

Exhibit C

4.10.4.1



CUMULATIVE SUPPLEMENT TO
JULY 1974 EDITION OF
NIOSH CERTIFIED PERSONAL PROTECTIVE EQUIPMENT

SEPTEMBER 1974

A23984

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Center for Disease Control
National Institute for Occupational Safety and Health
Morgantown, West Virginia 26505

PREFACE

This cumulative supplement to the July 1974 publication, N. CERTIFIED PERSONAL PROTECTIVE EQUIPMENT, lists approvals and certificates issued between July 18, 1974 and September 1, 1974.

A new table has been added, describing the pressure range and hose length range for each approved supplied-air respirator.

Comments on this publication, and requests for additional information, should be sent to the Director, Testing and Certification Laboratory, National Institute for Occupational Safety and Health, 944 Chestnut Ridge Road, Morgantown, WV 26505.

II. GAS DETECTOR TUBE UNITS

The following gas detector tube units have been approved by the National Institute for Occupational Safety and Health since July 18, 1974:

B. Gastec Model 400 Aspirating Pump (Bendix PN 2417535) has been certified for use with

8. Trichloroethylene - Model 132H gas detector tube, TC-84-038, August 9, 1974.

D. Kitagawa Model 400 Aspirating Pump has been certified for use with

8. Hydrogen Sulfide - Model 120b gas detector tube, TC-84-037, July 23, 1974.

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- *Table III-3. Supplied-Air Respirators
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¹This table of contents lists all entries in the July 1974 edition and this supplement. Items marked with an asterisk appear in this supplement.

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III. RESPIRATORY PROTECTIVE DEVICES

The following respiratory protective devices have been approved by the U.S. Department of the Interior, Bureau of Mines and the U.S. Department of Health, Education, and Welfare, National Institute for Occupational Safety and Health, since July 18, 1974.

Self-Contained Breathing Apparatus

18. SurvivAir® part numbers 9038-00, 9038-02, 9838-00, and 9838-02 demand-type one-half hour compressed-air self-contained breathing apparatus. Approval TC-13F-44, issued to SurvivAir Div., U.S. Divers Co., August 30, 1974.

19. SurvivAir® part numbers 9038-20, 9038-22, 9838-20, and 9838-22 pressure demand-type one-half hour compressed-air self-contained breathing apparatus. Approval TC-13F-45, issued to SurvivAir Div., U.S. Divers Co., August 30, 1974.

Supplied-Air Respirators

9. Scott catalog numbers 9616-11, -12, -15, -21, -22, and -25; and 4622-11, -12, -15, -21, -22, and -25 supplied-air respirators with 4266-15, 4265-25, and 4264-50 air-supply hose. Approval TC-19C-71, issued to Scott Aviation, August 20, 1974.

10. Scott catalog numbers 4616-18, -19, -28, and -29; and 4622-18, -19, -28, and -29 supplied-air respirators with 4259-15, 4258-25, and 4257-50 air-supply hose. Approval TC-19C-72, issued to Scott Aviation, August 20, 1974.

Dust, Fume, and Mist Respirators

16. A.O. R1050 single-use respirator for respiratory protection against pneumoconiosis and fibrosis-producing dusts. Approval TC-21C-147, issued to American Optical Corp., August 14, 1974.

17. Safeline 5350 single-use respirator for respiratory protection against pneumoconiosis and fibrosis-producing dusts. Approval TC-21C-148, issued to Safeline Products, August 14, 1974.

18. Scott part numbers 662-1 and 662-2 respirators (with 502-R filter) for respiratory protection against dusts, fumes, and mists having a time-weighted average less than 0.05 mg/M^3 , and radionuclides. Approval TC-21C-149, issued to Scott Aviation, August 20, 1974.

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Chemical-Cartridge Respirators

21. A.O. R5052 respirator (with R52 cartridges) for respiratory protection against not more than 10 parts per million chlorine, 50 parts per million hydrogen chloride, and 50 parts per million sulfur dioxide. Approval TC-23C-60, issued to American Optical Corp., August 14, 1974.

22. A.O. R6052 respirator (with R52 cartridges) for respiratory protection against not more than 10 parts per million chlorine, 50 parts per million hydrogen chloride, and 50 parts per million sulfur dioxide. Approval TC-23C-61, issued to American Optical Corp., August 14, 1974.

23. Safeline 5221 respirator (with 5963 cartridges) for respiratory protection against not more than 10 parts per million chlorine, 50 parts per million hydrogen chloride, and 50 parts per million sulfur dioxide. Approval TC-23C-62, issued to Safeline Products, August 14, 1974.

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TABLES FOR IDENTIFICATION
OF APPROVED COMPONENT PARTS

Table III-1. Self-contained breathing apparatus component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-13F-44	SurvivAir Div., U.S. Divers Co.	9038-00, 9038-02, 9838-00, 9838-02,	9411-12 or 9413-20, facepiece. 9118-00, regulator. 9602-47, low-pressure warning. 9151-45, cylinder and valve assembly. 9457-00, back-pack assembly.
TC-13F-45	SurvivAir Div., U.S. Divers Co.	9038-20, 9038-22, 9838-20, 9838-22	9411-60 or 9413-60, facepiece. 9118-01, regulator. 9602-47, low-pressure warning. 9151-45, cylinder and valve assembly. 9457-00, back-pack assembly.

Table III-3. Supplied-air respirators component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-19C-72	Scott Aviation	4616-18, -19, -28, and -29 4622-18, -19, -28, and -29	742 or 4704, facepiece. 6119, breathing tube. 4199 or 4199-1, flow control valve and cartridge assembly. 4225, air-supply hose.
TC-19C-73	Scott Aviation	4616-11, -12, -15, -21, -22, and -25 4622-11, -12, -15, -21, -22, and -25	742 or 4704, facepiece. 6119, breathing tube. 4196 or 4196-1, flow control valve and cartridge assembly. 4286, air-supply hose.

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Table III-4. Dust, fume, and mist respirators component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-21C-147	American Optical Corp.	R1050	R1050, respirator assembly.
TC-21C-148	Safeline Products	5350	5350, respirator assembly.
TC-21C-149	Scott Aviation	662-1 and 662-2	805 or 742, facepiece. 502-R, filter.

Table III-5. Chemical-cartridge respirators component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-23C-60	American Optical Corp.	R5052	50206, basic respirator subassembly.
TC-23C-61	American Optical Corp.	R6052	51071, basic respirator subassembly.
TC-23C-62	Safeline Products	5221	05862, basic respirator subassembly. 5963, cartridges.

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PRESSURE RANGES AND HOSE-LENGTH RANGES FOR APPROVED
SUPPLIED-AIR RESPIRATORS

Approval number	Respirator(s)	Hose-length range, feet	Pressure range, psi
TC-19C-64	Cesco PI-800	15	5 - 17
TC-19C-64	U.S. Safety Services PI-80	15	5 - 17
TC-19C-65	SurvivAir ^R 9011-12, 9811-12	4 - 250	50 - 125
TC-19C-66	SurvivAir ^R 9011-14, 9811-14	4 - 250	50 - 125
TC-19C-67	SurvivAir ^R 9011-13, 9811-13	4 - 250	50 - 125
TC-19C-68	SurvivAir ^R 9011-15, 9811-15	4 - 250	50 - 125
TC-19C-69	3M W-810, W-840, W-856, W-858, W-870	25 - 300	50 - 90
TC-19C-70	3M W-820, W-880, W-881, W-888, W-890	25 - 100	65 - 90
TC-19C-71	Scott 4616-18, -19, -28, -29; and 4622-18, -19, -28, -29	6 - 16	15 - 50
		16 - 22	50 - 250
TC-19C-72	Scott 4616-11, -12, -15, -21, -22, -25; and 4622-11, -12, -15, -21, -22, -25	12 - 25	15 - 50
		25 - 40	50 - 250

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ADDENDA: NIOSH CERTIFIED PERSONAL PROTECTIVE EQUIPMENT, SEPTEMBER 1974

The following respiratory protective devices were approved by the Bureau of Mines and the National Institute for Occupational Safety and Health between September 1, 1974 and September 20, 1974:

Dust, Fume, and Mist Respirators

19. MSA® part numbers 88479 and 457117 respirators (with part number 88480 filter) for respiratory protection against dusts, fumes, and mists having a time-weighted average less than 0.05 mg/M^3 , and radionuclides. Approval TC-21C-150, issued to Mine Safety Appliances Co., September 9, 1974.
20. Welsh 7506 respirator (with 7500-6 filters) for respiratory protection against dusts and mists having a time-weighted average not less than 0.05 mg/M^3 or 2 mppcf and asbestos-containing dusts and mists. Approval TC-21C-151, issued to Welsh, A Textron Co., September 11, 1974.
21. Welsh 7580 respirator (with 7500-8 filters) for respiratory protection against dusts, fumes, and mists having a time-weighted average less than 0.05 mg/M^3 , and radionuclides. Approval TC-21C-152, issued to Welsh, A Textron Co., September 11, 1974.

Chemical-Cartridge Respirators

24. Welsh 7504 respirator (with 7500-4 cartridges) for respiratory protection against not more than 300 parts per million of ammonia. Approval TC-23C-63, issued to Welsh, A Textron Co., September 11, 1974.
25. Welsh 7514 respirator (with 7500-4 cartridges and 7500-6 filters) for respiratory protection against not more than 300 parts per million of ammonia, dusts and mists having a time-weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-64, issued to Welsh, A Textron Co., September 11, 1974.
26. Welsh 7503 respirator (with 7500-3 cartridges) for respiratory protection against not more than 1,000 parts per million organic vapors, 10 parts per million chlorine, 50 parts per million hydrogen chloride, or 50 parts per million sulfur dioxide. Approval TC-23C-65, issued to Welsh, A Textron Co., September 11, 1974.
27. Welsh 7513 respirator (with 7500-3 cartridges and 7500-6 filters) for respiratory protection against not more than 1,000 parts per million organic vapors, 10 parts per million chlorine, 50 parts per million hydrogen chloride, or 50 parts per million sulfur dioxide, dusts and mists having a time-weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-66, issued to Welsh, A Textron Co., September 11, 1974.

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28. Willson 1222 respirator (with R22 cartridges) for respiratory protection against not more than 10 parts per million chlorine. Approval TC-23C-67, issued to Willson Products Div., ESB Inc., September 11, 1974.
29. Willson 122210 respirator (with R22 cartridges and R10 filters) for respiratory protection against not more than 10 parts per million chlorine, dusts and mists having a time-weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-68, issued to Willson Products Div., ESB Inc., September 11, 1974.
30. Willson 1223 respirator (with R23 cartridges) for respiratory protection against not more than 50 parts per million sulfur dioxide. Approval TC-23C-69 issued to Willson Products Div., ESB Inc., September 11, 1974.
31. Willson 1224 respirator (with R24 cartridges) for respiratory protection against not more than 300 parts per million ammonia or 100 parts per million methyl amine. Approval TC-23C-70, issued to Willson Products Div., ESB Inc., September 11, 1974.
32. Willson 122410 respirator (with R24 cartridges and R10 filters) for respiratory protection against not more than 300 parts per million ammonia, 100 parts per million methyl amine, dusts and mists having a time-weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-71, issued to Willson Products Div., ESB Inc., September 11, 1974.
33. Willson 122310 respirator (with R23 cartridges and R10 filters) for respiratory protection against not more than 50 parts per million sulfur dioxide, dusts and mists having a time-weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-72, issued to Willson Products Div., ESB Inc., September 11, 1974.
34. Welsh 7511 respirator (with 7500-1 cartridges and 7500-6 filters) for respiratory protection against not more than 1,000 parts per million organic vapors, dusts and mists having a time-weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. Approval TC-23C-73, issued to Welsh, A Textron Co., September 11, 1974.

Tables for identification of component parts of the respirators listed in the addenda will be included in the next cumulative supplement.

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TABLES FOR IDENTIFICATION
OF APPROVED COMPONENT PARTS

Table III-1. Self-contained breathing apparatus component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-13F-44	SurvivAir Div., U.S. Divers Co.	9038-00, 9038-02, 9838-00, 9838-02,	9411-12 or 9413-20, facepiece. 9118-00, regulator. 9602-47, low-pressure warning. 9151-45, cylinder and valve assembly. 9457-00, back-pack assembly.
TC-13F-45	SurvivAir Div., U.S. Divers Co.	9038-20, 9038-22, 9838-20, 9838-22	9411-60 or 9413-60, facepiece. 9118-01, regulator. 9602-47, low-pressure warning. 9151-45, cylinder and valve assembly. 9457-00, back-pack assembly.

Table III-3. Supplied-air respirators component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
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TC-19C-73	Scott Aviation	4616-11, -12, -15, -21, -22, and -25 4622-11, -12, -15, -21, -22, and -25	742 or 4704, facepiece. 6119, breathing tube. 4196 or 4196-1, flow control valve and cartridge assembly. 4286, air-supply hose.

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Table III-4. Dust, fume, and mist respirators component parts, by approval number.

Approval number	Approval issued to	Respirator number(s)	Component parts, number(s) and description
TC-21C-147	American Optical Corp.	R1050	R1050, respirator assembly.
TC-21C-148	Safeline Products	5350	5350, respirator assembly.
TC-21C-149	Scott Aviation	662-1 and 662-2	805 or 742, facepiece. 502-R, filter.

Table III-5. Chemical-cartridge respirators component parts, by approval number.

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