City of Kalispell RESPIRATOR PROTECTION POLICY

October 12, 2015

A. Executive Summary and Introduction

- 1. Annual fit test is required for all employees who will be required to wear a respirator as a part of a job.
- 2. Employees must be clean-shaven if wearing a respirator.
- 3. Employees are responsible for cleaning their own respirator.
- 4. Supervisors are responsible for ensuring their employees have a current fit test and are clean shaven when wearing their respirator
- 5. This program is designed to provide information and instruction on the proper use, care, inspection, cleaning, repair and storage of respirators. It is to be read and implemented in conjunction with applicable OSHA standards including 29 C.F.R. §1910.134 (respiratory protection), and any other OSHA standard regulating the use of respirators which may apply to our work conditions and practices. Although the OSHA standard is part of the general industry standards, it has been designated by OSHA as applicable to construction work and therefore applies to both general industry and construction.
- 6. We have established a respiratory protection program in order to coordinate the use and maintenance of respiratory protective equipment and to:
 - a. reduce employee exposure to toxic chemical agents, and
 - b. allow employees to work safely in hazardous work environments.
- 7. Each employee who has been issued a respirator and each respirator wearer, must be aware of the need to observe the provisions of the program.
- 8. Whenever any employee becomes aware of a problem or potential trouble of any kind related to respirator use, he or she must notify his or her supervisor at once.
- 9. If, at any time, there is something in this program or anything about the respirator or its use that is not understood, or anything an employee wants to have further explained, he or she must immediately notify his or her supervisor. That supervisor must then see to it that the employee is provided with the necessary instruction, training, information or protection.
- 10. Note: This policy does not apply to Kalispell Fire or Police Departments as they have their own established protocols.

B. Administration

- 1. The Human Resources Department (HR) has been designated as having the oversight for this respiratory protection program.
- 2. HR has authority to make decisions and implement changes in our respirator program when necessary. They will have the following oversight:
 - a. Of respirator selection procedure;
 - b. Establishment of respiratory equipment training programs for employees;

- c. Establishment of a continuing program of cleaning and inspection of respiratory equipment;
- d. Designation of proper storage areas for respiratory equipment;
- e. Establishment of issuance and accounting procedures for uses of respiratory equipment;
- f. Establishment of medical screening program/procedures for employees assigned to wear respiratory equipment;
- g. Establishment of a periodic inspection schedule of those workplace/conditions that require respiratory equipment in order to determine exposure and/or changing situations;
- h. A continuing evaluation of the above aspects to assure their continued function and effectiveness;
- i. Regular inspection and evaluation of the Respiratory Protection Program in order to determine its continued effectiveness.
- j. Keeping advised of all applicable OSHA respiratory protection requirements and advising affected supervisors and employees thereof as necessary.
- 3. Each department, who will have employees using respirators, will appoint an individual to monitor, administer the program within their department and coordinate with the HR department to assure compliance with the program.
- 4. Any employee who has questions or problems with respirators or their use must notify his supervisor immediately. If such supervisor cannot resolve the question or problem, they will refer the matters to the person in charge of our respirator program.
- 5. All supervisors will maintain continued surveillance of work conditions in all places where employees for whom they are directly responsible as well as employee exposures and stress (combination of work rate, environmental conditions and physiological burdens of wearing a respirator) in order to determine if any additions to, or changes in, respirator use requirements are needed.
- 6. The supervisor of each respirator wearer is responsible for ensuring that the appropriate face piece fit test has been conducted, that the result of such test has indicated a proper fit, and that the fit test is current.

C. Use of Respirators

- 1. It is mandatory that employees wear the appropriate respirator when working where there contains regulated substances in concentrations exceeding the permissible exposure limit (PEL), and whenever there is potential exposure to a contaminant substance for which its safety data sheet (SDS), prescribes respirator use.
- 2. This respirator program, the instructions accompanying the respirator, the applicable OSHA regulations and the precautions stated in the SDS for each of the substances being protected against must be observed by each user of a respirator.
- 3. No employee will perform a job that requires respirator use, or be present at any place where respirators are necessary unless all provisions of this Respirator Program are observed.

- 4. Any employee performing such a job, or present in such a place, who is wearing a respirator must immediately cease his work, leave the area, and report the matter to his supervisor whenever any one of these conditions exists:
 - a. dizziness, difficulty in breathing, or other physical stress or disorder;
 - b. damage to or ineffectiveness of the respirator being worn;
 - c. the smell or taste of any contaminant, or any unfamiliar smell or taste or other
 - d. sensation that troubles or concerns any employee, or
 - e. lack of the respirator training and instruction required under this Program, or
 - f. the absence of any other requirement of this Program.
- 5. Changes in operating procedures, temperature, movement of air, humidity and work practices may influence the concentration of a substance in the work area atmosphere. These factors may necessitate periodic monitoring of the air contaminant concentration. If testing is undertaken, it should continue in order to assure that the contaminant exposure has not risen above the maximum protective capability of the respirators being used.
- 6. Employees using self-contained breathing apparatus or supplied-air respirators in confined spaces, where the air is or may be immediately dangerous to life or health, must wear safety harnesses and lifelines. A second person equipped with complete protective gear must be standing by ready to help if the first worker gets into trouble. Communication (visual, voice, or signal line) must be maintained with all persons present. Precautions must be taken so that in the event of an incident, at least one person will be unaffected and have the proper rescue equipment to be able to assist the others in an emergency situation.
- 7. Whenever there is evidence of employee exposure to toxic substances while wearing a respirator, it will be followed-up with appropriate surveillance of work area conditions to determine if there is any relationship to inadequate respiratory protection, or a need for additional or other kinds of controls.
- 8. All individuals who are assigned to wear respiratory protective equipment will be provided respiratory protective equipment for their exclusive use.
- 9. Each respirator user must receive fitting instructions including demonstrations and practice on how the respirator should be worn, adjusted, and how to determine if it fits properly.
- 10. Although respirators are designed for maximum efficiency, they cannot protect the wearer without a tight seal between the face piece and wearer. Beards and other facial hair can substantially reduce the effectiveness of a respirator. All areas that come in contact with the face piece seal must be clean shaven and free from hair. Beards or hair cannot interfere with respirator valves.
- 11. The absence of dentures can seriously affect the fit of a face piece. To assure proper protection for a face piece, it must be checked by the wearer each time he or she puts on the respirator.
- 12. Corrective glasses worn by employees also present a problem when fitting respirators. Special mountings to hold corrective lenses inside full face pieces are available. If

- corrective lenses are needed, the face piece and lenses must be fitted by a qualified individual to provide good vision, comfort and proper sealing.
- 13. Contact lenses should not be worn while wearing a respirator in a contaminated area. Foreign bodies or contaminants that penetrate the respirator may get into the eyes and cause severe discomfort causing the wearer to remove the respirator.
- 14. Full face pieces and half-masks have different fitting characteristics. Of the several brands of styles marketed, each has a different size and fitting characteristic; no respirator will fit everyone.
- 15. Any employee who finds that they cannot obtain a proper fit with his or her respirator must notify their supervisors immediately.
- 16. Upon learning of any respirator's improper fit, the supervisor will not permit the employee to work in any area where respirators are required until the employee is equipped with a proper fitting respirator.
- 17. The effectiveness of the face piece fit of a respirator can be tested two ways qualitatively and quantitatively.
 - a. Qualitative fit testing involves the introduction of a harmless, odorous or irritating substance into the breathing zone of the wearer. Not detecting the substance indicates a proper fit.
 - b. Quantitative fit testing provides detailed information on respirator fit. While the wearer performs exercises that could induce face piece leakage, the air inside and outside the face piece is measured for the presence of particles.
- 18. All employees in the respirator program must have an annual fit test.

D. Selection of Respirators

- 1. Choosing the right respiratory protection equipment involves several steps:
 - a. Determining what the hazard is and its extent;
 - b. Choosing equipment that is certified for the function; and
 - c. Assuring that the device is performing the function it is intended to do.
- 2. Proper selection of respirators must be made according to the OSHA requirements as set forth in 29 C.F.R. §1910.134c .
- 3. Chemical and physical properties of the contaminant, as well as the toxicity and concentration of the hazardous material and the amount of oxygen present, must be considered in selecting the proper respirators.
- 4. The nature and extent of the hazard, the work rate, the area to be covered, mobility, work requirements and conditions, as well as the limitations and characteristics of the available respirators, also are selection factors that must be considered.
- 5. Although there are many kinds of breathing equipment that are used for protection, there are two basic types; air purifying and atmosphere-supplying respirators:
 - a. Air-purifying Respirators are designed to remove harmful substances from the air.
 - (1) They range from simple disposable masks to sophisticated positive pressure, blower-operated respirators.

- (2) Air-purifying respirators may not be used in an oxygen deficient atmosphere or under immediately dangerous to life or health conditions.
- b. Atmosphere-supplying Respirators are designed to provide air from a clean source outside of the contaminated work area. They range from air-line respirators, self-contained breathing apparatus (SCBA) to complete air-supplied suits.
- 6. The time needed to perform a given task usually determines the length of time for which respiratory protection is needed, including the time necessary to enter and leave a contaminated area.
- 7. A SCBA, gas mask or chemical-cartridge respirator provides respiratory protection for relatively short periods, while the air-line respirator provides protection for as long as the face piece is supplied with adequate respirable air.
- 8. Particulate-filter respirators can provide protection for long periods without need of filter replacement only if the total atmospheric particulate concentration is low.
- 9. For protracted periods of use, air-line respirators offer the advantage of longer use in high dust loading areas and avoid the need to be concerned about the sensory warning properties of the airborne toxic materials. Those respirators also cause less discomfort than air-purifying respirators because the wearer need not overcome filter resistance in order to inhale.
- 10. Some type of warning on remaining service life is available for all SCBA. It may be a pressure gauge or timer with an audible alarm for SCBA. The respirator user must understand the operation and limitations of each type of warning device. Most other chemical-cartridge respirators have no indicator of remaining service life. Therefore, it is important cartridges be changed according to the manufacturer's directions.
- 11. Air-purifying respirators present minimal interference with the wearer's movement. Supplied-air respirators with trailing hoses severely restrict the area the wearer can cover and present a potential hazard where the trailing hose can come in contact with machinery. A self- contained breathing apparatus unit that includes a back-mounted compressed-air cylinder presents a size and weight penalty that may restrict climbing and movement in tight places.
- 12. The wearer's work rate determines the volume of air breathed per minute, maximum inspiratory flow rate, and the tolerable inhalation and exhalation breathing resistance. The respiratory minute volume is of great significance in self-contained and air-line respirators operated from cylinders, since it determines their operating life. Useful life under moderate work conditions may be significantly less than that under rest conditions.
- 13. Peak airflow rate is important in the use of constant-flow, air-line equipment. The air-supply rate should always be greater than the peak inspiratory flow rate to maintain the respiratory enclosure under positive pressure.
- 14. High breathing resistance of air-purifying respirators under conditions of heavy work can result in distressed breathing.
- 15. A person working in an area of high temperature is under stress. Additional stress resulting from use of a respirator should be minimized by using a respirator with minimum weight and breathing resistance.
- 16. Unless there exists a specific OSHA standard containing different requirements that are applicable, respirators will be selected according to the matters stated above.

E. Employee Training and Discipline

- 1. Every employee who is required to wear a respirator must know how to wear it, care for it, adjust it and determine if it fits properly and provides the appropriate protection.
- 2. Supervisors will provide their employees with needed respirator training and instruction.
 - a. Such instruction and training will be given to any employee under the supervisor's direct and immediate control if the employee has not already received it, or if their prior training or instruction did not satisfy OSHA requirements, or if any doubts or questions exist about respirator use or any of the matters mentioned in this Program.
 - b. Additional training on a daily basis if necessary will be provided by each supervisor whenever it is needed to protect the health and safety of employees.
 - c. Each respirator wearer will be given an opportunity (if he has not already had one), to handle the respirator, have it fitted properly, test its face-piece-to-face seal, wear it in normal air for a period long enough to gain familiarity with it, have it fit-tested as required by the applicable OSHA regulation and to wear it in a test atmosphere.
 - d. Each respirator is accompanied by its own set of instructions for proper use, care and protection as well as its limitation. They are printed in (or on) the respirator box, bag or container. Those instructions must be observed.
 - e. Any employee who has not been provided with all of the training and instruction set forth above, or who at any time is unsure about respirator use, care or protection, or has any problems or difficulties with work while wearing a respirator, must tell that to their supervisor at once so that they can be provided with the proper training and instruction.
 - f. Failure to follow all instructions and training on respirator use, care and protection, and/or failure to wear the respirator during all times of exposure, can reduce respirator effectiveness and result in sickness or death. The vapors and mists that can be dangerous to health include some so small no one can see or detect them.
 - g. Appropriate discipline will be given to any employee who fails to observe any part of this respirator program.

F. Inspection, Cleaning, Storage and Repair

- 1. Each employee who has finished wearing a disposable respirator or a respirator that is to be used only once, will place the respirator in the appropriate trash or disposal container.
- 2. Those respirators that are routinely used will be regularly cleaned and disinfected by the respirator user. That must be done as frequently as necessary to ensure that it provides proper protection to its wearer.
- 3. A cleaning and disinfecting solution is to be provided for use in the cleaning process.
- 4. No one should ever use a respirator that has previously been used by another person.
- 5. Before putting a respirator on, the user will inspect it for defects and cleanliness. This must be done each and every time a respirator is put on.
- 6. The respirator must be inspected again after taking it off before putting it in storage.

- 7. Each respirator that is not routinely used, but is kept ready for emergency use, will be inspected after each use and at least monthly in order to assure that it is in satisfactory working condition.
- 8. An employee must never wear an unclean respirator or a respirator that is defective in any way.
- 9. Employees must report any instance of defective or ineffective respirators to their supervisors immediately, including the use of an unclean respirator.
- 10. Respirator inspection will include a check of the tightness of connections and the condition of the face piece, headbands, valves and connecting tube, where appropriate. Rubber or elastomer parts will be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible, and prevent them from taking a set during storage.
- 11. Employees who do not know how to properly inspect their respirator, must ask their supervisors for assistance.
- 12. Respirator repairs or parts replacement will only be done by experienced persons with parts designed and approved for that particular respirator.
- 13. No attempt will be made to replace components or to make adjustments or repairs beyond the Manufacturer's recommendations. Reducing or admission valves or regulators will be returned to the manufacturer or to a trained technician for adjustment or repair.
- 14. When not in use, each respirator will be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture or damaging chemicals.
- 15. Each person must store their respirator in its proper place and in the correct manner.
 - a. Respirators must be stored so that the face piece and exhalation valve rest in a normal position, and that the function will not be impaired by the elastomer setting in an abnormal position.
 - b. Dust respirators must be placed in clean plastic bags.
- 16. Respirators will never be stored in such places as lockers or tool boxes unless they are in clean carrying cases or cartons and the cleaning and storage conditions listed above can be assured.

G. Program Evaluation

- 1. The continued effectiveness of this respiratory protection program will be regularly evaluated by the person designated to be responsible for this respiratory protection program.
- 2. Inspections to determine compliance with its requirements will be conducted periodically.

H. Respirator Fit Testing

1. OSHA regulations require that any employee who wears a respirator shall receive fitting instructions including how it should be worn, how to adjust it and to determine if a face piece to face seal is achieved.

a. All employees who wear respirators must be fit tested initially and thereafter at least once per year.

I. Medical Evaluation and Determination

- 1. Medical evaluations will be provided to determine the employee's ability to use a respirator before the employee is fit tested or required to use a respirator. A physician, other licensed health care professional (HCP) or service chosen by management will perform the medical evaluation/examinations.
 - a. A follow-up examination/evaluation will be provided for an employee only if requested by the health care provider providing the evaluation and approved by management.

2. Administration of the medical questionnaire and examinations

- a. The medical questionnaire and examinations shall be administered confidentially during normal working hours or at a time and place convenient to the employee and management.
- b. The employee will have an opportunity to discuss the questionnaire and examination results with the HCP.

3. Supplemental Information for the HCP.

- a. The following information will be provided to the HCP, before he/she makes a recommendation concerning an employee's ability to use a respirator:
 - (1) Type and weight of the respirator to be used by the employee;
 - (2) Duration and frequency of respirator use;
 - (3) Expected physical work effort of employee;
 - (4) Additional protective clothing and equipment to be worn;
 - (5) Temperature and humidity extremes that may be encountered; and
 - (6) a copy of the written respiratory protection program and a copy of 29 CFR 1910.134.

4. Medical determination

- a. In determining the employee's ability to use the respirator, the city and employee will obtain a written recommendation/certification regarding the employee's ability to use the respirator from the HCP. The recommendation can note the following:
 - (1) Any limitations on respirator use related to the employee's medical conditions and workplace conditions, including whether or not the employee is medically able to use the respirator;
 - (2) The need, if any for follow-up medical evaluations; and
 - (3) A statement that the HCP has provided the employee with a copy of the HCP's written recommendation.

5. Additional medical evaluations

a. The city will provide additional medical evaluation if:

- (1) An employee reports medical signs or symptoms that are related to ability to use a respirator;
- (2) A HCP or management finds the need to reevaluate the employee;
- (3) Observations made during fit testing and program evaluation indicate a need for employee reevaluation.

6. Medical History

- a. Where an employee has had prolonged medical illness that could be affected by the use of a respirator, the employee shall not be assigned tasks requiring respiratory protection.
- b. The HCP shall use the physical exam results, medical history and the latest ANSI Z Guidelines in conjunction with the latest NIOSH Guidelines for evaluating Employees' ability to use (type) respirators.
- c. Where doubts exist a reevaluation can be conducted.

J. Facial Hair Policy

- 1. Facial hair that passes between the seal of a respirator or interferes with any valve shall not be allowed.
- 2. Standard Operating Procedure for Facial Hair:
 - a. Reassignment of employees with medical and/or religious reasons for having facial hair to operations where respirators are not required may be considered.
 - b. Employees experiencing a leak due to facial hair shall remove the facial hair and be fit tested before performing the assigned task requiring respirator.
 - c. Employees wearing respirators shall be expected to have hair-removing amenities on hand, or report to work clean shaven. (Lockers) Time will be allocated as deemed necessary, by the city, for hair removal.

K. Contact Lenses Policy:

- 1. Except in cases where a chemical manufacturer recommends against or prohibits their use, contact lenses will be permitted with half mask respirators provided that additional eye protection is utilized.
- 2. Standard Operating Procedure for Contact Lenses:
- 3. Safety glasses with side shields and/or impact goggles shall be worn with contact lenses.
- 4. Such equipment shall be inspected before use.
- 5. Supervisors should know who wears contact lenses.