

January 12, 2011

Mr. Michael LaFranzo  
Health Physicist  
U.S. Nuclear Regulatory Commission  
Region III  
Division of Nuclear Materials Safety  
2443 Warrenville Rd., Ste. 210  
Lisle, IL 60532-4352

Dear. Mr. LaFranzo;

Enclosed is a copy of the engineering drawing of the ventilation systems in the Radiosynthesis Laboratory complex at MRI. I have added notations on the drawings to assist you with the orientation of the drawing relative to the actual room numbers. I have also included a layout of the laboratory facility with notations at each lab hood showing the corresponding hood number used on the engineering drawing.

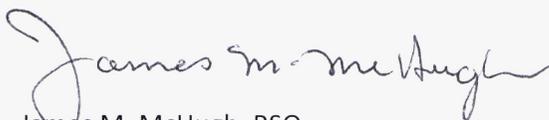
The unit designated as the AHU #1 on the engineering drawing is the HVAC supplying make up air to the laboratory complex. A blue arrow indicates the direction of flow.

The areas highlighted in yellow on the engineering drawing are the locations where the exhaust ducts penetrate the roof and connect with two Camfil Farr bag-in/bag-out gasket-sealed filtration systems. The exhaust air is filtered by a course pre-filter, a HEPA filter, and an activated carbon bed. Magnehelic gauges monitor the static pressure across each filter bank. Disregard the area highlighted in green. It has no significance.

The engineering drawing of the Camfil Farr filtration system is also included. This drawing contains detailed information on the filter media installed in the filter housing.

If you have any questions, please contact me at 816-360-5338 or Eric Jeppesen at 816-360-5378.

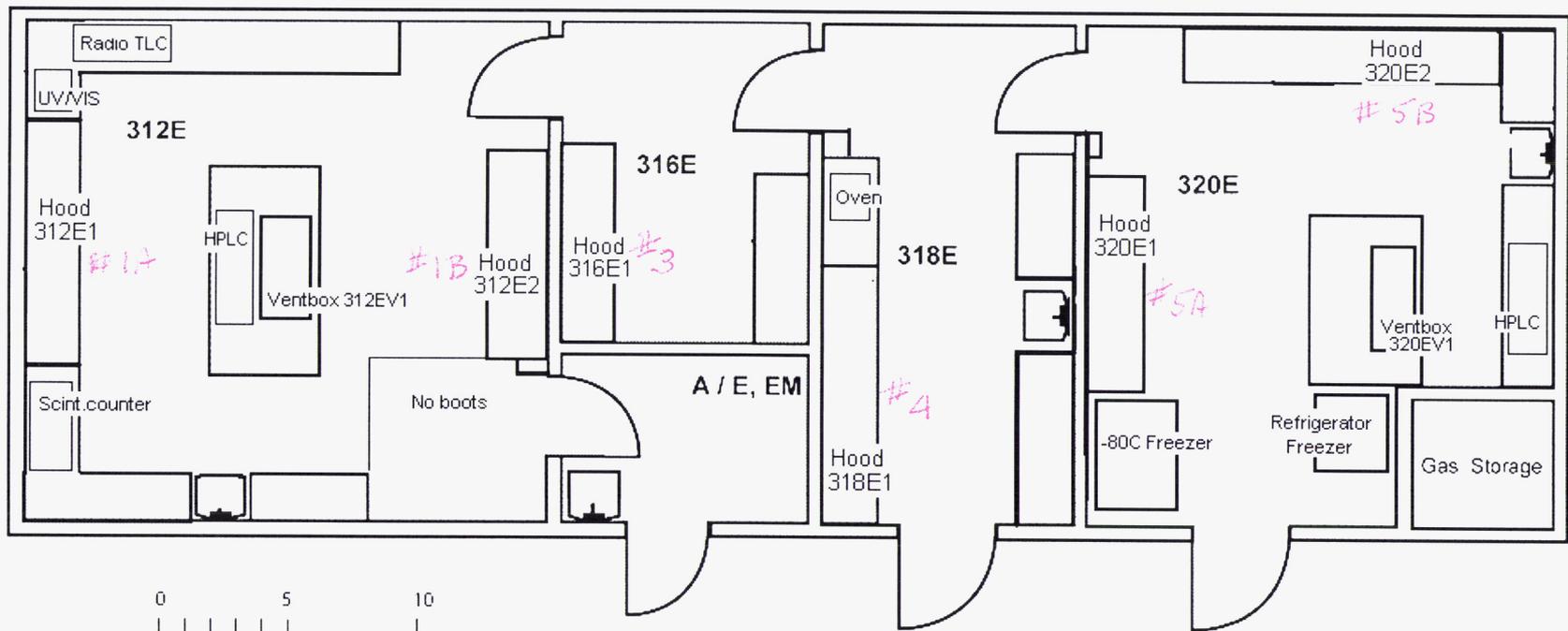
Sincerely;



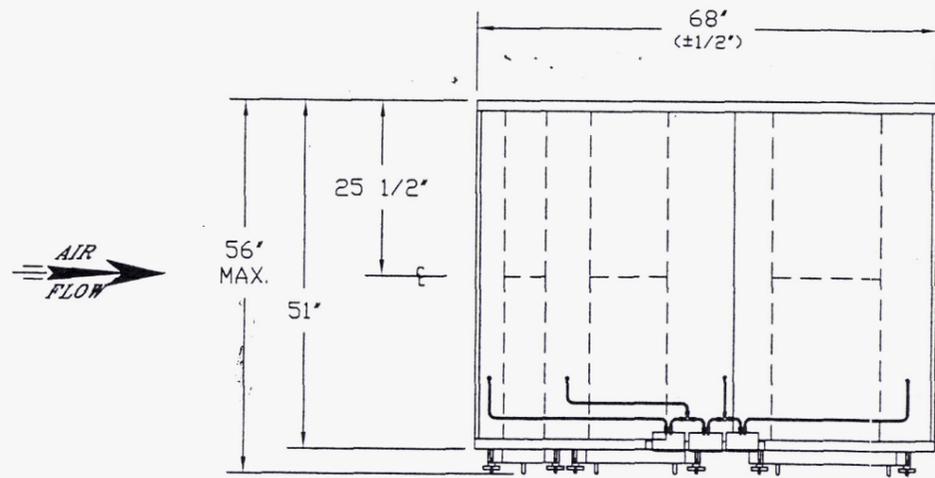
James M. McHugh, RSO  
Senior Advisor  
Environmental Safety & Health Office

RECEIVED JAN 18 2011

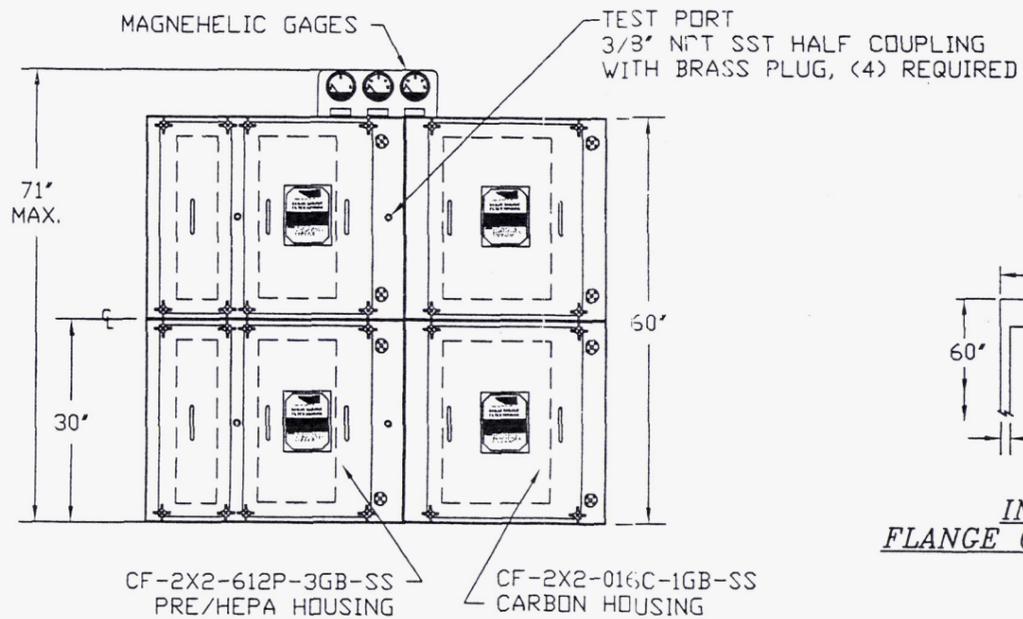
# Radiosynthesis Lab



Wipe sample locations showing >2000 DPM are highlighted on diagram



TOP VIEW



ACCESS SIDE VIEW

SYSTEM INFORMATION

PRE/HEPA HOUSING INFORMATION

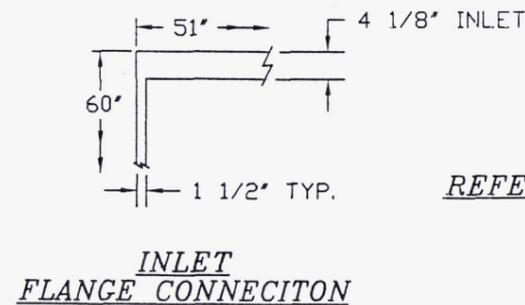
HOUSING MODEL: CF-2X2-612P-3GB-SS  
 QTY. PER SYSTEM: 1  
 ACCOMMODATES: (4) PREFILTERS  
 SIZE: 24"X24"X6" (NOM.)  
 (4) HEPA FILTERS  
 SIZE: 24"X24"X11 1/2"  
 BAG: 64CX72/3G  
 STRAP: 80"  
 BAG: 80CX96/3G  
 STRAP: 100"

GAGE INFORMATION

VENDOR: DWYER  
 MODEL(PRE): 2003  
 RANGE: 0-3" W.G.  
 MODEL(HEPA): 2005  
 RANGE: 0-5" W.G.  
 MODEL(CARBON): 2005  
 RANGE: 0-5" W.G.  
 TUBING: 1/4" COPPER  
 FITTINGS: BRASS

CARBON HOUSING INFORMATION

HOUSING MODEL: CF-2X2-016C-1GB-SS  
 QTY. PER SYSTEM: 1  
 ACCOMMODATES: (4) CARBON ADSORBERS  
 SIZE: 24"X24"X16"  
 BAG: 94CX96/3G  
 STRAP: 120"



INLET FLANGE CONNECTION

GENERAL NOTES

- TWO (2) FILTER SYSTEM REQUIRED, (SHOWN AS RIGHT HAND ACCESS).
- FILTERS ARE SUPPLIED BY CAMFIL FARR.
- INLET DUCT CONNECTION FLANGES SHALL BE A MINIMUM OF 1-1/2" WIDE.
- APPROX. SHIPPING WEIGHT WITHOUT FILTERS: 1,170 LBS. APPROX. SHIPPING WEIGHT WITH FILTERS: 2,145 LBS.
- A MINIMUM OF FOUR (4) FEET OF CLEARANCE IN FRONT OF ACCESS DOOR IS RECOMMENDED FOR FILTER CHANGE-OUT.
- \*DIRECTION OF ACCESS MUST BE SPECIFIED FOR INSTALLATION. TO DETERMINE DIRECTION OF ACCESS, IMAGINE THAT YOU ARE STANDING ON THE UPSTREAM END OF THE HOUSING SO THAT THE AIR FLOW WOULD STRIKE YOUR BACK. IF THE DOOR IS ON THE LEFT, THEN THE UNIT IS LEFT HAND ACCESS, IF THE DOOR IS ON THE RIGHT (AS SHOWN), THEN THE UNIT IS RIGHT HAND ACCESS.



MARK: P.O. # 0425

REFERENCE: MIDWEST RESEARCH INSTITUTE

ACCESS DIRECTION QUANTITIES  
 — UNITS RIGHT HAND  
 — UNITS LEFT HAND

APPROVAL PRINT

- APPROVED
- REVISE AND RESUBMIT

SIGNATURE: \_\_\_\_\_  
 DATE: \_\_\_\_\_

CUSTOMER: JORBAN-RISCOE  
 CUSTOMER LOCATION: \_\_\_\_\_  
 CUSTOMER PO NO.: 425  
 CAMFIL FARR ORDER NO.: 667497

UNLESS OTHERWISE SPECIFIED  
 TOLERANCES ARE:  
 FRACTION: ±1/8  
 DECIMAL: ±0.125



DRAWN BY: JWW DATE: 10/15/04  
 CHECK BY: DATE: 10/15/04  
 APPR. BY: DATE: 10/15/04  
 CAMFIL FARR BAG-IN/BAG-OUT  
 CF-2X2-612P-3GB-016C-1GB-SS  
 GASKET SEAL FILTRATION SYSTEM

REV.	DRAWN BY	DESCRIPTION	CHECK BY	APPR. BY
	DATE		DATE	DATE

THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO CAMFIL FARR AND MAY NOT BE REPRODUCED NOR TRANSMITTED TO OTHER PARTIES WITHOUT THE CONSENT OF CAMFIL FARR

SALES APPR: DATE:

DWG SIZE	DRAWING NO.	SHEET	OF	REV.
B	CB04-0261	1	2	

SCALE: NTS