

## FESHM 1050: FESHM, FRCM, AND QAM PROCEDURES

### Revision History

<b>Author</b>	<b>Description of Change</b>	<b>Revision Date</b>
T.J. Sarlina	<ul style="list-style-type: none"><li>• Changed chapter title</li><li>• Added responsibilities of the head of the Office of Quality Assurance for QAM chapters.</li></ul>	January 2022
Jim Niehoff	Added to Section 3.1, technical working groups, ESH professionals and “ad hoc” subcommittees to reflect centralized ESH&Q organization	January 2017
Amber Kenney	Five-year review. Minor updates include: <ul style="list-style-type: none"><li>• Added definition for “Program”</li></ul> Added reference to the Quality Assurance Manual	September 2016
Martha Michels	Updated chapter to include new workflow and approval processes and to clarify responsibilities.	January 2012

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## 1.0 INTRODUCTION

This chapter describes the procedures for introducing, drafting, and approving new and revised Fermilab ES&H Manual (FESHM) chapters, Fermilab Radiation Control Manual (FRCM) chapters, and Quality Assurance Manual (QAM) chapters.

## 2.0 DEFINITIONS

Directive – a standard method for communicating information.

Policy - a written statement that expresses the philosophy of senior management for guidance to attain stated goals.

Practice – a generally accepted method for performing work.

Program – a framework to accomplish a specified objective including details of the required actions and who is responsible.

Procedure - the written or established step by step method of performing a task which is necessary for an organization to accomplish their objectives.

Standard - a specific code, authoritative consensus standard, or regulation (as distinguished from a criterion which is any standard of judgment) applicable to the subject at hand.

## 3.0 RESPONSIBILITIES

### 3.1 The Chief Safety Officer

- Function as the editor and distributor of the Fermilab ES&H Manual and Fermilab Radiation Control Manual.
- Appoint authors for FESHM chapters, usually FESHCom subcommittee members or ES&H Section staff.
- Assure approved policies and procedures developed by the Fermilab Environment, Safety and Health Committee (FESHCom) and its technical subcommittees, ES&H professionals, and "ad hoc" groups have been incorporated into the Fermilab ES&H Manual as appropriate.
- Submit new FESHM chapters to the Chief Operating Officer for concurrence, and the Laboratory Director for approval.
- Submit revised FESHM chapters to the Chief Operating Officer for concurrence, and the Laboratory Director for approval if in his/her opinion significant changes have taken place.
- Review Exception and Variance requests and make recommendations to the Director.

### 3.2 Head of the Office of Quality Assurance

- Function as the editor and distributor of the Fermilab Quality Assurance Manual.
- Appoint authors for QAM chapters, usually members of the Office of Quality Assurance and quality assurance professionals employed by Fermilab Research Association (FRA).

- Assure approved policies and procedures developed by the Fermilab Environment, Safety and Health Committee (FESHCom) and its technical subcommittees, QA professionals, and "ad hoc" groups have been incorporated into the QAM as appropriate.
- Submit new QAM chapters to the Chief Operating Officer for concurrence, and the Laboratory Director for approval.
- Submit revised QAM chapters to the Chief Operating Officer for concurrence, and the Laboratory Director for approval if, in their opinion, significant changes have taken place.
- Review QA Exception and Variance requests and make recommendations to the Director.

### 3.3 The Chief Operating Officer

Evaluate new or updated FESHM, FRCM, and QAM chapters submitted for review and recommend approval to the Laboratory Director.

### 3.4 Division/Section Heads and Project Managers (D/S/P)

- Assure appropriate review of FESHM, FRCM, and QAM chapters posted for review.
- Implement requirements contained within the FESHM, FRCM, and QAM chapters.
- Request exception from FESHM requirements that cannot be implemented within 90 days of the date of issue (per [FESHM 1010](#)).

## 4.0 PROGRAM DESCRIPTION

The [three manuals](#) are available on both the [ES&H Section](#) and [Quality Assurance](#) web pages. Updates are typically posted within a day of approval and notifications are sent out to Manual subscribers via e-mail. Registration to receive notifications of new and modified manual chapters is at: [http://www-esh.fnal.gov/pls/default/esh\\_mailing\\_lists.html](http://www-esh.fnal.gov/pls/default/esh_mailing_lists.html).

The Quality Assurance Manual and the Fermilab Radiation Control Manual are both part of the ES&H Manual and are controlled using the same procedures as this chapter. QAM chapters are approved by the head of the Office of Quality Assurance. The QAM chapters utilize the same format as FESHM chapters. The Fermilab Radiological Control Manual has a different format in order to facilitate compliance with external requirements. [Templates for manual chapters](#) are stored in ESHQ DocDB.

## 5.0 MANUAL ADMINISTRATIVE PROCEDURES

- Manual chapters are typically reviewed at least every five years. The chapter author/subject matter expert (SME) determines if the review should be lab-wide or only by SME(s).
- The revision dates are changed when:
  - There is a lab-wide review of the chapter, or
  - The SME(s) updates a chapter and determines a lab wide review is not warranted.
  - If a chapter is only updated with minor revisions, such as grammatical changes, personnel titles, or things of that nature, the revision date shall not be changed.
- New and revised chapters are prepared as needed to improve Fermilab's ES&H and QA programs. Often their preparation/revision is stimulated by an improvement identified by an individual or agency. Revisions are also motivated by changes in Fermilab's [Work Smart Standards](#) and/or applicable laws and regulations.

- The Chief Safety Officer may promulgate Interim FESHM chapters to state specific policies. These will be issued without prior review by D/S/P's and will normally be limited in scope to the implementation of regulatory changes or mandated DOE policies.
- The head of the Office of Quality Assurance may promulgate Interim QAM chapters to state specific policies. These will be issued without prior review by D/S/P's and will normally be limited in scope to the implementation of regulatory changes or mandated DOE policies.
- Draft chapters are managed by a semi-automated process in Oracle. [The FESHM Workflow document](#) provides authors with details regarding the “FESHM Workflow” and other information.
- When the draft is ready for approval, ES&H Admin drafts a memo to be signed by the Chief Safety Officer or head of the Office of Quality Assurance and delivers it to the Directorate for approval by the Chief Operating Officer and the Laboratory Director. A summary of the need for the new chapter or the changes to an existing chapter shall be provided in the memo and at the beginning of the revised document. The Directorate does not have to approve chapters that have no substantive changes.
- After approval by the Laboratory Director, the chapter shall be posted and available on the ES&H and QA websites. Notifications shall be sent to those who have requested such information.
- Any chapter that is recently posted assumes a 90-day period for implementation of the new requirements. If additional time is needed, D/S/Ps shall request an exemption of the requirement from the Laboratory Director.
- Technical appendices to manual chapters contain details of implementation that are generally useful to persons who are engaged in designing controls for ES&H or QA issues. Technical appendices are included in the Manual immediately following related chapters. They shall be reviewed in the same fashion as the Manual chapters.

## 6.0 TECHNICAL APPENDICES

This TA describes the approach to format FESHM, FRCM, and QAM chapters and Technical Appendices.

### 6.1 Philosophy

The Fermilab ES&H Manual (including FRCM and QAM) contains management policies and procedures regarding ES&H and QA. The guidance is to minimize confusion concerning direction or assignment of responsibility. Manual chapters are to be kept as brief and clear as is practical.

### 6.2 ES&H and QA Manual Sections

Each ES&H and QA Manual chapter consists of the following sections in the indicated order.

- Revision History - A summary of changes/additions made to the chapter, along with the revision date and name of the author. New revisions should appear at the top of the table.
- Table of Contents - This can be done automatically in Word by using styles.
- Introduction and Scope - An introduction is included in every chapter. It states the scope and purpose for the chapter, describes the motivation for the chapter, and identifies the sites at which the chapter applies (i.e. – Fermilab, FRA leased spaces, etc.).
- Definitions - A definition section is included only if there are terms included in the chapter which are not commonly understood by the typical employee. Definitions shall be provided if the meaning of a term is not clear or could be confused with an alternate interpretation. Definitions must be consistent across all manual chapters.
- Responsibilities - A responsibilities section is included only if there are any responsibilities which are beyond those indicated in [FESHM 1010](#).
- Program Description - This section is used for "Program" chapters only. It should be sufficiently detailed to clearly identify those entities responsible for program implementation. The last statement in the section refers to the availability of a Technical Appendix.
- Procedures - This section is used for other than "Program" chapters. The last statement in the procedures section indicates the availability of one or more Technical Appendices.
- References
- Technical Appendices

### 6.3 Rhetoric

Wording should be simple and direct. Clear English should be used, and complicated sentence structures should be avoided. This is especially true for procedures.

The word "shall" is used for mandatory actions. The word "should" is used for advisory actions.

### 6.4 Technical Appendices

The [format of Technical Appendices](#) is to follow that of the rest of the FESHM or QAM Chapters.

### 6.5 Interim FESHM, FRCM or QAM Chapters

Interim Manual chapters are issued by the Chief Safety Officer to implement specific ES&H policies and by the head of the Office of Quality Assurance for Quality policies with a minimum of delay. They are meant to be simple brief statements in the format specified by the [appropriate template](#). They are often issued to allow for immediate implementation while the draft chapter is out for review and

comment. The Chief Safety Officer or head of the Office of Quality Assurance shall assign them a chapter number consistent with the Table of Contents of the relevant manual.