

**Veterans
Administration**

August 16, 1985

In Reply Refer To: 570/115

U.S. Nuclear Regulatory Commission
Materials Licensing Branch
Washington, D.C. 20555

THRU: James J. Smith, M.D. (115)
Director, Nuclear Medicine Service
Veterans Administration Central Office
Department of Medicine and Surgery
Washington, D.C. 20420

SUBJ: Addendum to Amendment #37 to NRC Biproduct Material License #04-01935-03.

This letter is an addendum to the request for amendment #37 on July 17, 1985, Item No. 5: The differential ventilation rate is -820 cfm (not -380 cfm). This -820 cfm value is found by (1) identifying the supply vents A, B, E, H, K, M, N (see identification sheet and map - attached, obtained from VA Engineering Service), (2) measuring their linear flow rates, (3) calculating the volume flow rates by multiplying the linear flow rates by the respective vent area (see previously submitted Vent Air Flow Rates), (4) summing the supply vent volume flow rate values and (5) subtracting the full open hood volume flow rate from that sum. This results in the differential ventilation rate of $80 + 100 + 220 + 90 + 105 + 100 + 90 = 1605$ equals -820 cfm. This improved ventilation rate differs from the -380 cfm value quoted in the letter of 7/17/85 because vents C and D were mistaken as supply vents while they are vents for internally recirculated (cooled) air. CONCLUSION: Negative air pressure occurs within the Nuclear Medicine facility due to the negative air ventilation rate produced by the hood at full open position.

J. J. MASON
Director

Enclosures (2)

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JAMES J. SMITH, M.D. (115)
Director, Nuclear Medicine Service
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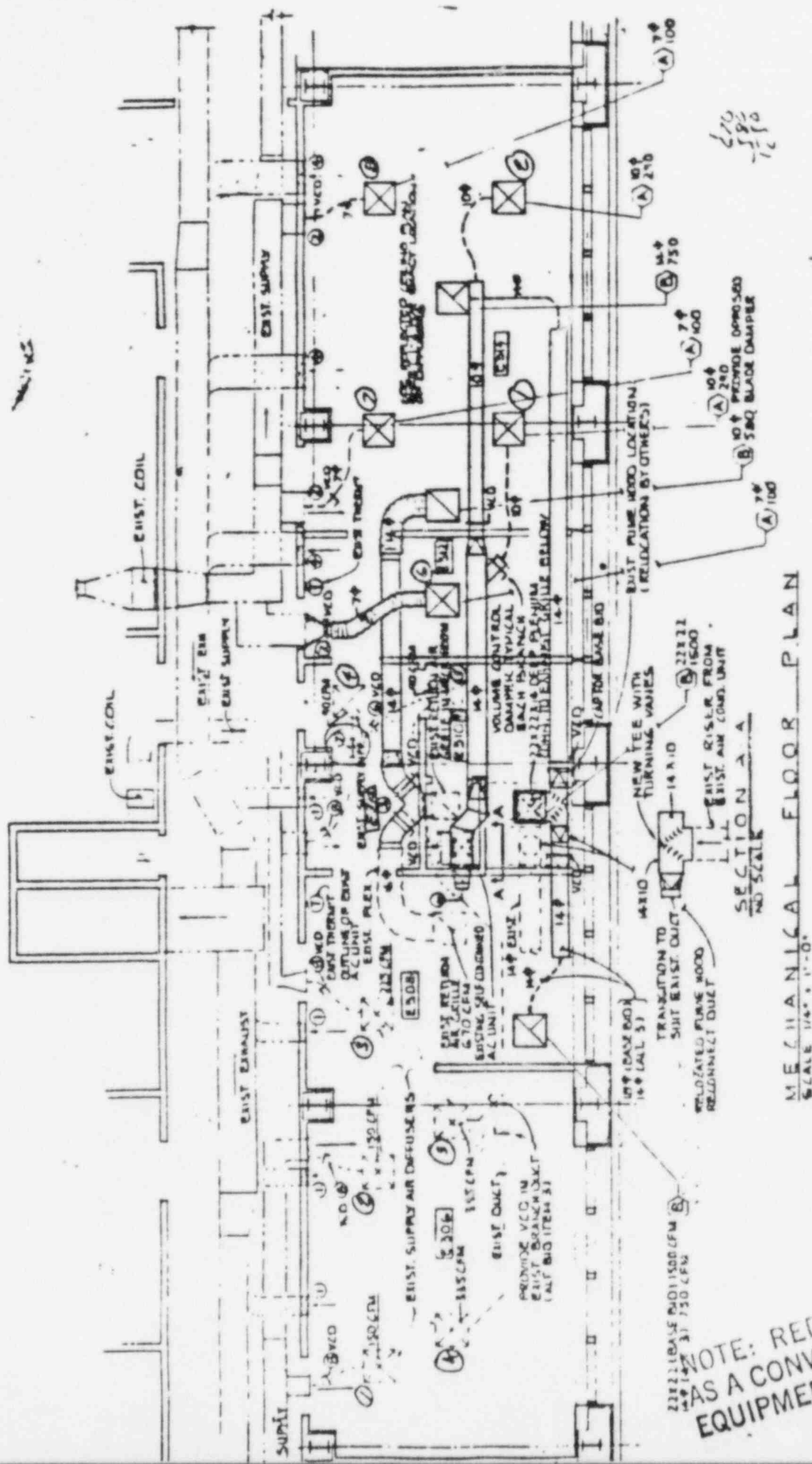
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70233

AIR OUTLET
TEST REPORTPROJECT Vet Admin Hosp - Nuclear Med SYSTEM EXIST SYSTEMSOUTLET MANUFACTURER — TEST APPARATUS Flow Hood

AREA SERVED	OUTLET				DESIGN		PRELIMINARY		FINAL		REMARKS
	NO.	TYPE	SIZE	AK	CFM	VEL	VEL OR CFM	VEL OR CFM	VEL	CFM	
<u>SUPPLY</u>											
<u>Rm# E306</u>	<u>1</u>	<u>EXIST</u>	<u>—</u>		<u>150</u>		<u>80</u>		<u>80</u>	<u>*2</u>	
<u>E306</u>	<u>2</u>				<u>150</u>		<u>100</u>		<u>100</u>	<u>*2</u>	
<u>E308</u>	<u>3</u>				<u>225</u>		<u>220</u>		<u>220</u>		
<u>E310</u>	<u>4</u>				<u>90</u>		<u>110</u>		<u>90</u>		
<u>E310A</u>	<u>5</u>				<u>90</u>		<u>—</u>		<u>—</u>	<u>*1</u>	
<u>E312</u>	<u>6</u>	<u>A</u>	<u>7"φ</u>		<u>100</u>		<u>130</u>		<u>105</u>		
<u>E314</u>	<u>7</u>						<u>100</u>		<u>100</u>		
<u>E314</u>	<u>8</u>				<u>7</u>		<u>80</u>		<u>90</u>		
					<u>915</u>						
<u>Exhaust Hood.</u>											
<u>Rm# 310A 1 Hood 50x28</u>											

REMARKS: *1 THIS OUTLET CONNECTED TO EXIST SELF CONTAINED A.C. UNIT
*2 DAMPER FULL OPENOK'D By FROOK HANSEN VA ENG 2-4-85TEST DATE 3-6-85 READINGS BY JIM KOVEMANN



22821 (BASE 20011500 CFM
147 3) 750 CFM

NOTE: REDUCED DRAWINGS
AS A CONVENIENCE IN LOCAT
EQUIPMENT.

August 15, 1985

TELEPHONE OR VERBAL CONVERSATION RECORD

TIME

☒ A.M.
☐ P.M.☐ INCOMING CALL☒ OUTGOING CALL☐ VISIT

PERSON CALLING

OFFICE/ADDRESS

PHONE NUMBER

EXTENSION

PERSON CALLED

OFFICE/ADDRESS

PHONE NUMBER

EXTENSION

Don Holmes

Consultant / V.A. Fresno

CONVERSATION

SUBJECT

Control No. 70233 - (MS 15)

SUMMARY

• Discussed amendment request dated July 17, 1985.

• It is not clear where the exhaust + return air vents move the air.

Mr. Holmes stated that there is a self-contained air conditioner for the nuclear medicine facility. He will submit more information describing the air flow.

• What areas are described? What are the areas used for? Rooms E306, E308, E310, ~~E312~~ E312, and E314 are shown on the diagram. Uses as noted below:

- E306 - LFOV camera
- E308 - portable imaging unit
- E310 - hot lab
- E312 - treadmill
- E314 - imaging area

REFERRED TO:

ACTION REQUESTED

☐ ADVISE ME OF ACTION TAKEN.

INITIALS

DATE

ACTION TAKEN

INITIALS

DATE

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CONVERSATION

SUBJECT

SUMMARY

- Why did you refer to the August 15, 1983 submittal?
They are using the same number of patients, the same doses, and the same number of views per patient.
- Mr. Holmes will submit further information on air flow. He will show the calculations which verify that the unrestricted ~~area~~ area air concentration limits are met within the nuclear medicine area.

-B.A. Redlinger

REFERRED TO:

ACTION REQUESTED

☐ ADVISE ME OF ACTION TAKEN.

INITIALS

DATE

ACTION TAKEN

INITIALS

DATE