

PARTICLE PHYSICS DIVISION OPERATING MANUAL
REVIEW AND APPROVAL RECORD

PPD/CMS/FCPA ES&H/NEPA REVIEW OF PROCUREMENTS AND PROPOSED PROJECTS

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REVISION HISTORY

Version	Date	Section No.	Specifics
1.0	4/25/2011	All Sections	Initial draft of procedure
1.1	5/4/2012	Appendix A	Added items that require ES&H review

PPD/CMS/FCPA ES&H/NEPA REVIEW OF PROCUREMENTS AND PROPOSED PROJECTS

1.0 INTRODUCTION

The purpose of this procedure is to provide a formal environment, safety, and health (ES&H) review process for proposed Particle Physics Division (PPD), U.S. Compact Muon Solenoid (CMS) and Fermilab Center for Particle Astrophysics (FCPA) actions.

2.0 SCOPE

This document establishes responsibilities of and procedures for division/section/center personnel that initiate purchases of services, supplies, and equipment (through purchase requisitions, short orders, petty cash and procurement cards (ProCards)) as well as construction activities, experiments, and substantial physical or operational changes to the facilities (through time and materials (T&M) task orders, subcontracting, and in-house work), or claim items off government surplus. In addition, this procedure serves as the PPD/CMS/FCPA implementation plan for the National Environmental Policy Act (NEPA) review process. The procedure places limitations on the use of petty cash and the procurement of certain items.

3.0 POLICY

It is PPD/CMS/FCPA's policy to comprehensively review projects, requisitions, and all other actions in their infancy to ensure that Fermilab is cognizant of any environmental, safety or health impacts or opportunities and how to mitigate or capture them. PPD/CMS/FCPA is committed to being a good environmental steward by promoting environmental consciousness and sustainable development; and is committed to ensuring a safe and healthy work environment for all personnel.

4.0 DEFINITIONS

Action - a project or activity which may include design, construction, and operation of an individual facility, or research development, demonstration and testing for a procedure or product. PPD is responsible for NEPA compliance for actions that are carried out by other divisions/sections on PPD's behalf if they are funded by PPD and PPD will have operational control over the final product.

Categorical Exclusion (CX) - an action that falls within a class of actions that have been determined to have no significant effect on the human environment, either individually or cumulatively, and is therefore exempt from further review and documentation under NEPA. To qualify as a CX, the action must be listed in either [Technical Appendix C to FESHM Chapter 8060](#) or [Appendix A or B to 10 CFR 1021, Subpart D](#), and it must meet the four conditions listed in Appendix B to 10 CFR 1021, Subpart D.

Requisition - for the purposes of this procedure, this term collectively refers to all of the following:

- Change Order - alteration to the amount or scope of a purchase requisition or T&M task order requisition. The change is made using the same type of form as the original action.
- Personnel Requisition - form for hiring of new personnel.
- Petty Cash Voucher – form used to obtain reimbursement for small outlays of personal cash used for a variety of purposes, including payment of local transportation costs and purchase of materials and supplies. These forms are used for amounts less than \$100.00. Petty cash purchases for more than \$50.00 require prior approval by the Procurement Department in the Business Services Section. Petty cash should not be used for the purchase of chemicals, including pesticides and herbicides, or any other ES&H-sensitive item without first notifying the PPD ES&H Group.
- Purchase Requisition - form used to initiate the ordering of supplies, equipment, repairs on equipment, consultant services, tools, memberships, chemicals, computers, hardware, and other items that support PPD daily operations. Open orders and "blanket" requisitions are included in this definition.
- ProCard – A MasterCard credit card issued to an employee (with supervisor’s approval) for use in purchasing low-value goods not to exceed \$2,500.00. There are restrictions on the types of items that may be purchased with a ProCard. See the [ProCard User’s Guide](#). A purchase requisition must be completed and approved before the purchase can be made.
- T&M Task Order Requisition - form used to purchase subcontractor labor for items such as routine maintenance, minor building modifications, repairs to electrical systems, plumbing, painting, replacement of fire detection suppression equipment, lighting, modification to building partitions, or mobile crane and rigging services.

Responsible Party - person initiating or assigning a proposed procurement or other action and having approval authority over it. Potential responsible parties include PPD Headquarters staff, department heads, PPD task managers and construction coordinators, project managers, project leaders, and PPD sponsors of visiting scientists/experiments. The responsible party is the “Project Initiator” for purposes of compliance with [FESHM Chapter 8060](#).

Service Subcontract - procurement action, the principal purpose of which is to furnish services through the use of subcontractor employees on site.

5.0 RESPONSIBILITIES

5.1 PPD/CMS/FCPA DIVISION/SECTION/CENTER HEAD

- Ensures that proposed PPD actions are reviewed for potential environmental impacts and safety and health concerns.
- Approves NEPA Environmental Evaluation Notification Form (EENF) for projects not qualifying for a routine maintenance CX.

5.2 PPD/CMS/FCPA SENIOR SAFETY OFFICER (SSO)

- Coordinates and assigns trained personnel within the PPD ES&H Group to assist in performing NEPA and ES&H reviews on requisitions initiated by PPD personnel,
- Reviews and approves applicable permits (including work permit and notification forms),
- Maintains records of NEPA approvals for PPD proposed actions other than requisitions, and
- Reviews hazard analyses (HAs) and, when necessary, comments on deficiencies to the approving supervisor or task manager.

5.3 PPD/CMS/FCPA DEPARTMENT HEADS

- a) Review all departmental proposed actions and carry out the NEPA compliance activities required of the Division Head,
- b) Submit (via assigned administrative support employees) department-approved requisitions (other than personnel requisitions and petty cash vouchers) to the ES&H Group for ES&H screening and further routing,
- c) Instruct their employees not to use a ProCard for purchase of restricted items and to consult with the ES&H Department before using petty cash for purchase of chemicals, including pesticides and herbicides, and other ES&H sensitive items,
- d) Encourage their employees to avoid use of materials that are hazardous to handle or detrimental to the environment by finding benign alternatives, and, when requested by the ES&H Group, approve justifications for use of hazardous materials when alternatives are not available, and
- e) Identify waste minimization/pollution prevention opportunities connected with their activities and encourage subordinates to pursue them.

5.4 PPD/CMS/FCPA REQUISITION GATEKEEPERS

- a) Review all requisitions against criteria in Appendix 1 for ES&H significance. Forward all requisitions that meet criteria in Appendix 1 to the PPD ES&H Group for further review, and
- b) Complete PPD ES&H/NEPA review of procurements training every two years.

5.5 PROJECT INITIATORS

- a) Communicate details of any new project or activity to PPD ES&H immediately to initiate any necessary reviews,
- b) Carry out the NEPA compliance activities required in connection with projects for which they are responsible for (refer to [FESHM 8060](#)). This would include evaluating the project using the Environmental Impacts Checklist in FESHM 8060 (as guidance).
- c) Supply additional description regarding ES&H issues, when requested by PPD ES&H,
- d) Assist the PPD Division Head in coordinating the NEPA and safety and health reviews for their assigned projects within PPD and with the ES&H Group, and
- e) Identify and pursue waste minimization/pollution prevention opportunities during project planning and implementation.

5.6 PPD ES&H GROUP PERSONNEL

- a) Evaluate all requisitions submitted to the ES&H Group for review, sign and indicate ID number after resolving any ES&H concerns,
- b) As directed by the PPD SSO, review NEPA Checklists, forms and any other pertinent supplied documents to identify safety and health concerns associated with proposed actions other than requisitions, and
- c) Review all requisitions involving subcontractor work for purposes of conducting safety and health inspections of construction activities, and
- d) Review hazard analyses and, when necessary, comment on deficiencies to the approving supervisor or task manager.

5.7 PPD ENVIRONMENTAL PROTECTION OFFICER

- a) In addition to those responsibilities under "PPD ES&H Group Personnel",
 - i. Acts as PPD's lead contact for NEPA compliance,

- ii. Reviews and approves NEPA Project Information Forms prior to submittal to the ES&H Section,
- iii. Conducts ES&H reviews as part of the compliance review, and
- iv. Provides training and guidance on NEPA to PPD staff.

5.8 PROCARD HOLDERS

- a) Screen department-approved requisitions against the criteria in the [ProCard User's Guide](#) to determine if intended actions require ES&H Group review, and if appropriate, forward them to PPD ES&H.

5.9 PPD BUILDING MANAGERS/TASK MANAGERS/CONSTRUCTION COORDINATORS/SERVICE SUBCONTRACT COORDINATORS

- a) Carry out the responsibilities under [FESHM 7000](#) series of chapters,
- b) Review and approve work permit and notification forms for activities occurring in buildings/areas for which they are responsible,
- c) Communicate details of any new project or activity to PPD ES&H immediately to initiate any necessary reviews,
- d) Identify and pursue waste minimization/pollution prevention opportunities during project planning and implementation,
- e) Ensure that subcontractors receive Fermilab Subcontractor Orientation and General Employee Radiation Training (GERT) unless they will be continuously escorted while on site. Waiver of GERT requires RSO approval if subcontractors will enter controlled areas.

5.10 ALL PPD/CMS/FCPA EMPLOYEES

- a) Adhere to the sustainable acquisition requirements/guidance when procuring goods and services, and
- b) Complete Sustainable Acquisition training, as required.

6.0 PROCEDURE

6.1 PROHIBITION/RESTRICTIONS

PROHIBITION

Except for certain personnel in the ES&H Group, no one in PPD/CMS/FCPA may purchase respirators. Respirators may only be obtained from the PPD ES&H Group or the ES&H Section.

RESTRICTIONS

- Purchase of radioactive sources or services involving bringing radioactive sources or radiation-producing devices on site requires prior approval of the ES&H Section. Notify the PPD Radiation Safety Officer to arrange for this approval.
- PPD/CMS/FCPA personnel conducting any activity that involves bringing compressed gases into PPD/CMS/FCPA facilities from an off-site location must provide prior notification to the ES&H Group. This requirement is waived if the gases are being obtained through a purchase requisition.
- Purchase of the items listed below is strongly discouraged and requires prior investigation on the part of the originator into the existence of more benign alternatives. Persons considering purchasing

any of these materials should consult with the PPD/ES&H Industrial Hygienist or Environmental Protection Officer before completing a requisition.

- Carcinogenic/toxic materials (e.g., methylene chloride, benzene, beryllium, lead-based paint)
- cyanide-containing chemicals
- [class I ozone-depleting substances](#)

If, after appropriate consultation and investigation, the employee still wishes to purchase a restricted material, the ES&H Group reserves the right to require that the requisition be accompanied by a written justification, signed by the requester's department head, describing why the material is needed and what efforts were made to identify a substitute, non-hazardous material.

- PPD/CMS/FCPA personnel wishing to purchase chemicals, pesticides or herbicides with petty cash must first inform one of the PPD ES&H group regarding the specific chemical proposed for purchase and the quantity.
- If the actual purchase differs in any way (e.g., chemical identity or quantity) from the original proposal conveyed to the ES&H Group, the purchaser must supply updated information as soon as possible.
- Items proposed to be obtained from government excess and are listed in Appendix 1, must be screened by the ES&H Group prior to finalizing arrangements.

6.2 SUSTAINABLE ACQUISITION

Executive Order 13423 requires that federal agencies develop a green purchasing program. PPD/CMS/FCPA employees purchasing goods and services shall take into account the elements of this program outlined in [FESHM 5011 – Sustainable Acquisition](#). In addition, if presented with equivalent options from different suppliers, give preference to local suppliers. This minimizes the environmental and energy impacts of transporting goods to the lab.

6.3 SCREENING AND SUBMISSION OF REQUISITIONS FOR REVIEW BY THE PPD ES&H GROUP

All requisitions initiated in PPD/CMS/FCPA shall be screened by the PPD/CMS/FCPA Requisition Gatekeeper or, as applicable, a ProCard holder, against the criteria in Appendix 1 and the [ProCard Users Guide](#). Those falling under the criteria in Appendix 1 require ES&H review and must be submitted to the PPD ES&H Group before further processing.

Petty cash vouchers, personnel requisitions, and requisitions for conferences, workshops, schools, etc., do not require ES&H review and need not be submitted to PPD ES&H Group.

ProCard Purchases

The [ProCard User's Guide](#) contains criteria for determining if an intended purchase requires PPD ES&H review. These are reflected in the ProCard User's Guide list of "ES&H-Sensitive Items" (copied below) for which prior written approval by PPD ES&H is required before placing an order.

ES&H Sensitive Items

- | | |
|---|---|
| ● <i>Chemicals</i> | ● <i>Paints</i> |
| ● <i>Chemical spill control equipment</i> | ● <i>Personal protective equipment</i> |
| ● <i>Ergonomic devices</i> | ● <i>Pressure/vacuum vessels</i> |
| ● <i>ES&H-related training seminars</i> | ● <i>Respiratory protective equipment</i> |
| ● <i>Fire protection/detection/ suppression systems</i> | ● <i>Scaffolding equipment</i> |
| ● <i>Forklift equipment</i> | ● <i>Storage tanks</i> |
| ● <i>Lifting fixtures</i> | |

If PPD ES&H review is required, the purchase requisition should be submitted electronically. Requests for expedited reviews will be granted in urgent situations, whenever possible.

6.4 PPD ES&H GROUP REVIEW OF PPD/CMS/FCPA ACTIONS

ES&H/NEPA Review

All PPD/CMS/FCPA-initiated actions, requisitions and project documents (e.g. hazard analysis, work permit, or environmental impact checklist or other document describing the activity) submitted to the ES&H Group shall be reviewed for ES&H issues in accordance with [FESHM 5010](#) and [FESHM 8060](#).

The ES&H group will review NEPA documents (such as the Environmental Impact Checklist or Project Information Form) submitted by the Project Initiator to make a determination of environmental impacts requiring further documentation.

The reviewer(s) shall approve a requisition by filling out the ES&H portion of the approval record after all ES&H implications have been considered. For any purchase requisition that represents a portion of an activity that has already had a NEPA determination, the reviewer may write, "previously approved." If a requisition that is associated with an activity that the reviewer believes has potential environmental impacts, has no prior NEPA approval, and does not fall under a routine maintenance CX ([Technical Appendix C of FESHM 8060](#)) shall be returned to the originator with instructions to complete and submit an Environmental Impacts Checklist ([Technical Appendix B of FESHM 8060](#)) to the PPD Environmental Protection Officer.

7.0 REFERENCES

- 4.1 [National Environmental Policy Act of 1969, 42 U.S.C. 4321 et seq.](#)
- 4.2 [Fermilab ES&H Manual \(FESHM\), Chapter 8060, National Environmental Policy Act Review](#)
- 4.3 [Title 40 Code of Federal Regulations \(CFR\) parts 1500-1508, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act](#)
- 4.4 [Title 10 CFR Part 1021, National Environmental Policy Act Implementing Procedures](#)
- 4.5 [Fermilab ES&H Manual, Chapter 5010, Review of Purchase Requisitions and Work Orders for Safety and Health Concerns](#)
- 4.6 [Title 29 CFR 1910.1200, Occupational Safety And Health Standards, Hazard Communication](#)
- 4.7 [Fermilab ES&H Manual, Chapter 7020, Subcontractor Safety — Other than Construction](#)
- 4.8 [ADDP-SH-0003, ES&H Review of Procurement Actions and Proposed Projects](#)
- 4.9 [PPD Administrative Procedure: PPD Admin 018 Purchase Order Guidelines](#)
- 4.10 [PPD Administrative Procedure: PPD Admin 020 Restrictions on Purchases and Changes to Procards](#)

CRITERIA FOR DETERMINING THE NEED FOR PPD/CMS/FCPA ES&H REVIEW OF PROPOSED PROCUREMENTSItems/Activities that require PPD ES&H Group Review (ES&H-Sensitive Items):

1. New T&M requisitions and change orders to existing T&M requisitions that alter the scope of work
2. New contracts and change orders that alter the scope of existing contracts for on-site services, labor, construction, decorating, or machinery maintenance – including temporary workers
3. Lasers or equipment containing lasers as a component, except printers and similar office equipment
4. Personal protective equipment, including but not limited to: hard hats, gloves, special purpose clothing, respirators, safety glasses and footwear. EXCEPTION: eyewear and footwear purchased through the FNAL safety eyeglasses and footwear program, which are not processed through the normal purchase requisition system
5. Chemical products, toxic and hazardous materials including but not limited to: toxic metals, paints, epoxies, compressed gases, and chemical spill control equipment
6. Radioactive or [nuclear](#) material
7. Equipment capable of generating ionizing radiation
8. Chainsaws, lawnmowers and other exterior grounds maintenance tools and equipment
9. Pressure/vacuum vessels or equipment incorporating pressure vessels, such as air compressors
10. Storage tanks
11. Power tools – fixed or portable
12. Powder-actuated tools
13. Medical and first-aid supplies
14. Material handling equipment, including but not limited to: cranes, hoists, rigging materials, powered industrial trucks and “golf” carts
15. Ergonomic equipment, including: chairs and stools, desks and tables on which computers will be placed, keyboards, mice and track balls, keyboard and mouse trays, document holders, glare screens, palm/wrist and foot rests, arm/wrist braces and other body support devices
16. Subcontractor work in hazardous locations (e.g. ODH, radiation areas, confined spaces, etc.)
17. Building modifications, maintenance or construction activities
18. Other items purchased from surplus, such as:
 - a. Items that may have been in a radiological area (e.g. shielding, scintillator plastics, chambers, targets, etc.)
 - b. Secondary containment
 - c. Portakamps, trailers
 - d. Back-up generators
 - e. Electrical equipment
 - f. Items that may contain asbestos (e.g. floor tiles, boilers, etc.)
 - g. Machinery
 - h. Heating/Ventilation equipment, Chillers
 - i. Appliances (e.g. freezer, refrigerator, etc.)

Figure 1

PPD/CMS/FCPA Procurement Review Process for ES&H/NEPA Review

