

U.S. Pipeline and Hazardous Materials Safety Administration Self-Contained Breathing Apparatus (SCBA) Cylinder Research Project

The purpose of this research is to determine if there is any safety risk associated with the use of SCBA cylinders beyond the 15 year service life used by fire departments. This project was initiated at the request of the several fire departments having composite cylinders that are reaching the 15 service that may still be suitable for continued use. A sample of at least 100 cylinders is needed for the research study. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is requesting fire departments to donate eligible SCBA cylinders for this this research. **There is no cost to the fire department or donating agency for shipping the SCBA cylinders, please see section 10 of this letter for shipping instructions and address.**

The questions and answers below will provide guidance for you to donate the SCBA cylinders.

1. What do the SCBA cylinder(s) needed for the research project look like?

The images below show examples of the SCBA cylinder and its use. You may have a different type or manufacture but the application for firefighting is the same.



2. What type of SCBA cylinder(s) should be shipped?

SCBA cylinder(s) that are made of composite materials that are either Fiber Reinforced Plastic (DOT FRP-1) or Fully Wrapped Carbon-Fiber Reinforced (CFFC) aluminum lined and are marked with an exemption or special permit number identified in the table below:

Exemption (E) or Special Permit (SP)	Number
E or SP	10915
E or SP	10945
E or SP	13381
E or SP	13173
SP	14339

3. **What OTHER types of SCBA cylinder(s) are eligible for this project?**

Exemption (E) or Special Permit (SP)	Number
E or SP	7277
E or SP	8162
E or SP	8391
E or SP	7218
E or SP	9716
E or SP	11005

4. **Where on the SCBA cylinder(s) are the markings located and what should I look for?**

The markings of a SCBA cylinder(s) could be located on the shoulder of the cylinder or a label embedded on the cylinder shell.

5. **What is the desired age of the SCBA cylinder(s)?**

We prefer SCBA cylinder(s) that have reached their 15 year service life. SCBA cylinders having less than 10 years' service life should not be provided

6. **How is the age of the SCBA cylinder(s) determined?**

The age of the SCBA cylinder is determined based on the first hydrostatic test date that includes month and year (e.g. 071998). The initial test date is located right after the "E" or SP number of the SCBA cylinder. These markings can be found on the sidewall of the cylinder which is coded with clear epoxy.

7. **What should be the condition of the SCBA cylinder(s)?**

A cylinder selected for this project should be a cylinder that has been in field use with acceptable wear due to operation. A cylinder that was removed from service due severe damage should not be selected for this project.

8. **What information do I need to complete to ship the SCBA cylinder(s)?**

The attached document titled, "SCBA Cylinder(s) Information Form" list the information needed. Please complete a separate form for each donated SCBA cylinder and include a completed form with the SCBA cylinder(s) being shipped.

9. **Who is responsible for the cost of shipment of the SCBA cylinder(s) for this project?**

The cost of shipment is covered by the contractor, Digital Wave, for the shipping the SCBA cylinder(s) to their address related to the research project.

10. What are the instructions for shipping the SCBA cylinder(s)?

Please contact the contractor, Digital Wave at the address noted below. They will provide you with the instruction, materials and information to ship the donated SCBA cylinder(s). Shipping method is generally a 3-5 day ground transportation from a commercial vendor (i.e. USPS, FedEx, UPS)

Digital Wave Corporation
Attention – Steve Ziola
13760 E Arapahoe Rd
Centennial, CO 80112
Phone: 303.790.7559
Fax: 303.790.7567

11. Who is the point of contact at PHMSA should I have questions about selecting the SCBA cylinder(s) or the project itself?

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Donated SCBA Cylinder(s) Information Form

Please provide the information regarding the donated SCBA Cylinder in the appropriate section of the table.

Manufacturer of SCBA cylinder	
Manufacture date of SCBA cylinder	
Exemption (E) or Special Permit (SP) number of SCBA cylinder	
SCBA cylinder serial number	
Last retest date listed on the SCBA cylinder	
Donating Agency Name	
Address	
Address Line 2	
City, State, Zip	
Name of Contact Person	
Telephone number	
E-Mail address	