

Record of Changes

Chapter	Paragraph	Description	File Date*
Chapter 4	8g(1)	Changes the interpretation of a UTL _{95%,95%} that exceeds the OEL.	27 Jun 2000
Chapter 9	3a(7)	Discusses the use of air-purifying respirators for isocyanates and other stressors with poor warning properties when a cartridge change out schedule is established and implemented.	15 Sep 2000
Chapter 9	8b(4)	Adds reference to cartridge change out schedules.	15 Sep 2000
Chapter 9	12d(6)	Directs the user to one source of guidance for cartridge change out schedules.	15 Sep 2000
Chapter 9	12e	Adds absence of a cartridge change out schedule, and an end-of-service-life indicator as instances requiring use of a supplied-air respirator instead of an air-purifying respirator.	15 Sep 2000
Chapter 9	Reference 9-11	Updates citation to reflect year of current edition.	15 Sep 2000
Chapter 3 Appendix 3-A	As marked in left margin	Adds or changes the wording of Operation Codes to be used with IHIMS	15 Sep 2000
Appendix A, Table Z-3	All	Deleted since these were only Transitional Limits and the Navy adopted the Final Limits of the OSHA 1989 rulemaking	14 Dec 2000
Appendix A, Cover	Cover	Deleted Table Z-3 from cover page.	14 Dec 2000

Chapter	Paragraph	Description	File Date*
Appendix A, Table Z-1A	All	Corrected spelling for diisopropylamine, moved cotton dust TWA value to the proper column (to mg/m ³ from ppm), deleted values under STEL for ethyl formate, moved ceiling values for ethylene glycol to the proper columns, moved fluoride TWA value to the proper column (to mg/m ³ from ppm) and added in "-" in blank columns.	15 Aug 2001
Appendix A, Table Z-2	Ethylene dichloride	Deleted ethylene dichloride since it is covered under Table Z-1A.	15 Aug 2001
Chapter 3, Appendix 3-B	2f(2)	Added a note about cleaning the templates for wipe sampling.	16 Aug 2001
Chapter 3, Appendix 3-B	2 through 7	Fixed the numbering of the main paragraphs, beginning with Single Surface Wipe Sampling Procedure through Quality Assurance/Quality Control.	16 Aug 2001
Chapter 3, Appendix 3-B	All	Added dimension examples to wipe areas or template areas.	16 Aug 2001
Chapter 3, Appendix 3-B	All	Fixed inconsistencies in capitalization in some of the headers.	16 Aug 2001
Chapter 3, Appendix 3-B	All	Fixed inconsistencies in square foot abbreviations.	16 Aug 2001
Appendix B, Table 1	All	Added a Table for Navy adopted OELs - Fuels and MMVF. This table was included for guidance purposes only.	23 Aug 2001
Appendix A, Table Z-1A	Tetryl	Changed Tetryl PEL from 15 to 1.5 mg/m ³ .	23 Aug 2001
Appendix A, Table Z-1A	All	Properly matched up the footnotes.	23 Aug 2001

Chapter	Paragraph	Description	File Date*
Appendix B, Cover	Cover	Added a cover page for the Table for Navy adopted OELs - Fuels and MMVF.	27 Aug 2001
Table of Contents	Appendix B	Added Appendix B Table 1 for Navy adopted OELs to the Table of Contents.	27 Aug 2001
Chapter 4	5c	Added a reference to the new Appendix B Navy adopted OELs.	27 Aug 2001
Appendix A, Table Z-1A	All	Made sure the footnote verbiage matched OSHA TABLE Z-1A.	28 Aug 2001
Appendix A, Cover	Cover	Deleted Table Z-3 from cover page again. (Previous change not posted to the web.)	05 Feb 2002
Record of Changes	File Date	Added a footnote explaining that the file date is the date the files were created or updated, and that this date may not reflect the actual effective date of posting to the Navy Environmental Health Center (NAVENVIRHLTHCEN) website.	07 Feb 2002
Chapter 3 Appendix 3-A	4	Updated the operations codes (OPCODE) dictionary. Added a table showing what was added or changed.	26 Mar-16 Apr 2002
Chapter 13 Appendix 13-F	4	Corrected referral to reference by changing it from 12F-4 to 13F-4.	04 Apr 2002
Sampling Forms	All	Updated recreated sampling forms to include the fields used in the eNOED project.	05 Apr-17 Apr 2002
Sampling Forms Definitions	All	Updated recreated sampling forms definitions to include all the fields for all of the new forms. Added explanations for the use for all of the new forms and added hyperlinks to the forms.	05 Apr-26 Apr 2002

Chapter	Paragraph	Description	File Date*
Chapter 8	14a and 14b	Added the statements that the anemometer should be qualitatively checked to ensure that it is in good working condition.	08 Apr 2002
Chapter 5	11	Updated and expanded the information on the certification of audiometric booths.	08 Apr 2002
Chapter 5 Appendix 5-B	All	Changed Appendix 5-B to include links to the medical surveillance audiometric booth certification form and the clinical audiometric booth certification form in the NAVENVIRHLTHCEN Field Guide to Audiometric Test Booth Certification.	08 Apr 2002
Chapter 12	4b(3)(d)	Clarified why atmosphere-supplying respirators must be worn when oxygen concentrations are below 19.5%.	08 Apr 2002
Chapter 3	1c, 1d and 1g	Updated the definitions for ceiling, excursion limit and short term exposure limit.	09 Apr 2002
Chapter 3	All	Corrected and updated references.	09 Apr 2002
Chapter 3	15b through 15d	Added information on calibration and limitations for direct reading gas monitors, direct reading dust monitors and other direct reading instruments.	11 Apr 2002
Chapter 5	12	Updated the references.	12 Apr 2002
Chapter 8	10 through 13	Added information on calibration for direct reading gas monitors, direct reading dust monitors and other direct reading instruments.	12 Apr 2002

Chapter	Paragraph	Description	File Date*
Chapter 5	11	Further updated and expanded the information on the certification of audiometric booths.	16 Apr 2002
Chapter 3, Appendix 3-A	1 through 3	Corrected and/or updated hyperlinks.	29 Apr 2002
Chapter 5 Appendix 5-A	1	Corrected and/or updated hyperlinks.	29 Apr 2002
Chapter 5, Appendix 5-B	1	Corrected and/or updated hyperlinks.	29 Apr 2002
Chapter 9	3 through 12	Corrected and/or updated hyperlinks.	29 Apr 2002
Chapter 14	3	Corrected and/or updated hyperlinks.	29 Apr 2002
Appendix B, Table 1	References	Corrected and/or updated hyperlinks.	29 Apr 2002
Chapter 7	1	Added a reference to the new asbestos fiber counting form and the new asbestos bulk sample analysis form.	16 May 2002
Chapter 7, Appendix 7-A	All	Added Appendix 7-A with hyperlinks to the new asbestos fiber counting form and the new asbestos bulk sample analysis form.	16 May 2002
Sampling Forms	Asbestos Fiber Counting Form and Asbestos Bulk Sample Analysis Form	Modified these CIHL forms, originally developed by NEPMU5 CIHL, to make them generic for use by any laboratory.	16 May 2002
Chapter 5	3b	Corrected the requirement for how long noise measurement records must be kept by changing it from the incorrect 50 years to the correct 40 years as is referenced in OPNAVINST 5100.23E.	16 May 2002

Chapter	Paragraph	Description	File Date*
Chapter 5	12	Corrected reference 5-1 OPNAVINST 5100.23 Series from the incorrect Chapter 18 to the correct Chapter 8, <i>Hearing Conservation and Noise Abatement</i> .	16 May 2002
Chapter 1	4	Updated the NAVENVIRHLTHCEN address.	20 Jun 2002
Chapter 8	4b(3)	Updated the NAVENVIRHLTHCEN address.	20 Jun 2002
Chapter 4	4a	Corrected reference from 401a to 4-1.	07 Oct 2002
Chapter 3	1e	Corrected reference from the incorrect Chapter 8 of OPNAVINST 5100.23 Series to the correct Chapter 16 of OPNAVINST 5100.23 Series.	17 Oct 2002
Chapter 4	2m	Corrected reference from the incorrect Chapter 8 of OPNAVINST 5100.23 Series to the correct Chapter 16 of OPNAVINST 5100.23 Series.	17 Oct 2002
Chapter 3, Appendix 3-A	1 through 3	Corrected and/or updated hyperlinks.	17 Oct 2002
Chapter 5 Appendix 5-A	1	Corrected and/or updated hyperlinks.	17 Oct 2002
Chapter 4	5a(2)	Added invitation to contact NAVENVIRHLTHCEN regarding dermal exposure assessment.	19 Nov 2002
Chapter 3	17b(3)	Updated information on wipe sampling techniques.	17 Dec 2002
Chapter 10	11b(4)	Corrected and/or updated hyperlinks.	17 Dec 2002
Chapter 7, Appendix 7-A	1	Corrected and/or updated hyperlinks.	17 Dec 2002

Chapter	Paragraph	Description	File Date*
Chapter 9	All	<p>The revision includes many new internet hypertext links to sources of in depth information, including the following topics: written standard operating procedures (SOPs) including downloading of a generic respirator SOP; NIOSH/NIST/SBCCOM development of approval schedules for testing and certifying air purifying respirators as protection against chemical, biological, and radiological (CBR) warfare agents; respirator cartridge change out schedules; compressed breathing air, including methods for testing breathing air quality; NIOSH approval of self-contained breathing respirators for emergency workers in terrorist attacks; NIOSH Guide to the Selection and Use of Particulate Respirators Certified Under 42 CFR 84; respirator homepage article expounding upon the logic for exempting AABA from quarterly breathing air quality testing; NIOSH approval of Breath Responsive PAPRs; along with several more.</p>	19 Dec 2002

Chapter	Paragraph	Description	File Date*
Chapter 9 (continued)	All (continued)	Several topics were expounded upon, including: respirator selection for use in oxygen deficient atmospheres; calculation of effective protection factors; respirator cleaning procedures using bleach and iodine; medical evaluation of respirator users; color coding for air purifying respirator cartridges and filters; explanation of why all nine classes of particulate filtered respirators approved by NIOSH are protective against Anthrax bacilli and spores; list of filter degrading oils; methods for calculating change out schedules for particulate filtering respirators; powered air purifying respirators; and chemical cartridge sorbent materials.	19 Dec 2002
Sampling Forms	All	Updated sampling forms to show non-required fields. This will aid the users in knowing what needs to be filled in.	28 Apr 2003

Chapter	Paragraph	Description	File Date*
Sampling Forms Definitions	All	Created a separate specific sampling forms definitions sheet for each sampling form. This makes it easier for the user to look up the definitions when they are filling in samplings forms. The new sampling forms definitions sheets show and explain which fields are required and optional. This will aid the users in knowing what needs to be filled in.	24 Apr-28 Apr 2003
Chapter 5	11	Further updated and expanded the information on the certification of audiometric booths.	9 Jul 2003
Chapter 5, Appendix 5-B	1	Corrected and/or updated hyperlinks.	9 Jul 2003
Appendix B, Table 1	All	Removed Table for Navy adopted OELs - Fuels and MMVF. This was done since there now are ACGIH TLVs for these stressors. Consult the hierarchy of standards in OPNAVINST 5100.23 series Chapter 16.	25 Jul 2003
Appendix B, Cover	Cover	Removed the cover page for the Table for Navy adopted OELs - Fuels and MMVF. See above.	25 Jul 2003
Table of Contents	Appendix B	Removed Appendix B Table 1 for Navy adopted OELs from the Table of Contents. See above.	25 Jul 2003
Chapter 4	5c	Removed the reference to the new Appendix B Navy adopted OELs. See above.	25 Jul 2003
Chapter 13	All	Revised and updated the Indoor Environmental Quality (formerly Indoor Air Quality) Chapter 13.	28 Oct 2003

Chapter	Paragraph	Description	File Date*
Table of Contents	Appendix B	Changed Chapter 13's name from Indoor Air Quality to Indoor Environmental Quality.	28 Oct 2003
PPE Codes		Updated and added a few PPE Codes.	21 Nov 2003
Chapter 3	10b/10c	Moved old 10b to 10c.	08 Jan 2004
Chapter 3	10b	Added a new discussion on estimating overall precision of a sampling and analytical method when S_{RT} is not provided.	08 Jan 2004
Chapter 3	References	Added a new reference 3-10 (3-11 when the update was posted to the NEHC website) and moved existing references.	08 Jan 2004
Chapter 3	11c through 11f	Added additional information on inhalable and total aerosol sampling.	27 Jan 2004
Chapter 5	10c	Updated the NAVENVIRHLTHCEN address.	28 Jan 2004
Chapter 8	4b(1)	Updated information on equipment that is calibrated at the NAVENVIRHLTHCEN Calibration Laboratory.	28 Jan 2004
Chapter 8	16, 18 and Table 8-2	Added information on equipment lifecycle service life.	28 Jan 2004
Chapter 4	2c and 8a(1) and 8a(2)	Added clarification regarding the use of censored data when doing population statistics on groups of STEL/Ceiling results.	13 Feb 2004
Chapter 2	3a(4)	Added ergonomics as a physical stressor.	13 Feb 2004
Chapter 2, Appendix 2-A	3c and 4c	Added ergonomics as a program.	13 Feb 2004

Chapter	Paragraph	Description	File Date*
Chapter 3	8c	Added information on NAVENVIRHLTHCEN reviewing breathing zone sampling forms sent to the CIHLs for analysis for accuracy and completeness and referenced the BUMED Industrial Hygiene Data Quality letter.	13 Feb 2004
Chapter 3	References	Added a new reference 3-9 and moved existing references.	13 Feb 2004
Chapter 3 Appendix 3-A	4	Updated the operations codes (OPCODE) dictionary. Added a table showing what was added or changed.	23 Feb 2004
Chapter 3	12b	Added information on consulting the analytical method being used for specific requirements during gravimetric analysis.	31 Mar 2004
Exposure Monitoring Form	All	Converted the OPNAV 5100\14 Exposure Monitoring Plan form to a new NEHC Form - 5100\21 Exposure Monitoring Plan.	20 May 2004
Chapter 4	7	Added link to Exposure Monitoring Plan - NEHC Form 5100\21 (Formerly OPNAV 5100\14).	20 May 2004
Chapter 5, Appendix 5-B	1	Corrected and/or updated hyperlinks.	01 Jul 2004
Chapter 7	6g	Added wording clarifying the need for formal classroom training in polarized light microscopy (PLM)/dispersion staining	12 Jul 2004
Exposure Monitoring Form	All	Removed the new NEHC - 5100\21 Exposure Monitoring Plan form since it will remain in the OPNAVINST 5100.23 Series as the OPNAV 5100\14 Exposure Monitoring Plan form.	31 August 2004

Chapter	Paragraph	Description	File Date*
Chapter 4	7	Removed link to new NEHC - 5100\21 Exposure Monitoring Plan form.	31 August 2004

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