage area and office room, will be surveyed monthly. The type of survey will be a wipe test and the wipes will be measured with a meter appropriate to the type of radionuclides compacted. All meters will be calibrated every six months. Contamination results of greater than twice background will require immediate decontamination. Survey results and meter calibration data will be available for NRC inspection.

Item G:

Specify the location of the compactor at your facility and describe your methods of controlling access into this area during compaction. Also describe the area where drums will be stored prior to shipment.

Response:

The compactor is installed in the Waste Handling Facility (WHF) of Monsanto Research, Chesterfield Village. The location of the WHF is shown on Figure 3. The compactor is located in the building at the WHF as shown on Figure 4. This building is kept locked. During compaction, stanchions and chain with warning signs ("Caution, Radioactive Materials") are placed around the working area of the compactor, which include the compactor and any materials brought to be compacted. Radioactive materials are stored in a building immediately adjacent to the compaction building. The storage area is roofed, fenced, posted and locked. In addition to WHF security, the entire Chesterfield Village Research Site is a secured site with a guard force on duty at all times.

Item H:

The step-by-step instruction provided to compactor operators. In addition to protective clothing, the instructions should address checking proper function of equipment, the method of "handling" waste in the "parent" drum and the method of examining defects in drums after inspection.

Response:

The compactor is operated by the site Environmental Services staff, who also handle chemical and pathological wastes and are fully trained in the use of protective equipment. They are issued work uniforms, safety shoes and safety glasses. The uniforms are changed daily. Attachment 5 lists procedures followed when compacting radioactive materials.

FIGURE 1.

MODEL DOS-RAW-W1
Radwaste Press

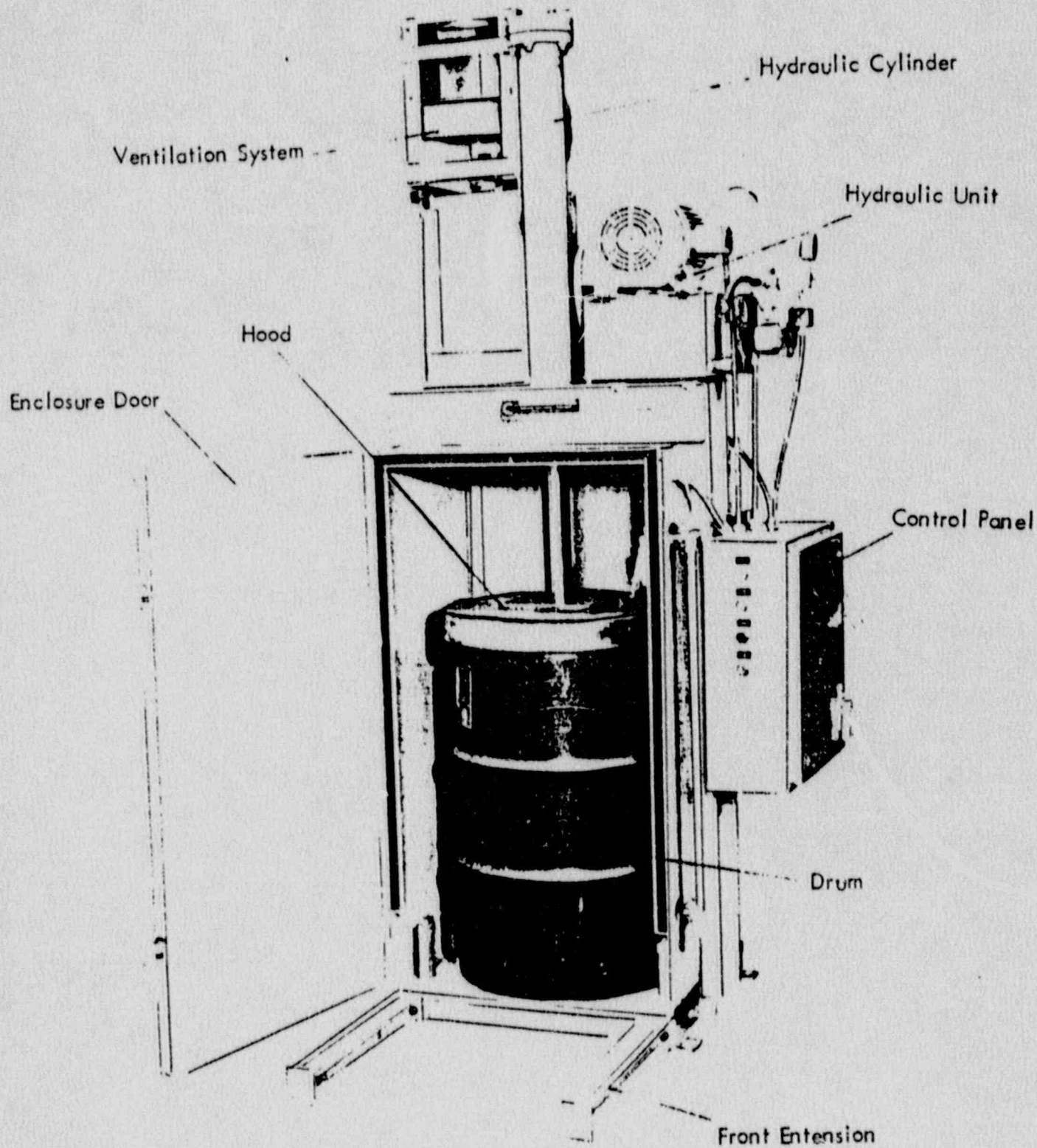


FIGURE 2.

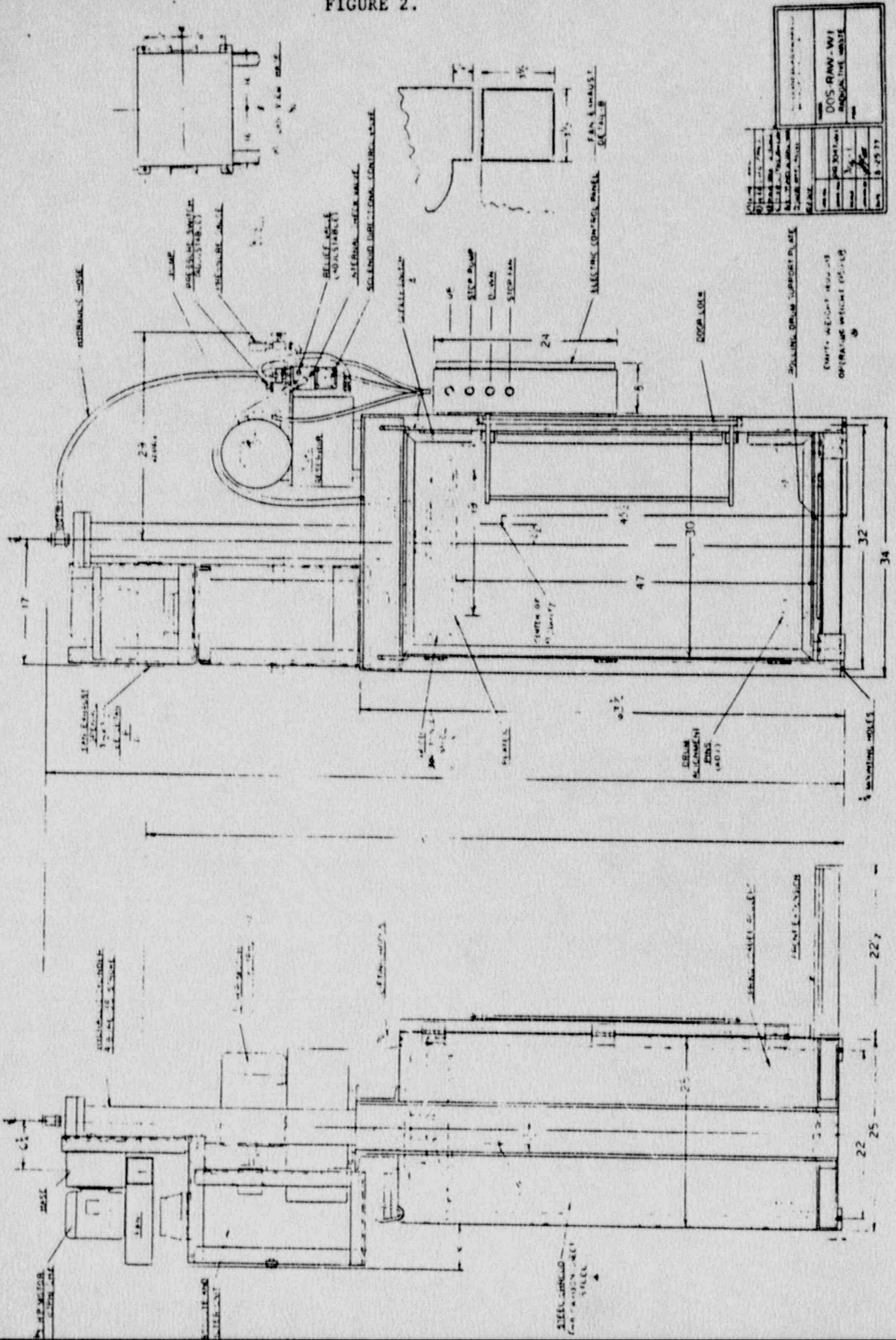


FIGURE 3.

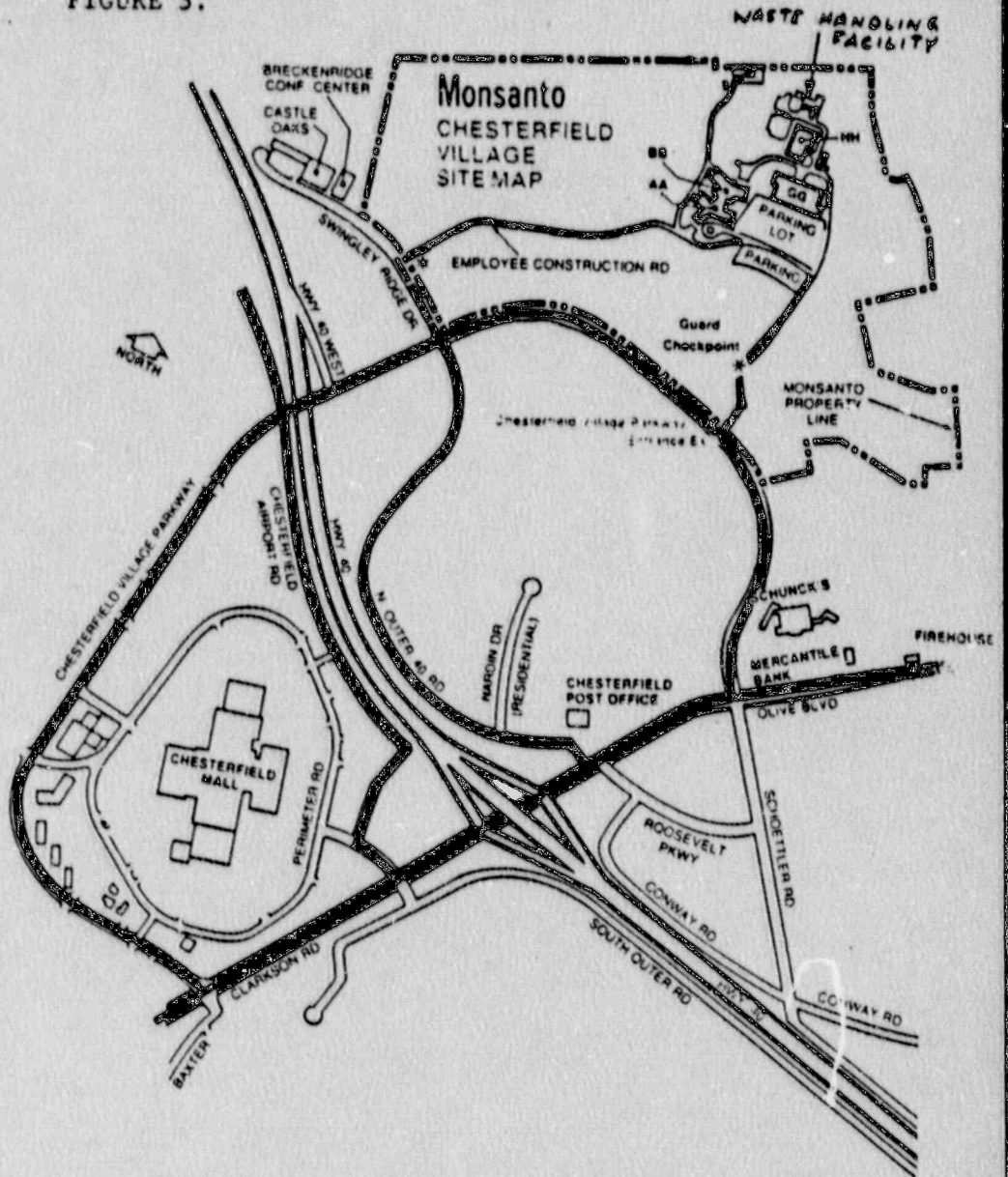
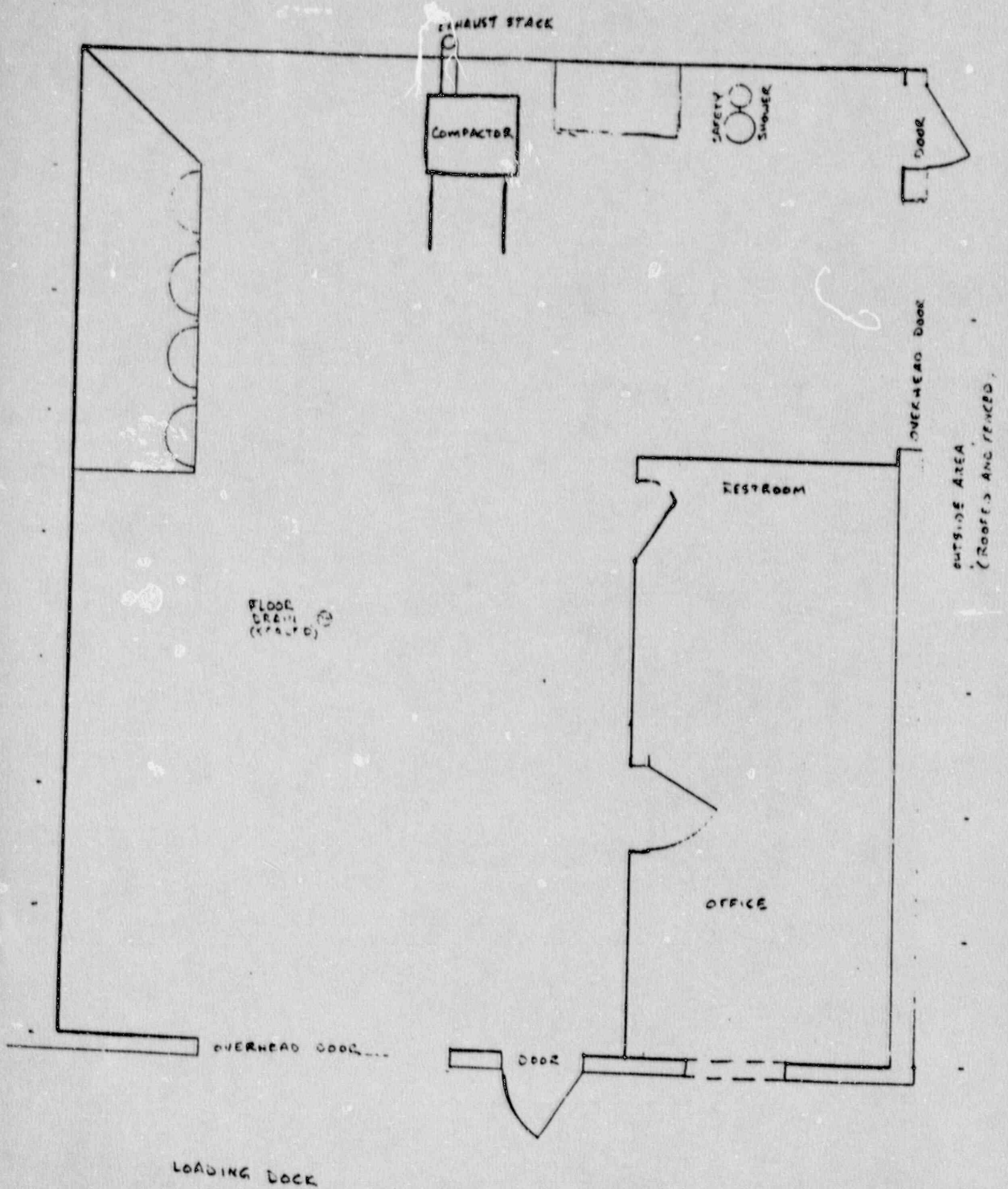


FIGURE 4.



ATTACHMENT 1.

<p>TEST FLOW DIRECTION ONLY</p> <p>NOTE: Filter May be Operated With Airflow in Either Direction</p>					FLANDERS FILTERS, INC. Washington, NC Dallas, TX San Rafael, CA (919) 846-8081 (214) 382-2000 (415) 489-0988			
	NUCLEAR GRADE HEPA FILTER Type B Filter per AES Recommended Practice (ANSI HNS RP-CC-001-83-T "Hepa Filters")					Manufactured in U. S. A.		
	MODEL NUMBER AND SIZE DESIGNATOR To Recorder Use Model Number and Size Designator					Made Under or Covered By One or More of the Following Patents: 3,499,311; 3,860,079 or RE 27,701, and Other Patents Pending		
	P-007-C-04-00 NLCN2 Z72209C					Tested By Q107 Panometer, Type A, B, C, S, T		
	MFG Serial No. N128866 Date					RES. IN W.G.	TEST FLOW ONLY	PENETRATION
	Additional Information:					ORDER NO: 86-0516		
					150CFM (100%) (20%)			

V-Bed Carbon Adsorbers Component and Designating Code

Adsorbers for Use with
The E-6C Housing

		DESIGNATORS	
Model	2V-Model: 2" Beds Assembled in V Bank	2V	} 2V } N } 6 } 3 } G } 16
Adsorbent Material/ Grade	Nuclear Grade*	N	
	Commercial Grade**	C	
	Whetlerite Type†	W	
Quantity of Beds	Six	6	
Frame Material	14-Gauge, Type-304 Stainless Steel	3	
Adsorber to Housing Seal	Gasket	G	
Nominal Depth of Assembly	24" x 24" x 12"	12	
	24" x 24" x 16"	16	
	24" x 24" x 18"	18	

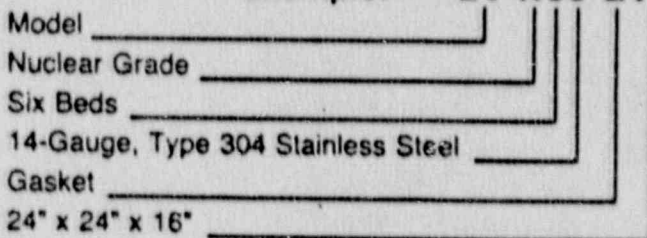
2V-N63-G12
2V-N63-G16
2V-N63-G18
2V-C63-G12
2V-C63-G16
2V-C63-G18
2V-W63-G12
2V-W63-G16
2V-W63-G18

NOTE: Other specialized adsorbers are available.

How to Order

Example:

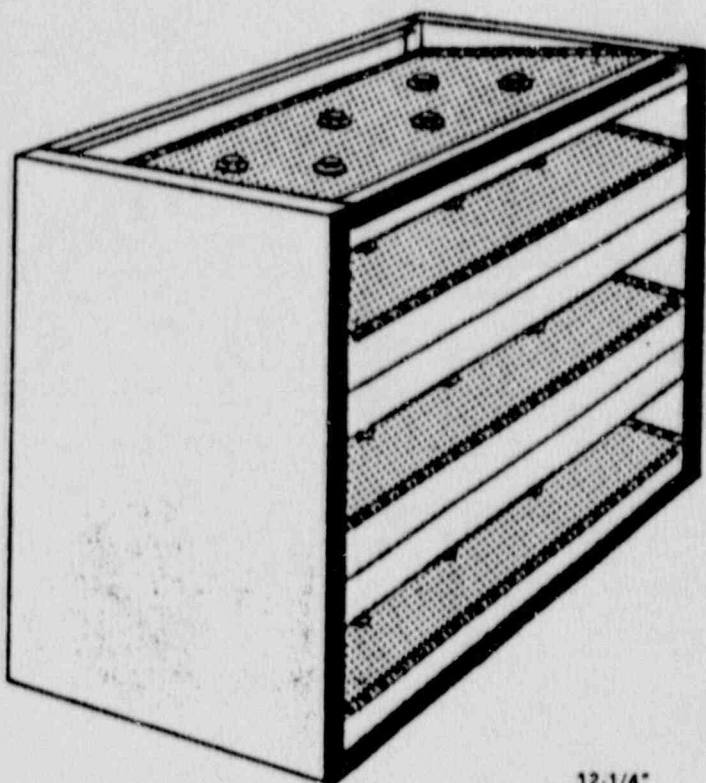
2V-N63-G16



NOTE: Special grades of carbon are available upon request.

- * **Nuclear Grade:** activated coconut shell carbon impregnated with potassium iodine for removal of the radioactive isotope I131.
- ** **Commercial Grade:** Granular activated coconut shell carbon with a highly-porous structure used for a wide range of gas phase applications.
- † **Whetlerlite Type Adsorbent:** A coal base granular activated carbon impregnated with various metallic oxides.

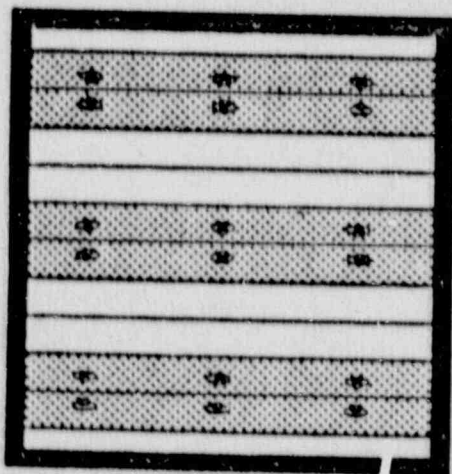
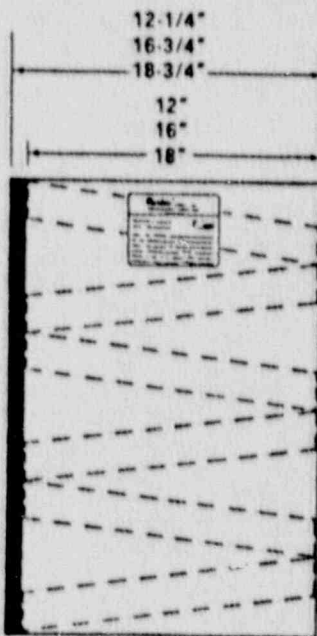
V-Bed Carbon Adsorbers Component and Designating Code (Continued)



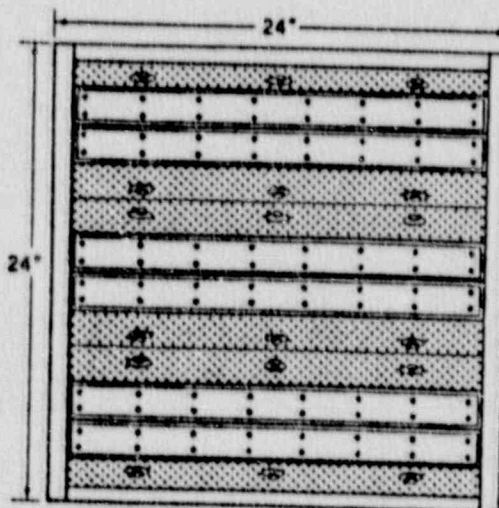
The adsorbers are available in three nominal sizes; 24" x 24" x 12", 24" x 24" x 16", and 24" x 24" x 18" and the E-6C Housing is manufactured in two sizes to accommodate the adsorber that is required.

Size	Flow	Pressure Drop
12"	700	1.25"
16"	1000	1.25"
18"	1250	1.25"

Model Number: 2V-N63-F12



Front View
(Upstream)



Rear View
(Downstream)

* Pressure Drop may be \pm 20% due to variation in particle size, moisture content and density of compacted carbon.

NOTE: Rated flow shown is based on a residence time of 125 seconds. Systems for removal of radioactive iodine or known carcinogens should have a minimum of 25 seconds residence time. This will require two adsorber housings in series.

EMS FOR SCIENCE AND INDUSTRY SINCE - 1950

RADIOACTIVE WASTE PRESS

DESCRIPTION

The Model DOS-RAW-W1 Baler is designed for pressing of radioactive waste directly into 55-gallon drums.

This is basically a two-column, downstroke, hydraulic baler enclosed in a shroud. On the base of the press is a 'drum support plate' mounted on spring-loaded rollers. This plate makes possible easy moving of the drum in and out of the press as necessary when repeatedly loading and pressing material.

Incorporated in the press is an Air Exhaust System consisting of a hood, prefilter and absolute filter and an exhaust fan. This system filters the air from within the shroud.

This press is operated by means of a motor driven hydraulic system. This system includes a 5 H.P. Motor, 5 GPM Hydraulic Pump, Solenoid Operated 4-Way Control Valve, Check Valve, Pressure Operated Switch, Relief Valve, and a 4-inch bore Hydraulic Cylinder. The Electrical System is arranged for operation on a 3 phase, 60 cycle supply of the voltage specified. Incorporated in the Control Panel is a step-down transformer which supplies 115 volts to the Control Circuit.

In the Hydraulic System is incorporated an adjustable Relief Valve, adjustable Pressure Operated Switch and a Hydraulic Gauge. The Relief Valve should be set for approximately 2150 PSI and the Pressure Operated Switch at 2000 PSI maximum to give 25,000 pounds operating force. Since the Pressure Switch is the controlling component, it can be set at a lower pressure if desired when making tests or pressing material where a lower pressure is preferred. The Relief Valve acts as a Safety Valve and should be set at least 100 PSI above the Pressure Switch so that the latter is the controlling component. A Shut-Off Valve in the line to the Hydraulic Gauge is normally closed. It should only be opened (about 1/2 turn) when checking the pressure reading at the gauge. During normal operation it is left closed. Disregard latter if press has liquid filled gauge.

The Controls consist of one 'Up' and one 'Down' and two 'Stop' Push Buttons - one for the pump motor and one for the exhaust fan motor. The Push Buttons are so wired that depressing the Pump-Motor up or down button also starts the Fan Motor. When the Press is started, it will run until the pressure switch is activated, but Fan Motor continues to run and will continue until the Fan Motor 'stop' Button is depressed. A Safety Switch prevents operation of the pump motor if the shroud door is not in the closed position. In normal operation, the temperature of the Hydraulic Fluid will rise approximately 20°F. A maximum temperature of 160°F. can be tolerated without any adverse effects.

CONSOLIDATED BALING MACHINE COMPANY
156-166 SIXTH STREET
BROOKLYN, N.Y. 11215



Combination Cartridge

part no.
464027

Comfo® II type GMC-H

NIOSH and MSHA approved for respiratory protection against organic and formaldehyde vapors; chlorine; hydrogen chloride; sulfur dioxide and against dusts, fumes, mists; asbestos — containing dusts and mists and radionuclides.

(see approval plate for specific limitations)

Meets OSHA requirements for an approved cartridge.

Manufactured by

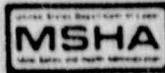
MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A., 15208

contents
six
460844
per
package

combination cartridge - GMC-H

part no. 464027

PERMISSIBLE CHEMICAL CARTRIDGE FOR ORGANIC AND FORMALDEHYDE VAPORS, CHLORINE, HYDROGEN CHLORIDE, SULFUR DIOXIDE, AND DUSTS, FUMES, MISTS, AND RADIONUCLIDES



MINE SAFETY AND HEALTH ADMINISTRATION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

APPROVAL NO. TC-23C-153

Issued to MINE SAFETY APPLIANCES COMPANY, Pittsburgh, Pennsylvania, U.S.A.



LIMITATIONS

Approved for respiratory protection against not more than 1,000 parts per million organic vapors, 30 parts per million formaldehyde vapor, 10 parts per million chlorine, 50 parts per million hydrogen chloride, 50 parts per million sulfur dioxide, dusts, fumes, and mists having a time weighted average less than 0.05 milligram per cubic meter, asbestos — containing dusts and mists and radionuclides.
Do not wear for protection against organic vapors with poor warning properties or those which generate high heats of reaction with sorbent material in the cartridge.

Maximum use concentrations will be lower than 1,000 parts per million organic vapors where that concentration produces atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.
Not for use in atmospheres immediately dangerous to life or health.

CAUTION

In making renewals or repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.
Follow the manufacturer's instructions for changing cartridges.

MSHA-NIOSH APPROVAL TC-23C-153

Issued to Mine Safety Appliances Company — April 21, 1983

The approved half mask facepiece respirator assembly for organic and formaldehyde vapors, chlorine, hydrogen chloride, sulfur dioxide, dusts, fumes, mists and radionuclides consists of the following MSA parts: 7-201-1, 7-201-2, or 7-201-3 facepiece and 460844 (TC-23C-153) cartridges.
The approved half mask facepiece with bell mounted cartridge respirator assembly for organic and formaldehyde vapors, chlorine, hydrogen chloride, sulfur dioxide, dusts, fumes, mists and radionuclides consists of the following MSA parts: 7-202-1, 7-202-2 or 7-202-3 facepiece, breathing tube and plenum assembly and 460844 (TC-23C-153) cartridges.

The approved half mask facepiece with back mounted cartridge respirator assembly for organic and formaldehyde vapors, chlorine, hydrogen chloride, sulfur dioxide, dusts, fumes, mists and radionuclides consists of the following MSA parts: 7-423-1, 7-423-2, or 7-423-3 facepiece, breathing tubes and plenum assembly and 460844 (TC-23C-153) cartridges.

The approved full facepiece respirator assembly for organic and formaldehyde vapors, chlorine, hydrogen chloride, sulfur dioxide, dusts, fumes, mists and radionuclides consists of the following MSA parts: 7-204-1, 7-204-2 or 7-204-3 facepiece and 460844 (TC-23C-153) cartridges.

460844

S.P. 387 (L) Rev. 9

ATTACHMENT 5

Compactor Operating Procedures

OPERATION - RADIOACTIVE:

Extra precautions must be followed when working with radioactive materials. Any item which becomes contaminated must either be cleaned, disposed of, or treated as radioactive. The following steps are the requirements for compacting radioactive waste.

1. Put up the stanchions and chain with radioactive material warnings to keep people away from the compactor area. The chain should always be around any rad material stored in the area. Put a radioactive material sign on the building door.
2. Put a pail lined with a plastic bag near the compactor for waste material like gloves, cleaning rags, etc. Compact these materials into the next load. Remove the whole bag and line the pail with a new one.
3. Turn on the radiation meter and set it near the compactor. After starting work with rad materials, remember to always check your hands for contamination before picking up the meter. Check your hands by passing them in front of the meter as it sits near the compactor.
4. Don protective gear: respirator, rubber gloves, and safety glasses. The radiation dosimeter must be worn at all times when working with rad material.
5. Put a drum on the slide and prepare a label for it. Do not put the label on the drum until it has been filled, however, so that it can be written upon and does not get contaminated. Note on the new label the label numbers being added to it. Be careful to compact only waste from a single US Ecology ID together in a drum. The 5 gallon cans may also be compacted if they show any sign of contamination, but they must be opened and the contents verified first. Be careful when removing bags from a drum. Watch for items like broken glass and needles, which might puncture the bag and cause injury. Watch also for unacceptable items: containers of liquid, pipe, and other material which cannot be compacted.
6. Fill the drum, either with the plastic bags from other containers or with the whole can, slide the drum in, and compact. Repeat until full.
7. Remove and seal the drum immediately, so the waste does not spring back up. Radioactive material must not be left inside the compactor.
8. Clean the outside of the full drum with cleanser (409, Fantastik, or equivalent) and as few paper towels as possible. Survey the paper towels for radioactivity. If any is found, clean the drum and check the towels again. Repeat until the towels come out free of radioactivity. If the drum was contaminated, also clean the inside of the compactor. While cleaning the drum, look for any punctures or other defects in the drum.

Compactor Operating Procedures

9. Attach the drum label and remove the drum to storage.
10. Clean any emptied containers in the same manner, checking for contamination. When finished, remove for reuse or disposal.
11. Continue compacting with the next drum.
12. At the end of the day's compacting, completely wipe down the inside and outside of the compactor. When finished, check your clothes for any contamination. If any is found, be careful not to spread it while removing the clothing, and then check the next layer of clothes (shirt, pants, etc). Keep removing any contaminated clothes and wash any contaminated skin immediately and thoroughly. Any skin contamination must be reported to supervision immediately. Put the materials in the trash pail, and wash the respirator as per the usual methods.

A complete radiation and contamination survey, with wipe tests, will be conducted by the supervisor.

FILTER CHANGING

The prefilter should be changed whenever the pressure drop has increased by more than 0.5" WG from the last change. The HEPA filter should be changed whenever the pressure drop has increased by over 2" WG from the initial installation reading. The date changed and the pressure reading should be noted on the label attached to the filter box.

Protective gear for changing the filters is the same as for compacting radioactive waste. Remove the prefilter by unscrewing the plate on the back of the filter box, removing the prefilter, and putting in the new one. The main filter is changed by removing the red gaskets from each end and sliding the entire box out. Clean the compactor area thus exposed and install the new filter. Dispose of the filters by putting them in a drum with other radwaste for compaction.

CONTROL NO. 32655