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Superseding AIR787A

(R) Filter Element Cleaning Methods

RATIONALE

Revision B was created to clarify cleaning requirements and the filter element cleaning guide table. In addition, the document has been significantly updated editorially.

FOREWORD

Satisfactory cleaning methods can be developed for most "cleanable" filter elements. The technical or economic feasibility of the cleaning method may be limited, however, by:

- The incompatibility of filter element construction materials,
- By mechanical weaknesses
- The lack of corrosion resistance to withstand repeated or continued cleaning
- By the presence of unusually tenacious contamination

These factors should be considered when selecting approaches to the development of specific methods.

The primary reason for cleaning filters is to eliminate the cost of the replacement of them. Additional considerations include:

- The reduction of logistic problems in stocking new replacement filter elements.
- The conservation of strategic materials and skills in the event of a national emergency.

When considering all of these factors, the total cost of cleaning should be less than the total cost of replacement for a given situation. While process economy is desirable for its own sake, economic evaluation and decision for a particular case can be undertaken by the user alone.

The applicable cleaning processes are mainly determined by the geometry and materials of construction used in the filter. Additionally, final cleanliness requirements and the characteristics of contamination plugging the filter should be considered.

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