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**SPECIFICATION FOR
Procurement of Portable Nuclear Grade HEPA Filtered Vacuum
Cleaners
and Replacement Filters**

Impact Level: 3

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Title
Specification for Procurement of Portable Nuclear Grade HEPA Filtered Vacuum Cleaners and Replacement Filters

CHANGE CONTROL RECORD		
Revision	Description of Change	Authorized for Release
0	This specification supersedes HS-V-P-4037, Rev. Basic	

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<p>1.0 SCOPE</p> <p>This specification is for the procurement of portable High Efficiency Particulate Air (HEPA) filtered vacuum cleaner units and replacement HEPA filters which are used in temporary contamination control and environmental clean up. These units fall in a category of 300 cubic feet per minute (CFM) or less.</p> <p>2.0 APPLICABILITY</p> <p>This specification applies to the acquisition of HEPA filtered vacuum cleaners and replacement filters to be used for radioactive and asbestos contamination control.</p> <p>3.0 DEFINITION</p> <p><u>HEPA Vacuum Cleaner</u> - An electrical device that cleans surfaces by suction and discharges transport air through a HEPA filter.</p> <p>4.0 DESIGN REQUIREMENTS</p> <ol style="list-style-type: none"> 1. Electrical components shall be UL approved. 2. Each filter shall be individually tested by the supplier and certified to have an efficiency of not less than 99.97% for 0.3 micrometer by an approved challenge aerosol. 3. All units shall be constructed of a material (e.g., stainless steel, plastic) which is easily decontaminated without damage to components. 4. Vacuums which have latches but provide a loose head to tank seal that is dependent on the vacuum force to provide a positive seal shall not be considered. 5. Suppliers which use silicone base material to prevent leakage shall not be considered. 6. All hose connections shall provide positive seals and be constructed of a material that will not be damaged by repeated use or rough handling. 7. HEPA filters shall have a positive seal and pass an in-place leak test. The filter hold down clamps shall provide the required force to seal the filter and prevent dislodging during rough handling, and repeated use. The filter clamps shall be constructed of a material that does not warp or bend with repeated use. 							

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5.0 PACKAGING, SHIPPING AND STORAGE

Each portable HEPA filtered vacuum cleaner unit and/or replacement HEPA filter shall be packaged in order to provide shock protection and prevent damage during handling, shipping and storage.

6.0 QUALITY ASSURANCE PROVISIONS

1. Acceptance Inspection and Testing

- a. Payment will not be made by the Buyer until each HEPA filtered vacuum cleaner unit has been inspected by Quality Assurance, and tested and accepted by Vent and Balance. Payment will not be made by the Buyer until each replacement HEPA filter has been inspected and accepted.
- b. Each HEPA filtered vacuum cleaner unit and/or replacement HEPA filter shall be inspected for visible damage, evidence of poor workmanship and errors in manufacture. Minor imperfections shall be acceptable provided they do not compromise the functional performance. Any minor imperfections must be random in type in any lot. Any imperfections exceeding 20% of that lot, indicating lack of quality control, shall be cause for rejection of the entire lot.
- c. Equipment and filters that do not meet these requirements shall be tagged with a "rejected" slip by Quality Assurance, noting the reasons for the rejection.
- d. The Supplier shall be notified by the Buyer of the rejection, including the nature of the rejection. The Supplier shall provide replacement items until the stipulated quantity has been found acceptable, unless otherwise negotiated between the Buyer and Supplier.

2. Optional Testing

The Buyer may elect to have additional testing performed by a Department of Energy (DOE) Filter Test Facility. In addition to the aforementioned testing and acceptance criteria, Buyer acceptance and payment shall be dependent on meeting these additional test requirements.

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7.0 APPENDIX: INSTRUCTIONS FOR COMPLETING THE REQUISITION

The following steps are instructions for completing the Requisition, when using this specification.

1. Attach a copy of Sections 1-6 of this specification to the Requisition.
2. Provide the following information in the Requisition (order and format):

PORTABLE HEPA FILTERED VACUUM CLEANER UNITS AND REPLACEMENT HEPA FILTERS SHALL BE IN ACCORDANCE WITH SPECIFICATION WHC-S-0462, REV.0.

PACKAGING, SHIPPING AND STORAGE SHALL BE IN ACCORDANCE WITH THIS SPECIFICATION.

Exceptions: _____

Quantity, Name and Intended Use (e.g., 6 ea. HEPA vacuum cleaner units, replacement HEPA filters, contamination control)

Type (e.g., Vacuum 125 CFM)

Filter Size (e.g., to fit 8" x 8", HEPA vacuum cleaner unit)

Manufacturer/Model Number

Filter/Mounting Frame Seal (e.g., Neoprene strip gasket, gasket location - downstream end)

Any Minimum Design Acceptance Criteria (e.g., stainless steel, voltage/current ratings unit, size, capacity)

QA Clauses: B34 -- Identification of Items

3. At a minimum, Industrial Hygiene, Quality Assurance and Radiation Control Engineering shall sign the Requisition.