

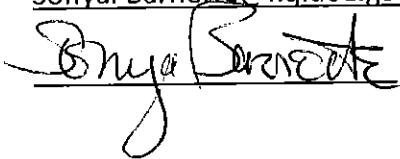
**Project Justification Statement for Revision to
Department of Energy Standard 3020, *Specification for HEPA and
ULPA Filters used by DOE Contractors***

1. **Title:** Department of Energy Standard 3020, *Specification for HEPA and ULPA Filters used by DOE Contractors*

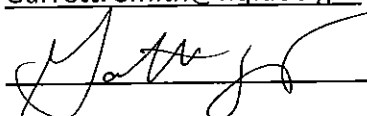
2. **Organization Name/Code**

Office of Quality Assurance and Nuclear Safety Management Programs (AU-32)
Office of Nuclear Safety (AU-30)
Office of Environment, Health, Safety, and Security (AU)

3. **Author's Name**

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5. How will this new or proposed revision to the DOE Standard support DOE?

The proposed project is to update Department of Energy (DOE) Standard (STD) 3020, *Specification for HEPA Filters Used by DOE Contractors*. The revised DOE-STD-3020 will provide general requirements for DOE/NNSA contractors for the procurement and required testing of high efficiency particulate air (HEPA) filters as well as Ultra Low Penetration Air (ULPA) filters used in DOE/NNSA facilities. These procurements should additionally align with the latest American Society of Mechanical Engineers (ASME) publication ASME AG-1, *Code on Nuclear Air and Gas Treatment*, as a primary source for purchasing and testing HEPA filters and the Institute of Environmental Sciences and Technology recommended practice IEST-RP-CC007.3, *Testing ULPA Filters*, for testing ULPA filters.

The revision to the Standard will update cross references to the latest applicable DOE directives and national consensus standards. The Standard is used in clarifying expectations during the purchases of HEPA and ULPA filters for the purchaser and manufacturers of filters. In addition, the revised Standard would alert the purchasers that the Filter Test Facility (FTF) will be forwarding filters to the purchasers that pass resistance and penetration testing but have defective filter labeling. The purchasers will then resolve the issues with the defective labeling with the manufacturers.

Other updates will be to include a nonmandatory purchase order template that models what is required in an acceptable purchase order for filters. The flammability point for the gel seals will be reexamined and tables will be reviewed for changing the reference to Standard Cubic Feet per Minute from Actual Cubic Feet per Minute. Accuracy of the rounding in the tables will also be reviewed. Some of the tolerances specified for manufacturers will be reviewed to determine if tolerances can be relaxed for parts that are not critical. Also, certain separatorless filters will be recommended to not be used in DOE/NNSA applications.

6. List possible Voluntary Consensus Standards (VCS) that were considered for use in lieu of developing or revising the subject Standard

There are no voluntary consensus standards that are completely equivalent with this Standard. Although ASME AG-1 and IEST-RP-CC007.3 can be useful in determining procurement and testing requirements, the applications are not equivalent to meeting all the special unique needs of the DOE/NNSA facilities. This Standard also gives direction for testing for performance requirements by the FTF and provides information on design criteria that will be inspected by the DOE FTF that are not fully covered in the national consensus standards.

A google search included reviews of web sites was performed to find other VCSs for equipment specifications concerning nuclear applications of air cleaning equipment and relevant testing requirements (ex. the National Air Filtration Association and science.gov). No other applicable VCSs were found except for the European Standard (EN 1822) which classifies nonUS manufactured filters.

7. Provide detailed justification for the PA's decision not to use potentially applicable VCSs in lieu of developing or revising a DOE Technical Standard.

Required use of IEST-RP-CC007.3 for testing ULPAs will be added as a voluntary consensus Standard to follow. The IEST standard will need to be specified in purchase orders for the manufacturers to test the ULPAs to that standard. Other than IEST-RP-CC007.3 and those already referenced for use in DOE-STD-3020, there are no potentially applicable voluntary consensus standards. The Standard provides a road map by pointing to several national consensus standards for items concerning the manufacture of nuts, bolts, washers, stainless steel wire, wire rods, and test methods for flash and fire points.

8. Will this new or proposed revision to the DOE Technical Standard have an impact on any DOE directives or a rule? If so, please list the impacted directives or rule.

DOE-STD-3020 is invoked in DOE Order (O) 420.1C, *Facility Safety*. The only other DOE directive that refers to DOE-STD-3020 is DOE Order (O) 410.1, *Central Technical Authority Responsibilities Regarding Nuclear Safety Requirements*. Therefore, CTA concurrence will be needed before the revised DOE-STD-3020 can be issued.

The Standard is also referenced in DOE G 420.1-1A, *Nonreactor Nuclear Safety Design Guide* and DOE G 440.1-7A, *Implementation Guide for Use with 10 CFR 850*.

No significant impact to the directives is expected.

9. Provide the reasoning for the selected document type (i.e., DOE Standard)

This Standard provides required materials of construction information as well as ensuring the filters are qualified before being manufactured for DOE/NNSA installations and performance tested at an independent filter test facility prior to being shipped to the sites.

As such, it is appropriate to issue it as a DOE standard rather than a DOE handbook, consistent with DOE O 252.1A, *Technical Standards Program*. The proposed revision is to a current DOE standard already in the DOE Technical Standards Program; and no change in document type is proposed.

10. Provide an anticipated timeline for process milestones.

10/01/18 Develop Project Plan
10/15/19 Start date for draft standard development
01/15/19 Provide to AUCT for AU-30 management review
01/21/19 AU-wide internal review
02/01/19 Enter into REVCOM for DOE/NNSA-wide review

03/30/19 End REVCOM Review and Comment – 60 calendar days
04/03/19 Begin Response Negotiation – 30 calendar days
05/03/19 REVCOM review of comments negotiated for Final Concurrence– 15 calendar days
05/18/19 Submit approval package for AU-30 concurrence – 14 business days
06/14/19 Approval and issuance date