GREENFIELD WATER UTILITY
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23 September 2025

Mayor Guy Titus
Board of Works and Public Safety
10 South State St.
Greenfield, IN 46140

Re: Respiratory Protection Plan Adoption

Mayor and Board Members,

The Water Utility uses chemicals that present a potential risk to our employees in order to maintain the proper treatment of the water we send to the public. We mitigate this risk by using respirators for our plant operators. By using respirators, we are required to have a plan in place that spells out the specific instructions on how, when, and where to wear the respirator and the evaluation our personnel must undergo to wear this personal protective equipment.

To meet the OSHA requirements we, in coordination with Human Resources and the Fire Department, have drafted this attached Respiratory Protection Plan for the Water Department. This plan will be in full force and effect upon the Board's Approval today.

At this time, I am requesting the Board approve this plan to be effective today, 23 September. Once approved we will provide copies to all employees affected by this plan and carry out any additional steps that are required.

I welcome any questions the Board may have on this recommendation.

Respectfully Submitted,

Charles Gill
Water Utility Manager

cc: Jane Webb, Utility Coordinator
Gregg Morelock, City Attorney
Lori Elmore, Clerk-Treasurer

Greenfield Water Utility
Respiratory Protection Plan

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Greenfield Water Utility

Respiratory Protection Program

1. **Purpose**

The purpose of this policy is to identify the types of respiratory protection equipment provided by the Greenfield Water Utility, the requirements and guidelines for the use of respirators and other mandated associated with their use**.**

2. Scope and Application

This policy applies to all Greenfield Water Utility's plant operators while changing out chlorine cylinders. This includes closing valves on empty tanks and opening valves on full tanks. Definitions related to this policy include:

> **Immediately dangerous to life or health (IDLH)** - Any atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects or would impair an individual's ability to escape from a dangerous atmosphere. Interior atmospheric conditions at structure fires beyond the incipient stage are considered IDLH, as are a variety of rescue types.
>
> **Respiratory protection** - Any device that is worn by the user to reduce or eliminate exposure to harmful contaminants through the inhalation of those contaminants.

3. Responsibilities

Respiratory Protection Program Administrator

The Water Utility Manager will designate a program administrator with sufficient training or experience to oversee the objectives of this policy and ensure that the Department meets any legal mandates related to respiratory protection.

The administrator shall:

a) Maintain, implement, and administer a written respiratory protection program.

b) Ensure the written respiratory protection program and related procedures are followed and appropriate.

c) Ensure the procedures and written respiratory protection program address relevant mandates.

d) Ensure selected respirators continue to effectively protect water operators.

e) Have supervisors periodically monitor water operators respirator use to make sure they are using them properly.

f) Regularly ask members who are required to use respirators for their input on program effectiveness and whether they have problems with the following:

1. Respirator fit during use
2. Any effects of respirator use on work performance
3. Respirators being appropriate for the hazards encountered
4. Proper use under current work site conditions
5. Proper maintenance

g) Ensure the Department covers the costs associated with respirators, medical evaluations, fit testing, training, maintenance, travel, and wages, as applicable.

h) Provide direction for respirator selection.

i) Require medical evaluations for water operators who uses respiratory protection as set forth in 20 CFR 1910.134.

Employees have the responsibility to:

a) Wear their respirators when and where required and in the manner in which they were trained for donning and doffing.
b) Care for and maintain their respirators as instructed, and store them in a clean, sanitary location when reuse protocols are in effect.
c) Inform their supervisor if the respirator no longer fits and request a new one.
d) Inform their supervisor or the Program Administrator of any respiratory hazards they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the Program.
e) Inform their supervisor of need for a medical re-evaluation.
f) Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke
g) Keep track of your respirator so you do not mistakenly use someone else's respirator.

4. Program Elements

a. Hazard Assessment and Respirator Selection

The Program Administrator will select respirators to be used based on the airborne transmissible disease hazards to which employees are exposed and in accordance with all applicable OSHA standards. The Program Administrator will conduct a hazard evaluation and document the evaluation. The hazard evaluation will involve a review of job tasks to determine where potential exposures may occur with employees.

The Program Administrator will revise and update the hazard assessment as needed. If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Program Administrator. The Program Administrator will then:

a) Evaluate the potential hazard, arranging for outside evaluation as necessary.
b) Communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this Program will be in effect for those tasks, and this Program will be updated accordingly.

Respiratory Fit Testing

Fit testing for water operators will be conducted by the Greenfield Fire Territory or Hancock Occupational Health.

Fit tests are used to qualitatively or quantitatively evaluate the fit of a respirator on an individual. Each new member shall be fit tested before being permitted to use a respirator in the chlorine rooms. Or in spaces that may contain contamination that could pose a hazard to the employee's health.

After initial testing, fit testing shall be repeated:

a) At least once every 12 months.
b) Whenever there are changes in the type of SCBA or facepiece used.
c) Whenever there are significant physical changes in the user (e.g., obvious change in body weight, scarring of the face seal area, dental changes, cosmetic surgery, or any other condition that may affect the fit of the facepiece seal).
d) Be performed after the annual physical.

Respirator Medical Evaluation Questionnaire

All water operators who are required to use respiratory protection must complete a medical evaluation questionnaire at Hancock Occupation Health prior to initial fit testing and annually thereafter, and if any of the following conditions arise between annual tests:

a) A water operator reports medical signs or symptoms that are related to the ability to use a respirator.

b) A Physician or Licensed Health Care Professional (PLHCP), a supervisor, or the respirator program administrator informs the employer that an employee needs to be re-evaluated.

c) Information from the respiratory protection program indicates a need for an employee re-evaluation; this includes observations made during fit testing and program evaluation.

d) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

The questionnaires will be reviewed by a PLHCP selected by the Department to determine which, if any, water operators need to complete physical examinations. Hancock Occupation Health shall be responsible for maintaining records of all respirators medical evaluation questionnaires and any subsequent physical examination results.

Emergency Procedures (respirator malfunction)

For any malfunction of an N95 or similar respirator (e.g., breakthrough, facepiece leakage, or improperly working valve in valve models), the respirator wearer must inform his or her supervisor that the respirator no longer functions, go to a designated safe area (away from resident care areas), and follow proper decontamination procedures to maintain the respirator. The supervisor must ensure the employee's respirator is repaired or is provided with a new respirator.

Cleaning, Maintenance, and Training

Cleaning – When respirators are authorized to be reused, care must be taken. Transmission from contact with a contaminated respirator can be reduced by not reusing respirators known to be contaminated (i.e., having come in contact with infected bodily fluid). Employees should consider use of a face shield over the respirator to reduce surface contamination, clean and sanitize hands before putting on and after taking off the respirator, and use clean gloves when putting a respirator on and performing the seal check. All employees shall follow the applicable cleaning procedures set forth in the Respiratory Protection Standard: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB2.

Maintenance

a) Respirators are to be properly maintained at all times to ensure that they function properly and adequately protect the employee.
b) Maintenance involves a thorough visual inspection for cleanliness and defects.
c) Worn or deteriorated parts will be replaced prior to use.
d) No components will be replaced or repairs made beyond those recommended by the manufacturer. The following checklist will be used when inspecting respirators:
    a. Rubber Facepiece
        i. Cracks, tears, or holes
        ii. Facemask distortion from improper storage

iii. Cracked or loose lenses (full facepiece)
iv. Broken or missing mounting clips

b. Valves:
i. Detergent residue, dust particle, or dirt on the valve seal
ii. Cracks, tears, or distortion in the valve material or valve seal
iii. Missing or defective valve covers

c. Headstraps:
i. Breaks or tears
ii. Loss of elasticity
iii. Broken or malfunctioning buckles or attachments
iv. Excessively worn serrations of the head harness which might allow the facepiece to slip

d. Filters/Cartridges:
i. Proper filter for the hazard
ii. Approved designation (NIOSH)
iii. Missing or worn gaskets
iv. Worn Thread
v. Cracked or dents in filter housing

e) Respirators must be stored in a clean, dry area, and in accordance with the manufacturer's recommendations in original manufacturer's packaging.
f) Respirators that are damaged, crushed, and defective or have defective parts, must be taken out of service immediately and presented to the Program Administrator for evaluation.
g) If during an inspection, an employee discovers a defect in a respirator, it should be brought to the attention of the supervisor.
h) Supervisors will give all defective respirators to the Program Administrator. The Program Administrator will decide whether to take the respirator out of service until it can be repaired; perform a simple fix on the spot such as replacing a Headstraps or dispose of the respirator due to an irreparable problem or defect. When a respirator is taken out of service, it must not be reused, and the employee must be given a replacement of the same make, model, and size. If the employee is not given a replacement of the same make, model and size, then the employee must be fit tested

Training

a) The Program Administrator will provide training to respirator users and their supervisors on the Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard.
b) Employees will be trained prior to using a respirator in the workplace.
c) The training must be comprehensive and understandable, and must recur annually, and more often if necessary.
d) As with any employee, supervisors must be trained prior to using a respirator in the workplace; they also should be trained prior to supervising workers who must wear respirators if the supervisors themselves do not use a respirator.
e) Supervisors will provide the basic information on respirators in Appendix D of the Respiratory Protection Standard (appended to this Program) to employees who are voluntarily wearing a respirator.

f) Supervisors will ensure that each employee using a respirator can demonstrate knowledge of at least the following:
    a. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
    b. What the limitations and capabilities of the respirator are.
    c. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
    d. How to inspect, put on and remove, use, and check the seals of the respirator.
    e. What the procedures are for maintenance and storage of the respirator.
    f. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
    g. The general requirements of the Respiratory Protection Standard.

Retraining shall be administered annually, and when the following situations occur:

a) Changes in the workplace or the type of respirator renders previous training obsolete.
b) Inadequacies in the employee's knowledge or use of the respirator indicates that the worker has not retained the requisite understanding or skill.
c) Any other situation arises in which retraining appears necessary to ensure safe respirator use.

5. Program Evaluation

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this Program are being implemented and information for client care and employee training is documented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, and a review of records. Program evaluations should include documentation of discussion points with employees. Problems identified will be noted and corrected by the Program Administrator.

6. Documentation and Recordkeeping

The following documentation and recordkeeping will be maintained:

a) A written copy of this Program and the Respiratory Protection Standard is kept in the Program Administrator's office and is available to all employees who wish to review it.
b) Copies of training materials will be maintained in the Program Administrator's office.
c) Copies of fit test records will be maintained in the water operator's personnel file in the Clerk Treasure's office.
d) Records will be updated as new employees are trained and as existing employees receive refresher training.
e) Medical evaluation and examination records. All medical records will be kept by Hancock Occupational Health.

Appendix A- Respirator Cleaning Procedures (Mandatory)

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in appendix B-2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 °C [110 °F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 °C [110 °F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 °C (110 °F); or,

2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 °C (110 °F); or,

3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 °C [110 °F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.