

Table 2: Respirator Approvals - Comparison of MSHA vs. NIOSH Schedules

MSHA Regulation		NIOSH Regulation	
Approval Schedules	MSHA and NIOSH Joint Approval MSHA 30 CFR Part 11 Effective dates: 1971 – 1995	NIOSH Approval ¹ NIOSH 42 CFR Part 84 Effective dates: 1995 to present	Notes to Current Users of Respirators for Pesticides
TC-21C Particulate Respirators <i>changes deletions</i>	<ul style="list-style-type: none"> Non-powered particulate filter APR: <ul style="list-style-type: none"> APR with HEPA filters Single use dust/mist respirators Dust/mist filtering respirators Dust/mist/fume respirators Any² Powered Air Purifying Respirator (PAPR) with particulate filter (HE) Any² PAPR with dust/mist filter PAPR with dust/mist/fume filter 	<ul style="list-style-type: none"> Obsolete Obsolete Obsolete Any PAPR² with particulate filter (HE) Obsolete Obsolete 	<p>All MSHA/NIOSH non-powered particulate respirator designations are obsolete, dust mask; dust/mist/fume, and HEPA filters. Respirators with these filter types have not have not been manufactured since 1998.</p> <p>42 CFR Part 84 created "Schedule" TC-84A. It includes all non-powered APR with particulate filters; as well as those with particulate filters in combination with chemical cartridges.</p>
TC-84A Air Purifying Particulate Respirators (only non-powered) <i>new schedule</i>	not applicable	<ul style="list-style-type: none"> Filtering facepiece respirators (N, R, or P) Non-powered APR with particulate filters (N, R, or P) Non-powered APR with combination chemical cartridge - particulate filter (N, R, or P) Non-powered APR with chemical cartridge & particulate filter (N, R, or P) held in place with retainer 	<p>Schedule TC-84A particulate filters (N, R, P) are rated for degradation of filter efficiency by oil; i.e. N (no oil); R (oil-resistant); and P (oil-proof). Each of these filter types is also rated by filter efficiency: i.e., 95%, 99%, and 99.97%.</p>
TC-14G Gas Mask Air Purifying Respirators <i>changes</i>	<ul style="list-style-type: none"> Gas mask without particulate filter Gas mask with particulate filter (dust/mist, dust/mist/fume, HEPA) Gas mask or PAPR with gas mask canister approved for pesticides Tight-fitting PAPR with gas mask canister with HE filter Tight-fitting PAPR with gas mask canister 	<ul style="list-style-type: none"> Gas mask without particulate filter Gas mask with particulate filter (N, R, or P) Obsolete Tight-fitting PAPR with gas canister with HE filter Tight-fitting PAPR with gas canister 	<p>Current NIOSH Approval Schedule TC-14G allows for certification of N, R, or P-series filters for gas masks. P100 is the most typical filter type commercially available for gas masks.</p> <p>All NIOSH/MSHA pesticide respirator designations are obsolete.</p> <p>PAPR that include particulate filters in combination with chemical canisters or cartridges are currently tested & approved under schedules TC-14G & TC-23C (see below).</p>
TC-23C Chemical Cartridge Respirators <i>changes</i>	<ul style="list-style-type: none"> Chemical cartridge respirators with/without dust/mist, dust/mist/fume, or HEPA particulate filters Pesticide respirators (pesticide cartridge; OV cartridge with pesticide filter) Paint spray respirators Any² PAPR with chemical cartridge(s) Any² PAPR with chemical cartridges and either, dust/mist, dust/mist/fume, paint spray, or pesticide filters Any² PAPR with combination chemical cartridge & HE filter 	<ul style="list-style-type: none"> Chemical cartridge respirators <u>without</u> particulate filters Obsolete Obsolete Any² PAPR with chemical cartridge(s) Obsolete Any² PAPR with combination chemical cartridge & HE filter 	<p>Any chemical cartridge combination with dust/mist, dust/mist/fume, & HEPA filter, or pesticide pre-filters are obsolete. Any pesticide or paint spray respirators (TC-23C, TC-14G) are obsolete, & have not been manufactured since 1998.</p> <p>Current NIOSH Schedule TC-23C includes testing & certification criteria for chemical cartridge respirators <u>without</u> particulate filters.</p> <p>The testing & certification criteria for combination chemical cartridge-particulate filter respirators are now included in TC-84A and 23C (see above).</p>
TC-19C Supplied-air Respirators <i>no change</i>	<ul style="list-style-type: none"> Supplied air respirator (airline) 	<ul style="list-style-type: none"> TC-19C respirators cannot be used in atmospheres immediately dangerous to health and life (IDLH). Entry into IDLH atmospheres requires use of self-contained breathing apparatus that allow for emergency escape (see TC-13F below). 	
TC-13F Self-Contained Breathing Apparatus <i>no change</i>	<ul style="list-style-type: none"> Self-contained breathing apparatus (SCBA) Supplied air respirator with a self-contained escape bottle 	<ul style="list-style-type: none"> When TC-13F is specified, check pesticide label for whether the SCBA or SAR with SCBA escape bottle is to be "pressure-demand" or "demand" mode. If one or both of these is not indicated on the label, contact the pesticide manufacturer for direction. Otherwise, use a pressure-demand unit, in case of IDLH atmospheres. TC-13F Pressure-demand is the state of the art for IDLH atmospheres because they are the most protective respirators 	

¹MSHA and NIOSH jointly review and approve respirators used for mine emergencies & mine rescue

² Any, loose- or tight-fitting respirator