

UNIVERSITY OF ILLINOIS AT CHICAGO RADIONUCLIDE LABORATORY FUME HOOD SURVEY

Room _____ Building _____ Date _____ Time _____ AM/PM Surveyor _____

Radiation Project Number (s) _____ Reviewed By _____

Project Director (s) _____

Velometer: Alnor Velometer Jr., Model 8100 Serial Number: UIC-1 UIC-2 UIC-3

Alnor Thermo Anemometer, Model 8525 Serial Number: 9886

Other: Make _____ Model _____ Serial Number _____

Fume hoods in radionuclide laboratories must be tested for proper operation at annual intervals to satisfy IDNS regulatory requirements. Fume hoods in newly established radionuclide labs are tested when the lab is being authorized and fume hoods in existing laboratories are tested during the third calendar quarter each year. In addition to the test performed by Radiation Safety, a Physical Plant contractor surveys the hoods once each year to determine the sash height required to obtain a face velocity of 100 FPM. The Radiation Safety Section's testing is performed to verify the hood is operating as indicated on the Physical Plant test and is acceptable for use with radioactive materials.

HOOD NUMBER	INSPECTION RESULTS							
	FACE VELOCITY (FPM)	ALL OK	NOT OK	CIRCLE THE CORRECTIVE ACTION (S) (EXPLAINED BELOW)				
		[]	[]	1	2	3	4	5
		[]	[]	1	2	3	4	5
		[]	[]	1	2	3	4	5
		[]	[]	1	2	3	4	5
		[]	[]	1	2	3	4	5
		[]	[]	1	2	3	4	5

CORRECTIVE ACTIONS:

If *ALL OK* is checked, radioactive material may be used in a properly labeled hood. If *NOT OK* is checked, radioactive material may not be used in the hood and the indicated corrective action should be taken. Refer to the following list of recommendations:

1. The fume hood is not operational. **DO NOT USE** radioactive material or any other hazardous material in this hood. Contact Heat, Light and Power (Physical Plant) at 6-7180 to request hood adjustment or repair. Newly repaired hoods must be resurveyed by Physical Plant's fume hood inspection contractor before use.
2. The face velocity is below 80 FPM, inadequate for use with radioactive material. Do not use radioactive material in this hood. Contact Heat, Light and Power (Physical Plant) at 6-7180 to request hood adjustment or repair. Newly repaired hoods must be resurveyed by Physical Plant's fume hood inspection contractor before use.
3. The face velocity is able 150 FPM. Excessive turbulence may eject hazardous materials from this hood. Do not use radioactive materials in this hood. Contact Heat, Light and Power (Physical Plant) at 6-7180 to request hood adjustment or repair. Newly repaired hoods must be resurveyed by Physical Plant's fume hood inspection contractor before use.
4. At the time of this survey, this fume hood was not designated for radioactive material use.
5. Other: _____

INSTRUCTIONS TO SURVEYOR:

- 1) Observe whether the hoods in the lab are numbered. If not, locate the fume hood closest to the door on the left hand side as you enter the room and affix a label identifying it as hood number 1, then proceed to the right in a clockwise manner until all fume hoods have been labeled.
- 2) Enter the corresponding hood number (s) on the *Radiation Survey Report* sketch.
- 3) Review the *University of Illinois at Chicago Laboratory Fume Hood Survey* report posted on the hood and set the vertical or horizontal sash as indicated to obtain a face velocity of 100 FPM. Make a note in the comments section below if no survey report is present or if the report does not indicate the hood is approved for use with radioactive material.
- 4) Set velometer range to LO (W) (0-200 FPM Scale) for the Alnor Velometer Jr. Model 8100. Cover the inlet and outlet holes on the side of the velometer and verify that the meter reads zero. If not, continue to cover the holes and adjust the screw on the front of the velometer.
- 5) Place the velometer on the lower ledge in the center of the hood opening. Orient the velometer to obtain the maximum face velocity. Record the face velocity in the appropriate column. Record the actual numerical value. Note: Acceptable face velocity is between 80 and 150 FPM.
- 6) Enter the appropriate numerical value in the database lab survey results from:
 - SURVEYED
 - NOT SURVEYED
 - NO HOOD
- 7) Submit this fume hood survey to your supervisor with the *Radiation Survey Report*. After review, file the original or a copy of this survey with each *Radiation Survey Report*. Attach a copy of this survey to each corresponding *Radiation Survey Report* and mail them to each Project Director listed on the *Radiation Survey Report*.