# RESPIRATORY PROTECTIVE EQUIPMENT (RPE) QUALITATIVE FIT TEST FORM

MOD Form 5033

# Part 1 - Personal, RPE and Activity Details

Fait 1 - Fersonal, RFE and Activity Details					
Wea	arer details	RPE details			
Full Name		Type <sup>1</sup>	Choose an item.		
Rank / Title		Manufacturer			
Staff / Service Number		Model			
Email Address		Size	Choose an item.		
Signature		Condition	Choose an item.		
Pla	ce of Work	Filter			
		NSN			
		Date RPE			
		Issued Replacement			
		Due			
Comments					
Additional PPE Worn					
Activity Details					
Frequency RPE is to be worn	What is the task(s) undertaken and / or airborne hazard(s) controlled by your RPE?				
Hourly					
Daily					
Weekly					
Monthly					
Yearly					

<sup>&</sup>lt;sup>1</sup> BA – Breathing Apparatus. Only applicable to half-masks, not full-masks. Source: <u>Health and Safety Executive</u>, <u>INDG 479 – Guidance on respiratory protective equipment (RPE) fit testing</u>

# Part 2 – Fit Test

Staff / Service Number

Seest   Number of squeezes used in the Sensitivity Test   Number of squeezes used in the Sensitivity Test   Number of squeezes required at the start of the Fit Test   Seconds during the Fit Test   Test									
used in the Sensitivity Test		Sensitivity Test							
11 - 20	Sweet	used in the Sensitivity		required at the start of			squeezes every 30 seconds during the Fit		
Fit Test  Exercise	Bitter	1 – 10				10		5	
Fit Test  Exercise		11 – 20				20		10	
Exercise Pass (with comments) Fail (with comments)  1. Normal Breathing		21 – 30				30		15	
Exercise Pass (with comments) Fail (with comments)  1. Normal Breathing							•		
1. Normal Breathing 2. Deep Breathing 3. Turning Head Side to Side 4. Moving Head Up and Down 5. Talking 6. Bending Over 7. Normal Breathing Overall Result Test Valid Date of Test Tester Comments  Tester Details									
2. Deep Breathing			Pass	(with co	omn	nents)	Fail (with comments)		
3. Turning Head Side to Side  4. Moving Head Up and Down  5. Talking  6. Bending Over  7. Normal Breathing  Overall Result  Test Valid  Date of Test  Tester Comments  Tester Details	1. Normal Breathing								
4. Moving Head Up and Down  5. Talking  6. Bending Over  7. Normal Breathing  Overall Result  Test Valid  Test Valid  Tester Comments  Tester Comments  Tester Details	2. Deep Breathing								
5. Talking	3. Turning Head Side to Side								
6. Bending Over 7. Normal Breathing Overall Result Test Valid Date of Test Tester Comments  Tester Details	4. Moving Head Up and Down								
7. Normal Breathing	5. Talking								
Overall Result  Test Valid  Pes  Retest Date  Tester Comments  Tester Details	6. Bending Over								
Test Valid Date of Test Tester Comments  Tester Details	7. Normal Breathin	g							
Date of Test Tester Comments  Tester Details	Overall Result								
Tester Comments  Tester Details	Test Valid		Yes				No		
Tester Details	Date of Test								
	Tester Comments								
	Tostor Dotails								
						Name			

Signature

## OFFICIAL – SENSITIVE – PERSONAL (When completed)

#### Guidance Notes<sup>2</sup> for MOD Form 5033

**NOTE:** This form is specifically for the use of Qualitative Fit Tests (QLFT) only. If conducting a Quantitative Fit Test (QNFT), users **should** utilise the auto-generated report from the portacount machine and record the results appropriately. All tight-fitting respirators require fit testing.

**Qualitative Fit Testing:** Qualitative fit testing (QLFT) is a pass/fail test based on the wearer's subjective assessment of any leakage through the face seal region by detecting the introduction of bitter or sweet-tasting aerosol as a test agent. QLFT methods are suitable for disposable and reusable half masks; they are not suitable for full-face masks. Although this type of test is based on subjective detection and response by the wearer of the RPE, it is important that it is administered by a fit tester competent in using this method.

**Quantitative Fit Testing:** Quantitative fit testing (QNFT) provides a numerical measure of how well a facepiece seals against a wearer's face; this is called a fit factor. These tests give an objective measure of face fit. QNFT methods are suitable for disposable and reusable half masks and full-face masks.

## Part 1 – Personal, RPE and Activity Details

- 1. **Wearer details.** Details of the person undergoing the RPE Fit Test are to be entered here. For hard copy versions, they **must** sign the form, for electronic versions an e-signature and confirmation via email (or by other auditable means) will suffice.
- 2. **RPE details.** The details of the RPE being tested is to be entered into this section.
  - a. **Filter.** The type of filter used on the wearer's RPE. Reference the information in Table 1 of these notes.
  - b. **Date RPE Issued / Replacement Due.** The full date is required.
  - c. **Comments.** The tester **should** enter any further comments here that are relevant, for example commenting further on the condition of the RPE being tested, specifying the size of the RPE if not listed or explaining the reason why one of the previous fields could not be completed.

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<sup>&</sup>lt;sup>2</sup> Fit Testing of RPE Guide can be found in <u>JSP 375, Vol 1, Chapter 15 - Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE), Annex A.</u>

Filter types					
Colour code	Туре	For use against	Class	Other information	
White	Р	Particles	1 2 3	European standard: EN 143	
Brown	А	Organic gases and vapours, boiling point above 65 °C	1 2 3	European standard: EN 14387	
Grey	В	Inorganic gases and vapours	1 2 3	European standard: EN 14387 Do not use against carbon monoxide	
Yellow	E	SO <sub>2</sub> and other acid gases	1 2 3	European standard: EN 14387	
Green	К	Ammonia and its organic derivatives	1 2 3	European standard: EN 14387	
Red &	Hg P3	Mercury	-	European standard: EN 14387 Includes P3 particle filter Maximum use time 50 hours No class number	
Blue &	NO P3	Oxides of nitrogen	-	European standard: EN 14387 Includes P3 particle filter Single use only No class number	
Brown	AX	Organic gases and vapours, boiling point at or below 65 °C	-	European standard: EN 14387 Single use only No class number	
Violet	SX	Substance as specified by the manufacturer	-	European standard: EN 14387	

Table 1<sup>3</sup>, Filter Types.

- 3. **Additional PPE Worn.** If the wearer is required to wear any other PPE when using the RPE, they **should** mention this here (with NSN's if known) and wear it during the fit test. This includes any spectacles.
- 4. **Activity details.** This section can help inform the frequency of testing. The frequency RPE is to be used **should** be entered in this section using the checkboxes provided, but if it varies, then include further details in the field titled "What is the task(s) undertaken and / or airborne hazard(s) controlled by your RPE?". Within that section, a brief outline of the task/activity that is undertaken, and / or the airborne hazards that are to be controlled with the RPE. For example:

"Using the spray paint bay within the workshops, RPE to protect against paint vapours and particles."

<sup>&</sup>lt;sup>3</sup> Source of information for Table 1 – <u>Health and Safety Executive, HSG 53</u>

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#### Part 2 - Fit Test

- 5. **Flavour of Aerosol.** The flavour used for the sensitivity test **must** also be used for the fit test.
- 6. **Sensitivity Test.** The sensitivity test **must** be carried out with a test hood in place on the wearer, but with no mask worn. Using a nebuliser, the sensitivity solution is introduced into the test hood worn by the wearer. The purpose of the hood is to contain the atomised solution. The Fit Tester records the number of applications of solution required for the wearer to taste the solution. If the wearer does not taste the sensitivity solution after 30 squeezes the alternative taste solution or another fit test method **must** be used.
- 7. **Fit Test.** The fit test is conducted following the sensitivity test with the wearer now wearing the mask. It is important that the wearer has a clean palate prior to putting on the mask. There **must** be a gap of at least 5-10 minutes between the sensitivity test and the fit test, with the wearer having drunk a glass of still water to help cleanse their palate. The wearer **should** then conduct a pre-use wearer seal check. The wearer **must** pass the 7 exercises, each lasting at least 60 seconds, detailed in the Fit Test part of the form. The below Table (Table 2) provides a description of each exercise. During the exercises, the wearer **should** be standing.

Exercise	Description
1. Normal Breathing	The wearer <b>should</b> breathe normally with no head movements or talking.
2. Deep Breathing	The wearer <b>should</b> breathe slowly and deeply, taking care not to hyperventilate.
3. Turning head side-to-side	The wearer <b>should</b> slowly turn their head from side to side between the extreme positions on each side (approximately 15–20 times per minute). The head shall be held at each extreme momentarily so the wearer can inhale at each side.
4. Moving head up and down	The wearer <b>should</b> slowly move their head up and down (approximately 15–20 times per minute). The wearer <b>should</b> be instructed to inhale in the up position (that is, when looking toward the ceiling).
5. Talking	The wearer <b>should</b> talk slowly and loudly enough to be heard clearly by the fit tester. The wearer <b>should</b> read from a standard reading passage or count down from 100. The "Rainbow Passage" (at paragraph 8) is the preferred standard reading passage for the talking exercise.
6. Bending Over	From a normal standing position, the wearer <b>should</b> bend at the waist as if to touch their toes and then return to an upright position. Repeat approximately 10–15 times throughout the duration of the exercise.
7. Normal Breathing	Same as exercise 1.

Table 24, Fit Test Exercises.

<sup>&</sup>lt;sup>4</sup> Source of information for Table 2 – <u>Health and Safety Executive, INDG479</u>.

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- 8. **Rainbow Passage:** "When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colours. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow."
- 9. During the 7 exercises, the tester **should** enter any specific comments relating to the exercises next to the check boxes. The wearer can be tested on the same respirator a second time if they failed at the first attempt. This is because failures are often a result of not taking enough care during fitting. If there is a second failure, then this **should** not be seen as a failure on their part. It is just an indication that the respirator tested has been shown not to fit them well enough and an alternative must now be tried, in order to find a model that will provide them with an adequate fit.
- 10. The overall result **must** then be marked, and the tester **must** confirm that the tests were valid. If the test was not valid for any reason, the tester **must** enter this information in the "Tester Comments" box.
- 11. If the Sensitivity Test and Fit Test were completed on different days, the date the Fit Test took place **should** be entered. The "Retest Date" is the proposed date that the wearer and the RPE **should** be next tested and **should** be no longer than 2 years from the date of the fit test. This **must** be the full date. If consumable replacements are frequently required, then this may affect the retest frequency.
- 12. **Tester Details.** Finally, the tester **must** enter their details and sign off the form, for electronic versions an e-signature and confirmation via email (or by other auditable means) will suffice.