

## RESPIRATOR PROGRAM REVIEWS

### I. **PURPOSE:**

As indicated in the title, the purpose of this article is to provide guidance for performing both RPPM annual audits and periodic BUMED industrial hygiene evaluations of the respirator program. [OPNAVINST 5100.23 Series](#) requires that the respirator program be audited annually by the respiratory protection program manager (RPPM) and periodically reviewed and evaluated by the cognizant Bureau of Medicine and Surgery (BUMED) industrial hygiene office. According to paragraph 1513.b.(2)(a) of this instruction, the periodicity of the BUMED audit is based on the complexity of the industrial processes and associated respirator program. As described in Appendix 8-B, highly hazardous facilities, such as shipyards, weapons stations, and ordnance stations are audited annually; moderately hazardous facilities, such as air stations and squadrons are audited biannually; and low hazard facilities are audited every four years. This guidance includes a checklist for both Navy industrial respirator programs and for Navy chemical, biological, radiological, nuclear (CBRN) respirator programs. Although this checklist can be used for both the annual RPPM audit and the periodic BUMED program review; the two types of program evaluation differ with the thoroughness of workplace inspection and records evaluation. More specifically, the RPPM performs a complete workplace inspection and records audit, while BUMED performs a representative workplace inspection and record review as described below.

### II. **RPPM ANNUAL AUDIT:**

In addition to the checklist, the RPPM audit includes examination of respirators in the workplace. The RPPM performs a complete inspection of all workplaces where respirators are worn to ensure proper respirator use. Besides the annual audit, the RPPM needs to perform frequent, random inspections to assure that respirators are properly selected, used, cleaned, and maintained. The RPPM should keep records of these ongoing surveillance findings. In addition to workplace inspections, the RPPM performs an annual audit of all records associated with the respirator program including respirator training; medical evaluation; fit testing; cartridge change out schedules; monthly inspection of emergency respirators; and compressor inspection and maintenance, including testing for Graded D air quality. Included in this audit is a review of the periodic BUMED Industrial Hygiene Surveys, which contains the written records documenting hazard assessment and the logic on which respirator selection is based. All problems identified during the RPPM audits and the periodic BUMED program evaluations must be corrected as soon as possible.

### III. **BUMED PERIODIC REVIEW:**

In addition to the checklist, the local BUMED industrial hygiene office (BUMED IH) should accomplish a workplace inspection of personnel wearing respirators. The BUMED IH periodic review of the respirator program is not intended to be a complete audit of the respirator program like the RPPM annual audit. BUMED IH is not expected to inspect each individual respirator wearer at the command. The BUMED IH respirator program review is scheduled to occur at the time of the periodic industrial hygiene survey. Therefore, BUMED IH will evaluate respirator use throughout the command's workplaces during the normal course of their periodic survey. In the workplace,

BUMED IH should inspect respirators, have the respirator wearers perform positive and negative pressure user seal checks, see how respirators are cleaned and stored, and ask the workplace supervisor for the worksite SOP. If SOP respirator instructions are not clear to the BUMED IH reviewer, they are probably not clear to the respirator wearer. BUMED IH should record the names of individuals they encounter in their workplace inspection and take this list of personnel to the RPPM and check to see if they are included on the RPPM's roster - if they're not on this list, find out why! Check the list of respirator user names in the RPPM's records to ensure that fit testing, medical evaluation, and training are up-to-date. The RPPM will have a signed Appendix 15-A for each medically qualified civilian respirator wearer and the RPPM can confirm from the local medical treatment facility Individual Medical Readiness point of contact that military personnel in the respirator program are fit for full duty and therefore medically qualified to wear all types of respiratory protection. Check the RPPM's other record keeping requirements, including records for Grade D breathing air quality testing, supplied air compressor inspection and maintenance, monthly emergency use respirator inspections, RPPM training, cartridge change out schedules, and the annual RPPM program audit. Again, the BUMED IH periodic review is not intended to be as thorough as the RPPM annual audit. However, the BUMED evaluation of respirator use in the workplace and the program record evaluation must be complete enough for BUMED IH to determine the effectiveness of the respirator program. The BUMED respirator program review/evaluation can either be a separate document or an annex to the periodic BUMED Industrial Hygiene Survey Report.

#### **IV. CBRN RESPIRATOR PROGRAM:**

A. CBRN respiratory protection programs include all elements of the respirator program described in Chapter 15 of [OPNAVINST 5100.23 Series](#) along with additional requirements for respirator selection; respirator use and limitations; respirator inspection, cleaning, and decontamination; respirator training; fit testing; program evaluation; and respirator cartridge change out schedules.

B. In addition to the program audit and evaluation requirements of Chapter 15, paragraph 2606.c.(6) of [OPNAVINST 5100.23 Series](#) requires an additional on-site program evaluation for the CBRN Respirator Program, in which *“The Incident Safety Officer will conduct frequent inspections of the incident site to ensure that the correct respirators are being used, are being worn properly, and are in good working condition. The Incident Safety Officer will convey this information to the CBRN RPPM, who will maintain a record of inspection dates and findings.”*

**CHECKLIST FOR RPPM AUDIT AND  
BUMED PERIODIC RESPIRATOR PROGRAM REVIEW**

<b>PROGRAM ELEMENT</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
<b>PROGRAM ADMINISTRATION:</b>				
A.	<b>Is an RPPM appointed in writing by the commanding officer or officer in charge?</b> Section 1513.a. of OPNAVINST 5100.23 Series			
B.	<b>Does the RPPM maintain a roster of individuals that require respiratory protection?</b> Section 1503.d. of OPNAVINST 5100.23 Series			
C.	<b>Are there written SOPs governing all aspects of the respirator program, including worksite SOPs posted in the general area?</b> Section 1513.a.(2) of OPNAVINST 5100.23 Series			
D.	<b>Do SOPs include emergency and rescue guidance, as necessary?</b> Section 1513.a.(2) of OPNAVINST 5100.23 Series			
E.	<b>Do SOPs include cartridge change out schedules as appropriate?</b> Section 1513.a.(2) of OPNAVINST 5100.23 Series			
F.	<b>Is there an annual audit performed by the RPPM?</b> Section 1513.a.(8) of OPNAVINST 5100.23 Series			
G.	<b>Does the cognizant BUMED industrial hygiene office provide review/ evaluation of the respirator program according to the periodicity specified in Appendix 8-B?</b> Section 1513.b.(2)(a) of OPNAVINST 5100.23 Series			
<b>SPECIAL PROBLEMS:</b>				
A.	<b>Are personnel not allowed to wear tight fitting respirators with any personal protective equipment or condition that interferes with the facepiece seal or exhalation valve, including facial hair?</b> Section 1503.e. of OPNAVINST 5100.23 Series			
B.	<b>Are provisions made for respirator use in hot or cold environments, such as use of nose cups to control lens fogging and reduce physiological stress, special gaskets that retain elasticity at low temperatures, and use of vortex tubes for heating or cooling?</b> Annexes 11 and 12 of ANSI Z88.2			
C.	<b>Does vision correction not interfere with the respirator seal?</b> Clause 7.5 of ANSI Z88.2			
D.	<b>Are contact lenses allowed to be worn with respirators?</b> Clause 7.5.3.3 of ANSI Z88.2 Note: Suitable eye/face protection must be provided for all workers exposed to eye injury hazards, regardless of contact lens wear.			
E.	<b>Have personnel practiced with and demonstrated that they can successfully wear contact lenses with respirators?</b> Clause 7.5.3.3 of ANSI Z88.2			
<b>VOLUNTARY USE RESPIRATORS:</b>				
A.	<b>Are voluntary use respirators only issued where there is no risk of over exposure?</b> Glossary and Section 1503.g. of OPNAVINST 5100.23 Series			
B.	<b>Are only NIOSH approved filtering facepieces issued for voluntary use?</b> Glossary and Section 1503.g. of OPNAVINST 5100.23 Series			
C.	<b>Are personnel who are issued voluntary use respirators other than filtering facepieces enrolled in the complete respirator program?</b> Section 1503.g.(2) and Glossary of OPNAVINST 5100.23 Series			
<b>RESPIRATOR USE:</b>				
A.	<b>Are engineering controls being used to control workplace exposure?</b> Section 1501.b. of OPNAVINST 5100.23 Series			
B.	<b>Do contractors provide their own respirators and respirator programs for their employees?</b> Section 1502.b.(1) of OPNAVINST 5100.23 Series			

<b>PROGRAM ELEMENT</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
C.	<b>Are all Navy employees, such as employees, inspectors, and visitors, who must enter an area requiring respirators provided with appropriate respiratory protection, medical evaluation, fit testing, and training?</b> Section 1503. of OPNAVINST 5100.23 Series			
D.	<b>Are all personnel assigned to areas where escape only respirators are required medically evaluated and trained in the use of escape only respirators?</b> Section 1503.c. of OPNAVINST 5100.23 Series			
E.	<b>Are visitors and personnel not assigned to areas where escape only respirators are required briefed in the use of the escape respirator and escorted at all times by personnel assigned to that area, but exempted from medical evaluation?</b> Section 1503.c. of OPNAVINST 5100.23 Series			
F.	<b>Are employees permitted to leave the hazardous area for respirator related reasons such as respirator malfunction, increased breathing resistance, or unusual discomfort from wearing the respirator?</b> Clause 4.3.4 of ANSI Z88.2			
G.	<b>Are cartridge change out schedules established and implemented for chemical cartridge air-purifying respirators?</b> Section 1505. of OPNAVINST 5100.23 Series			
H.	<b>Is the cartridge change out schedule logic based on objective information and documented in the written standard operating procedures?</b> Section 1505. of OPNAVINST 5100.23 Series			
I.	<b>Do respirator users perform user seal checks upon each donning of their respirator?</b> Section 1513.c.(2) of OPNAVINST 5100.23 Series			
J.	<b>Are only respirators used upon which user seal checks can be performed?</b> Section 1513.c.(2) of OPNAVINST 5100.23 Series			
K.	<b>Do medical personnel who wear respirators comply with Chapter 15 of OPNAVINST 5100.23 Series?</b> Section 1507.f. of OPNAVINST 5100.23 Series			
<b>TRAINING:</b>				
A.	<b>Has the RPPM been trained by one of the following courses: (1) OSHA Training Institute Course 222 or 222A; (2) NIOSH Course 593; (3) Navy RPPM course, Respiratory Protection Program Management (A-493-0072); or (4) any respiratory protection course that has at least 32 hours of training including, but not limited to, the topics listed Section 1512?</b> Section 1512 of OPNAVINST 5100.23 Series			
B.	<b>Does the RPPM keep up-to-date with current respiratory protection information?</b> Section 1512.c. of OPNAVINST 5100.23 Series			
C.	<b>Are personnel assigned by the RPPM to conduct respirator fit testing trained and evaluated according to clause 5 and Annex A1 of ANSI Z88.10-2010?</b> Section 1512.e. of OPNAVINST 5100.23 Series			
D.	<b>Are supervisors, respirator issuers, and emergency rescue teams trained according to ANSI Z88.2?</b> Section 1511 of OPNAVINST 5100.23 Series			
E.	<b>Are respirator users trained annually in a manner that is understandable and that respirator wearers can demonstrate knowledge of the topics outlined in Section 1511 of OPNAVINST 5100.23 Series?</b> Section 1511 of OPNAVINST 5100.23 Series			
<b>MEDICAL EVALUATION:</b>				
A.	<b>Are civilians who must wear respirators medically evaluated according to the Medical Surveillance Procedures Manual/ Medical Matrix?</b> Section 1508 of OPNAVINST 5100.23 Series			
B.	<b>Are military personnel who have been confirmed by their region or activity as having no deployment limiting medical conditions, and with a current annual Preventive Health Assessment per OPNAVINST 6120.3 considered qualified to wear any type of respiratory protection? (How does the region or activity confirm that military personnel are fit for full duty?)</b> Section 1508 of OPNAVINST 5100.23 Series			

<b>PROGRAM ELEMENT</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
C.	<b>Does either a physician, or the following individuals under the supervision of a physician, conduct respirator medical evaluations: a nurse practitioner; an occupational health nurse; a physician's assistant; a preventive medicine technician; or an independent duty hospital corpsman?</b> Section 1513.b.(1) of OPNAVINST 5100.23 Series			
D.	<b>Does the activity provide their medical treatment facility with information about the operation and the respirator to be worn by completing the top portion of Appendix 15-A for each civilian employee requiring a medical evaluation for respirator use?</b> Section 1513.a.(5) of OPNAVINST 5100.23 Series			
E.	<b>Does the cognizant health care professional fill out the lower portion of Appendix 15-A and return a copy to the RPPM and to the employee indicating the worker's ability to wear respiratory protection or any limitations on respirator use?</b> Section 1513.b.(1) of OPNAVINST 5100.23 Series			
<b>COMPRESSED BREATHING AIR:</b>				
A.	<b>Are compressed breathing air sources tested quarterly for Grade D air quality?</b> Section 1506.b. of OPNAVINST 5100.23 Series			
B.	<b>Are records of air quality monitoring maintained for five years?</b> Section 1506.b. of OPNAVINST 5100.23 Series			
C.	<b>Are all new and/or upgraded breathing air compressors equipped with continuous carbon monoxide monitor and alarm systems?</b> Section 1506.c. of OPNAVINST 5100.23 Series			
D.	<b>Are carbon monoxide monitor and alarm systems calibrated according to manufacturers' instructions?</b> Section 1506.c. of OPNAVINST 5100.23 Series			
<b>RESPIRATOR SELECTION:</b>				
A.	<b>Is respirator selection based on the consideration set forth in Section 1507.c. of OPNAVINST 5100.23 Series?</b> Section 1507.c. of OPNAVINST 5100.23 Series			
B.	<b>Are only respirators approved by NIOSH or NIOSH/MSHA issued?</b> Section 1507.a. of OPNAVINST 5100.23 Series			
C.	<b>Are only NIOSH approved SCBA or combination airline/ SCBA allowed to be worn during entry into oxygen deficient or IDLH atmospheres?</b> Section 1507.d. of OPNAVINST 5100.23 Series			
D.	<b>During entry into IDLH atmospheres, is one employee or more, when needed, located outside the IDLH atmosphere in communication with the employee inside the IDLH atmosphere; and are they trained and equipped with appropriate PPE and rescue equipment to perform effective rescue in the IDLH atmosphere?</b> Section 1507.g. of OPNAVINST 5100.23 Series and Paragraph (g)(3) of 29 CFR 1910.134			
E.	<b>Has the activity determined, in advance, as part of the written respirator program's worksite-specific standard operating procedures, the procedure that standby personnel will follow and whom they specifically need to notify in rescue situations?</b> Section 1507.g. of OPNAVINST 5100.23 Series, Paragraph (g)(3)(iv) of 29 CFR 1910.134, and Page 33 of the OSHA QUESTIONS AND ANSWERS ON THE RESPIRATORY PROTECTION STANDARD of 3 Aug 98			
F.	<b>For firefighting, are only NIOSH approved full face pressure demand SCBA (with at least 30 minute service life) meeting NFPA 1981 requirements allowed to be worn?</b> Section 1507.e. of OPNAVINST 5100.23 Series			
G.	<b>Is the 2 in - 2 out rule observed during structural firefighting?</b> Section 1507.g. of OPNAVINST 5100.23 Series and Paragraph (g)(4) of 29 CFR 1910.134			

PROGRAM ELEMENT		YES	NO	N/A
<b>FIT TESTING:</b>				
A.	Are all employees who wear tight fitting respirators fit tested before initial respirator issue and annually thereafter according to Appendix A of 29 CFR 1910.134 and ANSI Z88.10-2010? Section 1509 of OPNAVINST 5100.23 Series			
B.	Does the activity conduct additional fit testing whenever the employee has observable changes in their physical condition that could affect respirator fit, such as facial scarring in the area of the face seal, dental changes, cosmetic or reconstructive surgery, or a significant change in body weight (e.g., 10% or more)? Paragraph (f) (3) of 29 CFR 1910.134 and Clause 9.1.5 of ANSI Z88.2			
C.	Does the command allow employees to select respirators from a sufficient number of respirator models and sizes so that respirators correctly fit all respirator users? Paragraph (d)(1)(iv) of 29 CFR 1910.134			
D.	Are full face negative pressure air-purifying respirators worn in atmospheres between 10 to 50 times the occupational exposure limit quantitatively fit tested? Section 1509.b. of OPNAVINST 5100.23 Series			
E.	Are fit test records maintained? Section 1509.c. of OPNAVINST 5100.23 Series			
<b>RESPIRATOR CLEANING:</b>				
A.	Are respirators cleaned and sanitized according to Appendix B-2 of 29 CFR 1910.134 as necessary to maintain a sanitary condition for exclusive individual issue; before being worn by different individuals; and after each use for emergency use respirators? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(1) of 29 CFR 1910.134			
B.	Are respirators used in fit testing and training cleaned and disinfected after each use? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(1)(iv) of 29 CFR 1910.134			
<b>RESPIRATOR STORAGE:</b>				
A.	Are respirators stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and are they stored in a manner to prevent deformation of the facepiece and exhalation valve? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(2)(i) of 29 CFR 1910.134			
B.	Are emergency use respirators stored according to manufacturer instructions in compartments or in covers clearly marked as emergency respirators and accessible to the work area? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(2)(ii) of 29 CFR 1910.134			
<b>RESPIRATOR INSPECTION:</b>				
A.	Are respirators inspected before each routine use and during cleaning? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(3)(i)(A) of 29 CFR 1910.134			
B.	In addition to inspection requirements in "A." above, are SCBA inspected monthly to ensure a fully charged state and that the regulator and warning devices function properly? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(3)(iii) of 29 CFR 1910.134			
C.	Are SCBA cylinders recharged when the pressure falls to 90% of the manufacturer's recommended pressure level? Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(3)(iii) of 29 CFR 1910.134			
D.	Are emergency use respirators inspected at least monthly per manufacturer's instructions and inspection findings documented? Section 1510 of OPNAVINST 5100.23 Series and Paragraphs (h)(3)(i)(B) and (h)(3)(iv) of 29 CFR 1910.134			

<b>PROGRAM ELEMENT</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
E.	<b>Are emergency escape-only respirators inspected before being carried into the workplace for use?</b> Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(3)(i)(C) of 29 CFR 1910.134			
<b>RESPIRATOR REPAIR:</b>				
A.	<b>Are repairs to respirators made according to manufacturer's instructions by appropriately trained personnel, using only NIOSH approved parts for the respirators being repaired?</b> Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(4) of 29 CFR 1910.134			
B.	<b>Are reducing and admission valves, regulators, and alarms adjusted or repaired only by the manufacturer or a technician trained by the manufacturer?</b> Section 1510 of OPNAVINST 5100.23 Series and Paragraph (h)(4)(iii) of 29 CFR 1910.134			
<b>CBRN RESPIRATOR PROGRAM:</b>				
A.	<b>Are all program elements of the industrial respirator program incorporated in the CBRN respirator program?</b> Section 2606.a. of OPNAVINST 5100.23 Series			
B.	<b>Has the RPPM having cognizance over the first responders been assigned as the CBRN RPPM?</b> Section 2606.b. of OPNAVINST 5100.23 Series			
C.	<b>Have all prerequisite requirements for wearing respiratory protection been accomplished, including medical evaluation, respirator selection, fit testing, and training so that first responders are ready to respond if needed in defense of naval facilities during terrorist attack?</b> Section 2606.b. of OPNAVINST 5100.23 Series			
D.	<b>For Level A protection, are only NIOSH CBRN approved SCBA or NIOSH approved SCBA meeting NFPA 1981 requirements worn under the encapsulating suits until the activity is completely outfitted with NIOSH CBRN SCBA?</b> Sections 2603.c.(1), 2606.c.(1)(a), and Table 2 of OPNAVINST 5100.23 Series			
E.	<b>Do SCBA used for Level A protection have air cylinder service lives of 60 minutes?</b> Section 2606.c.(1)(a) of OPNAVINST 5100.23 Series			
F.	<b>For Level B protection, are only NIOSH CBRN approved SCBA allowed to be worn when liquid chemical warfare agent is present?</b> Section 2606.c.(1)(b) and Table 3 of OPNAVINST 5100.23 Series			
G.	<b>Are NIOSH approved SCBA meeting NFPA 1981 requirements allowed to be worn for Level B protection when liquid chemical warfare agent is not present until the activity is completely outfitted with NIOSH CBRN SCBA?</b> Sections 2603.c.(1), 2606.c.(1)(b), and Table 3 of OPNAVINST 5100.23 Series			
H.	<b>Are only NIOSH CBRN approved air-purifying respirators selected for Level C protection?</b> Section 2606.c.(1)(c) and Table 4 of OPNAVINST 5100.23 Series			
I.	<b>Do personnel stationed at military treatment facility secondary decontamination stations and decontamination corridor security personnel wear full-face rubber, PAPRs equipped with combination organic vapor, acid gas and HEPA filters during the interim period until NIOSH CBRN approved PAPRs are available?</b> Section 2606.c.(1)(d) of OPNAVINST 5100.23 Series			
J.	<b>Are NIOSH CBRN approved SCBA not allowed to be used beyond six hours after initial exposure to chemical warfare agents to avoid possible agent permeation?</b> Section 2606.c.(2)(a) of OPNAVINST 5100.23 Series			
K.	<b>In the absence of industrial hygiene air sampling data are respirator cartridges used by security guards changed after every eight-hour shift?</b> Section 2606.c.(7)(b) of OPNAVINST 5100.23 Series			
L.	<b>Are NIOSH CBRN approved air-purifying respirators not allowed to be worn into IDLH atmospheres or atmospheres containing less than 19.5% oxygen.</b> Section 2606.c.(2)(b) of OPNAVINST 5100.23 Series			

<b>PROGRAM ELEMENT</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
M.	<b>Are NIOSH CBRN approved air-purifying respirators not allowed to be used beyond eight hours after initial exposure to chemical warfare agents or only two hours if exposed to liquid chemical warfare agent?</b> Section 2606.c.(2)(b) of OPNAVINST 5100.23 Series			
N.	<b>Are CBRN respirators inspected monthly according to manufacturer's instructions?</b> Section 2606.c.(3)(a) of OPNAVINST 5100.23 Series			
O.	<b>Are personnel wearing CBRN respirators quantitatively fit tested by an OSHA accepted quantitative fit test method?</b> Section 2606.c.(5) of OPNAVINST 5100.23 Series			
P.	<b>Is the minimum passing quantitative fit factor 500?</b> Section 1509.(b) of OPNAVINST 5100.23 Series			
Q.	<b>In the absence of industrial hygiene air sampling data are PAPR cartridges used by personnel assigned to secondary decontamination stations at medical treatment facilities and by security guards stationed at the decontamination corridor changed every two and a half hours?</b> Section 2606.c.(7)(b) of OPNAVINST 5100.23 Series			