

Thoughts on a New Respirator Naming Convention for Pesticide Labels

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Overview of Current Labeling Situation

Pesticide labels appear to use a mix of terminology from 2 different regulations

- 30 CFR 11 NIOSH/MSHA; Dust/Mist Filtering Respirator; Organic vapor respirator with pesticide prefilter; TC-21C
- 42 CFR 84 NIOSH; N,R,P,HE filters; TC-84A;
- Other TC-19C; TC-23C; TC-14G; TC-13F
identifiers: “Air supplying” is always wrong

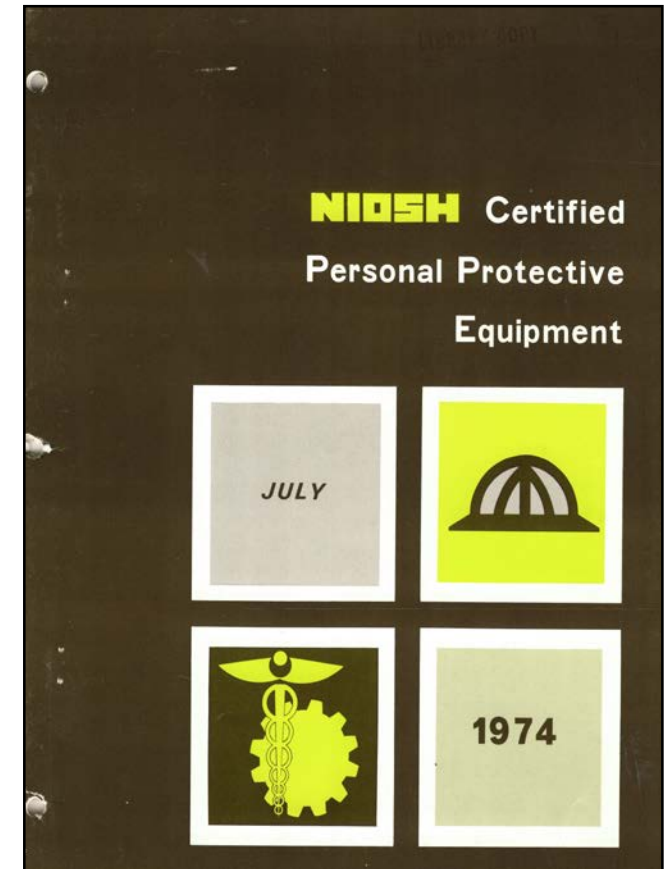
Overview of Use of TC Numbers

Started when there were:

- Fewer NIOSH approvals
- Simpler devices –simple/direct functionality

March 25, 1972- July 18, 1974

SCBA	17	TC-13F
Gas Masks	2	TC-14G
Supplied-Air Respirators	8	TC-19C
Dust, Fume, Mist Respirators	15	TC-21C
Chemical Cartridge Respirators	20	TC-23C



Overview of Use of TC Numbers (Cont.)

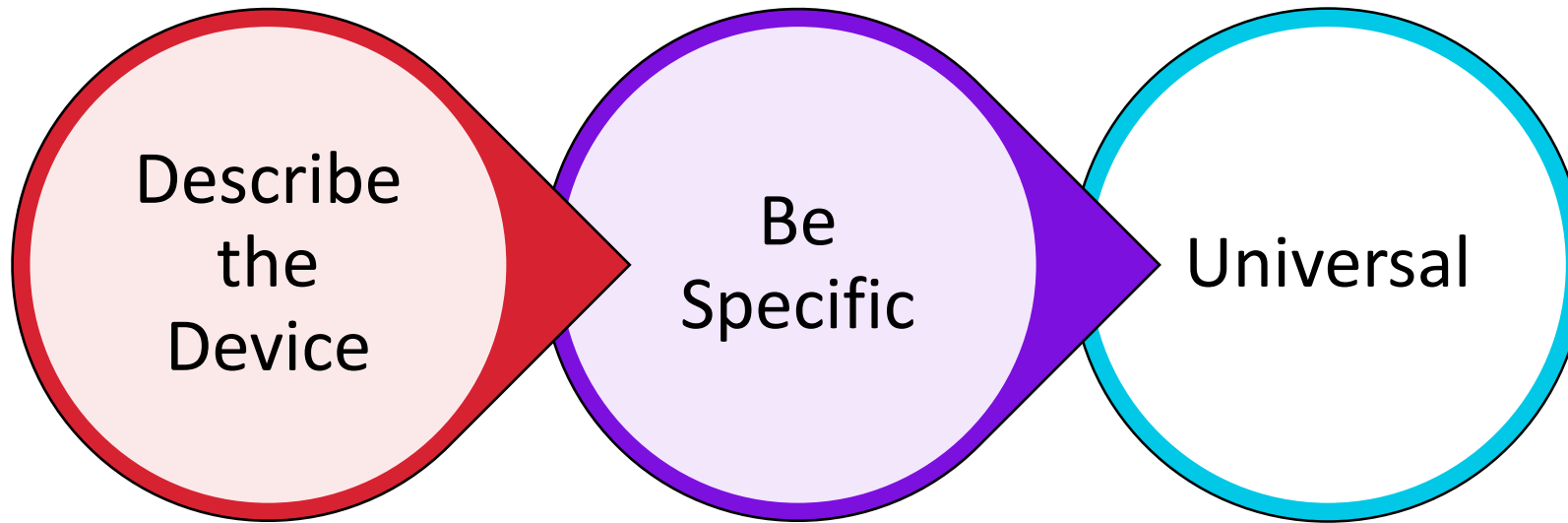
As of January 9, 2018:

Total NIOSH Approvals: 8286



Source: NIOSH NCEL https://www2a.cdc.gov/drds/cel/cel_form_code.asp

What's in a Name Generally?



- Respirator classification has been around for years
- Naming conventions from standards/regulations
- Not jargon/trade terms etc.

Classification Encompasses

Respiratory Inlet Covering (RIC)

- Facepiece,
- Hood,
- Helmet,
- etc.

Attachments to the RIC

- Filters,
- Cartridges,
- Airlines,
- Cylinders

“Driver” of the air

- Wearer,
- Motor blower,
- Compressed gas

Examples of the Classification

APR w/ half mask and organic vapor cartridges

PAPR w/hood and high efficiency filter

SAR - Any supplied air respirator

SCBA- pressure demand SCBA

Combination SAR with auxiliary SCBA

PR Notice 98-9 - Particulate removing respirators

Pesticide Product	Respirator Recommendation
Contains oil or has instructions that would allow application with an oil-containing material	Any NIOSH approved respirator with any R, P, or HE filter
Does not contain oil and bears no instructions that will allow application with an oil containing material Examples: granular formulations, dusts mixed with water, dry powders mixed with water	Any NIOSH approved respirator with any N, R, P, or HE filter

PR Notice 98-9 – Chemical cartridge respirators

Pesticide Product	Respirator Recommendation
Contains oil or has instructions that would allow application with an oil-containing material	Any NIOSH approved respirator with a(n) [NAME] cartridge and any R, P, or HE filter
Does not contain oil and bears no instructions that will allow application with an oil containing material Examples: granular formulations, dusts mixed with water, dry powders mixed with water	Any NIOSH approved respirator a(n) [NAME] cartridge and any N, R, P, or HE filter

Respirator Language - LRM

Pesticide Type	Vapor Pressure (mmHg)	Respirator Language	
		Existing	Proposed
Non-Organic Gaseous Products (e.g. phosphine)	1×10^{-3} or lower	Case by case basis	Any NIOSH approved respirator with <u>[Name]</u> cartridge or canister
Organic Gaseous Products Used in Enclosed Areas	1×10^{-3} or lower	For handling activities in enclosed areas, use either a NIOSH approved supplied-air respirator with NIOSH approval number prefix 19C; or a self-contained breathing apparatus (SCBA) with NIOSH approval number prefix TC-13F	Any NIOSH approved pressure demand self-contained breathing apparatus (SCBA)

SCBA vs Supplied Air Respirator (SAR)



TC-19C
SAR



TC-13F
SCBA



TC-13F
SCBA

Respirator Language – LRM (cont. 1)

Pesticide Type	Vapor Pressure (mmHg)	Respirator Language	
		Existing (non-oil)	Proposed
Organic Gaseous Products Applies Outdoors	1×10^{-03} or lower	A NIOSH-approved respirator with an organic vapor (OV) cartridge with combination N, R or P filter with NIOSH approval number prefix TC-84A; or NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC-14G; or a NIOSH approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter, with NIOSH approval prefix TC – 23C.	Any NIOSH approved respirator with an organic vapor cartridge or canister with an N, R, P or HE filter

Respirator Language - LRM (cont. 2)

Pesticide Type	Vapor Pressure (mmHg)	Respirator Language	
		Existing	Proposed
Solid Products: Products that are formulated and applied as solids.	NA	A NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC- 84A; or a NIOSH approved powered air purifying respirator with HE filter with NIOSH approval number prefix TC- 21C.	Any NIOSH approved particulate respirator with N, R, or HE filter

Respirator Language – LRM (cont. 3)

Pesticide Type	Vapor Pressure (mmHg)	Respirator Language	
		Existing	Proposed
Liquid Products in Toxicity Category I: Products that are formulated or applied as liquids:	Lower than 1×10^{-05}	A NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC – 84A.	Any NIOSH approved particulate respirator with any N, R, or HE filter
Liquid Products in Toxicity Category I: Products that are formulated or applied as liquids:	Greater than 1×10^{-05}	A NIOSH approved respirator with an organic vapor (OV) cartridge with a combination N, R or P filter, with NIOSH approval number prefix TC – 84A; or a NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC – 14G.	Any NIOSH approved respirator with organic vapor cartridge or canister with any particulate filter Or A NIOSH approved respirator with [NAME] cartridge or canister with any particulate filter

Respirator Language – LRM (cont. 4)

Pesticide Type	Vapor Pressure (mmHg)	Respirator Language	
		Existing	Proposed
Liquid Products in Toxicity Category II:	Lower than 1×10^{-04}	A NIOSH approved particulate respirator, with any N, R or P filter with NIOSH approval number prefix TC-84A.	Any NIOSH approved particulate respirator with any N, R, P or HE filter
Liquid Products in Toxicity Category II:	Greater than 1×10^{-04}	A NIOSH approved respirator with an organic vapor (OV) cartridge with a combination N, R or P filter, with NIOSH approval number prefix TC-84A; or a NIOSH approved gas mask with a canister with NIOSH approval number prefix TC-14G; or a NIOSH approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH approval number prefix TC – 23C	Any NIOSH approved respirator with an organic vapor cartridge or canister and any N, R, P or HE filter Any NIOSH approved respirator with [NAME] cartridge or canister and any N, R, P or HE filter



Questions?

The background consists of a complex, abstract pattern of overlapping triangles in various shades of yellow and orange. The triangles vary in size and orientation, creating a dynamic and textured visual effect. The colors range from bright, vibrant yellows to deeper, more saturated oranges, with some areas appearing as lighter, almost white highlights where the triangles overlap.

Thank you!