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Sheriff

HARFORD COUNTY SHERIFF'S OFFICE ADMINISTRATIVE POLICY

Respiratory Protection

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1. Purpose

To establish and implement the Harford County Sheriff's Office (HCSO) Respiratory Protection Program (RPP) for guarding employees from exposures to toxic contaminants or conditions involving potentially dangerous atmospheres.

2. Policy

To follow the legal and regulatory compliance requirements of Occupational Safety & Health Administration (OSHA) 29 CFR 1910.134, together with American National Standards Institute (ANSI) guidelines and all clarifying information.

3. Definitions

FIT-TESTING: when using qualitative tests, isoamyl acetate requires organic vapor cartridges, and irritant smoke requires a high-efficiency filter. Quantitative tests use high-efficiency filters for small particulate oil mists or a particulate filter for large particle oil mists. A test protocol selected to be used in fit testing, as explained in the 1999 CFR 1910.134, requires the respirator wearer to perform a series of head and facial movements that are designed to check the effectiveness of the respirator seal. These procedures involve movements such as regular and deep breathing, moving head up and down, side to side, and counting or reading while the respirator seal is being challenged by a specific contaminant. The detection of any leak signals a test failure. Facial hair is recognized as a serious problem which interferes with a respirator's fit. ANSI and OSHA regulations prohibit the testing of individuals not clean-shaven in the areas of the face-to-facepiece seal. Other factors that are recognized to be a potential cause of respirator leaks may be problems with facial scars, dentures, bone structure, or changes in bodyweight of the wearer, gain or loss. These conditions may be corrected by using a different model or size of a respirator followed by refit testing.

RESPIRATOR TRAINING: training must include precautions in the following areas:

Mechanics of breathing information should prepare the respirator wearers for increased physical efforts due to added exertion when performing work tasks while using a respirator or a self-contained breathing apparatus. Respiratory hazards should be explained to emphasize the difference between oxygen deficiency and contaminants as requiring supplied-air or air-purifying respirators. Respirator selection must consider all of the potential contaminants in specific work operations to assure protection based on the NIOSH Approval Label which specifies restrictions or limitations for safe use. The nature of anticipated exposures, whether acute, chronic or both, should include warnings about what could happen if respiratory protection is not used properly and how to recognize symptoms of problems. Fitting instructions must include regular inspection of all parts of a respirator, how to put it on, adjusting the fit, performing both negative and positive fit-checks, and any other precautions as needed. Limitations of all respirators should be stressed, with attention to procedures for adequate cleaning, sanitizing, drying and storage methods as necessary to have the equipment ready to perform when needed and repair if necessary. The different types of cartridges, air tanks, harnesses, or

attachments for all respiratory protective equipment should call attention to the use of color codes or other safeguards plus techniques practiced in assembling and inspecting all gear before and after each use. Careful monitoring of any difficulties or problems should be given special priority to be referred for corrective action.

4. References

Occupational Safety & Health Administration (OSHA) 29 CFR 1910.134

Federal OSHA regulations, Respiratory Protection Final Rule of January 8, 1998, re-printed in the July 1, 1999 CFR, applies to both 29 CFR 1910 and 1926, 14 sections and 4 Appendixes

ANSI Standard Z88.2-1992 and 1980 "Practices for Respiratory Protection", eleven sections with Tables and Appendix, control documents to assist enforcement.

"Effect of Facial Hair on The Face Seal of Negative Pressure Respirators", AIHA Journal, 1/84.

"There's More to Respirators Than Meets the Eye" by John F. Rekus, Consultant on Safety and Occupational Health training, formerly with Maryland OSHA, published in Occupational Safety & Health, 10/89.

"Effect of Facial Hair on Respirator Performance", AIHA Journal, 4/73.

Court Decisions Supporting Facial Hair Policies, BNA OSH Reporter, 1/83 and 6/84.

U.S. Dept. of Labor, clarification of 29CFR 1910.134 (e) (5), citing the "employer's responsibility" to assure a respirator-fit with an adequate seal by requiring a clean-shaven policy, explaining that a failure to enact this requirement is an OSHA violation, 1/79.

Position Paper "Facial Hair," AIHA Respiratory Protection Committee citing three support references, 1973 and 1980.

"Employee Facial Hair Versus Employer Respirator Policies," Applied Industrial Hygiene Vol.2, No. 5, 9/87.

ANSI Standard Z88.6-1984 "Respirator Use – Physical Qualifications," Explanations for all medical approval requirements, 7 sections with 3 Appendixes.

5. Procedures

A. Scope

1. These procedures apply to all units and divisions, which may require the use of the following types of respiratory protective equipment (RPE):
 - a. Any type of dust-mask respirator;
 - b. An air purifying, negative-pressure, canister-type, either half-mask style or full facepiece respirator;
and
 - c. Self-contained breathing apparatus (SCBA) required for use in oxygen-deficient or hazardous atmospheres.

B. General

1. All units and divisions will adhere to the program when protection from the presence of certain toxic contaminants or potential hazards necessitates the use of respiratory equipment, including routine and non-routine operations, transitional or emergency conditions.

C. Responsibilities

1. HCSO employees will not be permitted to wear specialized respiratory equipment or perform work that requires its use unless all safeguards addressed in this program are covered.
2. The **Safety Officer or designee** are responsible for the development, implementation, maintenance, and evaluation of the HCSO RPP. In this capacity they will:
 - a. Regularly confer with employees assigned to use respirators to consider their opinions on program effectiveness and to address any problems;
 - b. Assist all units in the effective management of written respiratory protection programs designed for specific tasks involving toxic or other potentially harmful contaminants;
 - c. Review and approve any standard operating procedures (SOP's) for respirator use to check the appropriate selection of the required safety equipment;
 - d. Provide guidance to the health services contractor regarding Federal OSHA and ANSI requirements for physical examinations of Sheriff's Office employees who regularly wear respiratory protection in order to obtain the required medical approval;
 - e. Provide fit-testing examinations and explain fit-check procedures necessary for the protection of those who wear negative-pressure respirators;
 - f. Consider effect on workplace performance, while addressing respirator fit;
 - g. Evaluate results of training to cover instructions and safety measures for operators who wear the appropriate respirators;
 - h. Order prescription eyewear attachments, for inside full-face respirators, to add protection for those employees who normally wear prescription eyeglasses or contact lenses;
 - i. Perform periodic inspections to assure that all respirators are correctly used, cleaned, maintained, and stored according to OSHA regulations; and
 - j. Assist in updating programs as required by new regulations or changes in operations.

D. Unit/Division Supervisory Responsibilities

1. All work operations must be evaluated for hazards to determine the proper respiratory protection equipment. Consult with the **Safety Officer** on whether the respirator to be used in an adequate safeguard.
2. Job descriptions, developed by the Human Resources Director (HRD) together with the units involved, must specify those classifications requiring the use of a respirator and whether the respirator is used regularly or occasionally.

3. Compliance with mandatory respiratory safeguards must be enforced by supervision to cover important precautions, including the OSHA requirement for respirator wearers to be clean-shaven at the respirator contact points, in order to assist the face-to-face piece seal which guards against the entry of contaminants.

E. Employee Responsibilities

1. All HCSO employees who wear specialized respiratory protection equipment must carefully follow the qualifying conditions and the safety guidelines of this program.
2. Respirator wearers must notify supervision immediately of conditions which may affect their ability to achieve adequate personal protection or any change in the fit of a respirator facepiece.
3. Since a tight seal of a respirator is vital to health protection, every wearer must be clean-shaven at the respirator contact points and always perform the proper fit checks every time a respirator is used.
4. Medical Approval
 - a. Federal OSHA regulations require physical examinations to qualify individuals for the following reasons:
 - i. Negative-pressure air-purifying respirators increase breathing resistance;
 - ii. Extra weight of RPE or an SCBA adds to the physical burden on the wearer and increases stress during work operations or emergency situations;
 - iii. Existing respiratory conditions or special health problems can greatly reduce a worker's ability to wear a respirator; and
 - iv. Certain health conditions are especially hazardous to overall safety in prolonged respirator use.
 - b. Medical approval following a physical examination is mandatory for those job classifications requiring the regular use of a respirator, as follows:
 - i. Pre-employment for proper job placement; and
 - ii. Annually or as required for designated job classifications.
 - c. The HCSO occupational health services contractor, following job task information provided by Human Resources, will determine the physical qualifications necessary for a worker to safely wear a respirator.
 - d. Guidelines to assist in determining the medical approval for wearing a respirator are provided by using the questionnaire required by The Federal Register of January 8, 1998, Respiratory Protection Final Rule, as well as using ANSI Z88.6 1984 (Physical Qualifications for Respirator Use), now in 29 CFR 1910.134.
 - e. A specific questionnaire is mandatory by federal regulations to be filled out by an employee required to wear a respirator and maintained as confidential by the health care provider.
 - f. After a physical examination and reviewing all information, a physician or other licensed health care professional will provide a decision on respirator use with either:

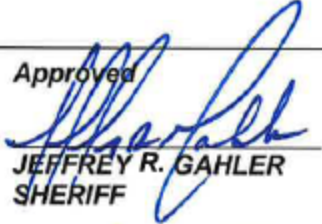
- i. No Restrictions;
- ii. Specified Restrictions, noting duration of restrictions; or
- iii. Not Approved, and as required, will notify the employer (CFR 1910.134 Appendix C).

F. Fit-Testing Procedures

1. The effectiveness of fit-test methods depends on setting pre-determined and measurable conditions for checking the face-to-face piece seal of a particular make and model of a respirator to be worn by an individual.
2. A respirator fit-test will be carried out for each wearer of a negative-pressure respirator before issuance and at least annually. Respirator fit-testing for positive-pressure respirators will use canister-equipped facepieces of the same type to determine the appropriate size for the wearer.
3. The following factors must be considered by the **Safety Officer or designee** to decide which specific fit-test would be most appropriate based on current information:
 - a. What air contaminants are expected to be encountered;
 - b. The proper respirator to be used for protection; and
 - c. The type of filter or cartridge necessary for the test.

G. Respirator Wear and Training

1. All individuals who will be required to wear respirators for protection against toxic contaminants or harmful atmospheres must be adequately trained in the safe use of the equipment.
2. Written records of all respiratory protection training classes will be maintained at the Training Academy citing the names of all those in attendance, the instructor and dates of classes, plus information about topics included and types of respirators to be used.
3. Written records of all respirator fit tests will be kept for the duration of employment of each individual required to wear a respirator. Each fit-test record will include the type of fit-test used, make and model of the respirator, name of the person tested, name of the test operator, date of the test, and the results.

Approved

JEFFREY R. GAHLER
SHERIFF
DATE 2-3-2022