



Subject: **INDUSTRIAL HYGIENE PROGRAM**

Policy No. 117

APPLICATION

All New York University academic, commercial and residential facilities.

PURPOSE

This policy is for the recognition, evaluation, and control of Industrial Hygiene [IH] related problems or compliance. It contains information on environmental control, personal protective equipment, and toxic or hazardous substances as required by the OSHA standards as well as methods and forms to use for conducting IH investigations.

POLICY AND GENERAL INFORMATION

1.0 Ventilation

- 1.1 Laboratory facilities will be provided with adequate fume hood ventilation for the dispensing of hazardous and potentially hazardous chemical. Each lab area will have adequate room ventilation per Design Engineer's specification.
 - 1.1.1 The average face velocity of fume hoods will be between 80 - 150 feet per minute [fpm]. Above 150 fpm is unacceptable for laboratory use.
 - 1.1.2 Hoods will be monitored annually. After the performance survey, a report will be submitted to the Lab Safety Officer.
 - 1.1.3 Measurements will be recorded on a sticker and placed on the front of the hood.
 - 1.1.4 Hoods that have a constant readout may be excluded from the annual monitoring. All hoods are to be checked annually with a meter with calibration traceable to the National Institute of Standards and Technology [NIST].
 - 1.1.5 If additional hood monitoring is necessary, a ventilation specialist maybe contracted.
 - 1.1.6 Any hood, which does not flow within 10% of its set point with a sash opening of at least 18", will be taken out of service until repaired. The hood will be tagged with a caution sticker indicating that it is unacceptable for use with hazardous materials.
 - 1.1.7 The lab safety officer will be responsible for coordinating the hood repairs. After the hood has been serviced, ES will be contacted to perform another survey on the lab hood.

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- 1.1.8 Laboratory personnel are to be instructed to keep hoods clear of clutter, which would cause disruption of airflow into the hood and therefore compromise protection from hazardous vapors.
- 1.1.9 Building Manager must be notified immediately if lab personnel observe that the fume hood is not working appropriately.
- 1.1.10 Fume hoods must never be turned off by NYU or outside vendors without first obtaining approval from the lab director in the effected area. This is to ensure the safety of the lab personnel working with hazardous or potentially hazardous chemicals.
- 1.2 All spray or brush finishing operations will be enclosed or confined and will be located in accordance with NFPA No. 33-1969 (Standard for Spray Finishing Using Flammable and Combustible Materials).
 - 1.2.1 These areas are to be designed and constructed in accordance with sections 29CFR 1910.107.
 - 1.2.2 All spray or finishing rooms, including floors, will be constructed of masonry, concrete or other noncombustible material and have noncombustible fire doors and shutters.
 - 1.2.3 Substitution of noncombustible material will be used when feasible.
 - 1.2.4 Local exhaust hoods will be adequate for the operations and will be tested annually for capture velocities between 100fpm to 150fpm depending on the hazard of the material being used in the operation.
- 1.3 Blasting or abrasive operations must have local exhaust to maintain the concentration of respirable dust or nuisance dust in the breathing zone of the abrasive-blasting operator [or any other worker in the area] below the levels specified in 29CFR1910.1000.
- 1.4 All fume hood and local exhaust test reports and/or forms will be maintained in the IH files of ES.
- 2.0 Occupational Noise
 - 2.1 A written Hearing Conservation Program [HCP] has been developed and implemented [see NYU Policy No. 114]. The responsibilities and procedures set in this policy will be followed to ensure compliance with 29CFR1910.95.
 - 2.2 Hearing protection will be provided when needed or required [noise levels \geq 85 dBA], engineering and administrative controls will be provided, individuals in the HCP will be given annual audiometric testing and training.
 - 2.3 Noise measurements will be made upon request to Environmental Services [ES]. If the area has been evaluated, measurements will be performed when changes are made in the process or for equipment changes/repairs.
 - 2.4 Noise measurements are to be recorded on a Noise Survey Form and maintained in the IH Files [see Appendix A].

3.0 Personal Protective Equipment

- 3.1 Hazard assessments will be performed under the guidance of ES to determine the need and type of protective equipment needed for a particular work area or task. Proper and adequate equipment will be selected and required for use by an occupational health professional in ES.
- 3.2 A written Use and Selection of Personal Protective Equipment Policy has been developed and implemented [see NYU Policy No. 112]. The responsibilities and procedures set in this policy will be followed to ensure compliance with 29CFR1910.132-136, 138.

4.0 Bloodborne Pathogens

- 4.1 A written Bloodborne Pathogen Exposure Control Program has been developed and implemented [see NYU Policy No. 110]. Responsibilities and procedures set in this policy will be followed to ensure compliance with 29CFR1910.1030.
- 4.2 ES will review and evaluate the program annually. The program will be updated for effectiveness and training will be performed as necessary.

5.0 Hazard Communication

- 5.1 A written Hazard Communication Program has been developed and implemented [see NYU Policy No. 107]. Responsibilities and procedures set in this policy will be followed to ensure compliance with 29CFR1910.1200.
- 5.2 ES will review and evaluate the program annually. The program will be updated for effectiveness and training will be performed as necessary.

6.0 Chemical Hygiene and Lab Safety

- 6.1 A written Chemical Hygiene Plan has been developed and implemented [see NYU Policy No. 108]. Responsibilities and procedures set in this policy will be followed to ensure compliance with 29CFR1910.1450.
- 6.2 ES will review and evaluate the program annually. The program will be updated for effectiveness and training will be performed as necessary.

7.0 Monitoring for Hazardous Chemicals

- 7.1 Initial monitoring will be performed for employee exposure if reasons indicate exposure levels exceed the action level as given by the OSHA limits set in 29CFR1910.1000 or a chemical specific standard [e.g., Formaldehyde]. Other recommended standards [i.e., ACGIH Threshold Limit Values (TLV), etc.] will be considered if more conservative.
- 7.2 The chemical inventory will be reviewed annually by ES to determine a monitoring schedule of all hazardous chemicals in quantities of concern.
- 7.3 A monitoring plan will be developed and the following procedures will be implemented:
 - (a) A matrix will be established which includes the list of chemicals to be monitored, departments or facilities and areas or employees in worst-case scenarios.

- (b) The occupational health professional in ES will obtain a validated method for Monitoring the chemical(s), appropriate monitoring equipment and an AIHA certified lab for the analysis.
- (c) Monitoring data will be documented on the NYU Industrial Hygiene Monitoring form [see Appendix B] and kept in the IH files with the chemical monitored.
- (d) Samples will be taken at least over a three-day period, which may or may not run concurrently. However, the area or employee must be monitored for three full days [~360 minutes per day] for an 8-Hr TWA and 15 minutes for a STEL or Ceiling for that chemical. The STEL or Ceiling can be obtained within those days and taken during the highest exposure potential [i.e., sampling, pouring, or any viable contact or exposure].
- (e) If a specific standard has both a PEL 8-Hr TWA and a 15-Min. STEL, both must be obtained for compliance to the OSHA standard. If a particular chemical only has a Ceiling or STEL then the sampling period will be for 15- minutes.
- (f) The samples will be shipped overnight to the lab. If sampling takes three weeks or longer, the samples must be stored or refrigerated according to the method used, or they can be shipped immediately for analysis.
- (g) Results of the analysis must be sent to the employee who was monitored, within 15-days after the receipt of the results by ES. A “Results of Analysis Form” [see Appendix C] will be sent by e-mail or fax to the department head who will then be responsible for giving the results to the employee.
- (h) A formal report will be sent to management after all three days of sampling for a particular area or job function has been completed, that includes a summary, scope, results and conclusions as well as a table of the results.
- (i) ES will maintain all monitoring forms and results for thirty years as required by OSHA.

8.0 Qualitative Exposure Evaluation

- 8.1 All chemicals and substances do not have validated monitoring methods or established exposure limits. Thus for these chemicals or substances air monitoring may not be performed.
- 8.2 Instead, if the task warrants evaluation, a qualitative exposure evaluation will be performed for the task. The information obtained during the evaluation will be documented on a Qualitative Exposure Evaluation form [see Appendix D] and maintained in the IH files.

9.0 Appendices

- Appendix A - Noise Survey Form
- Appendix B - Industrial Hygiene Monitoring Form
- Appendix C - Results of Analysis
- Appendix D - Qualitative Exposure Evaluation Form