## TOWN OF BRISTOL GRANT SUMMARY DOCUMENT

(To be completed at time of grant application)

Funding Agency Name: Federal Emergency Management Agency (FEMA)

**Date of Application Submission:** February 11, 2021

**Subject:** Assistance to Firefighters Grant (AFG)

## Explanation of what grant funds will be used for:

The Bristol Fire Department has identified through a risk assessment the need to replace its compressed air filling station equipment (e.g. air compressor, booster, supply air cylinders). The current system is a 1999 Poseidon 5hp compressor with compatible booster, fill station, and supply air cylinders bought in 1997. The manufacturer, Poseidon, is no longer in business and parts are not obtainable for repair work. The system has seen a few problems in recent years and the company hired to provide service is not able to do further repairs. The 22-year-old air filling station has had a few issues in recent years. A compressor filter issue identified Fall 2020 potentially allowed oil to enter and contaminate the breathing air that was then used to fill air cylinders. That failure had potential health implications on the firefighters who depend on safe clean air to work in immediately dangerous to life and health atmospheres.

The purchase of a new compressor, fill station, booster, and supply air cylinders is the best solution to mitigate current situation. After working with a repair contractor and several suppliers, the Department has determined that a full replacement of the system will cost \$50,000, which is broken down as follows:

10hp Compressor:\$27,700Fill Station with cascade:\$11,3004 - 6000PSI Cylinders:\$6,100Storage Rack for cylinders:\$1300Installation:\$1600Shipping:\$2000Application Amount:\$50,000

There are a few differences between the air filling station that is currently in use and the replacement. First is output. When the air filling station was first put into service, 2216 psi air-packs were the standard. Over the last 20 years, the Fire Department has upgraded to 4500psi air cylinders. The current air filling system relies on 24-year-old 4500 psi supply air cylinders. These 4500 psi supply cylinders limit our ability to maximize air filling and ultimately causes the compressor to work harder to boost the compressed air to 4500 psi. That compression heats the air in the firefighters' air-pack cylinder and over time, as it cools, the air cylinder pressure drops below the optimal 4500 psi.

One goal of this replacement project is to better optimize the air in the SCBA cylinder. By upgrading the compressor from 5HP to 10HP, replacing the storage cylinders with new cylinders which can hold 6000 psi, and upgrading the fill station, the SCBA air cylinders will fill quicker, cooler, and hold a better pressure, ultimately improving the efficiency of the air-packs.

The project also specifies a storage rack for the 6000 psi supply air cylinders. Currently the supply air cylinders are freestanding on the floor. This is an unsafe situation and is something that we would resolve with a complete air filling station replacement.

## **Description of Matching or other Funds to be used:**

Grant recipients must share in the costs of the projects funded under this grant program as required by 15 U.S.C. 2229(k) (1) and in accordance with applicable federal regulations at 2 CFR Part 200.

Matching funds are determined by the size of the population in which the Fire Department serves.

"When serving a jurisdiction of 20,000 residents or fewer, the applicant shall agree to make available non-federal funds in an amount equal to not less than 5 percent of the grant awarded".

The Fire Department is proposing to utilize capital equipment funds earmarked for a replacement Air Filling System to cover the grant writer fee and the non-federal funding 5 percent match totaling \$2,404.76.

Name of Grant Applicant: Brett LaRose, Chief – Bristol Fire Department

## **SUMMARY OF GRANT AWARD**

(To be completed by Treasurer's Office)

Fund # (Assigned by Treasurer's Office):
Grant Award Date://
Grant Number issued by Funding Agency:
CFDA if applicable:
Grant Period:// to/
Grant Award Amount: \$
Final Report Submitted://
Total Reimbursed: \$

To be filled with copy of detail transaction report generated from general ledger.