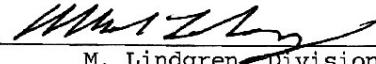


ACCELERATOR DIVISION ES&H PROCEDURE

ADSP-08-0601


ENVIRONMENT, SAFETY, AND HEALTH REVIEW
OF PROCUREMENT ACTIONS AND PROPOSED PROJECTS

REVISED BY  13747N DATE 12/4/18
E. McHugh ESH&Q/AD DSO

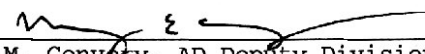
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M. Lindgren, Division Head

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REVIEW AND CONCURRENCE RECORD

REVIEWED BY:  13747N DATE: 12/4/18
E. McHugh, ESH&Q/AD DSO

REVIEWED BY:  DATE: 12/4/18
A. Nestander, AD Sr. Field Financial Manager

REVIEWED BY:  DATE: 12/6/18
M. Convery, AD Deputy Division Head

Revision History

Author	Description of Change	Revision Date
Eric McHugh	Added "revision history" tracking Adjusted language to reflect reorganization of ESHQ Adjusted language to reference current FESHM chapters Added reference ADAP-05-0001 Procedure for Processing Requisitions Added references to e-marketplace	12/10/2018

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1.0 PURPOSE AND SCOPE

The purpose of this procedure is to provide a formal environment, safety, and health (ES&H) review process for proposed Accelerator Division (AD) actions. The document establishes responsibilities of and procedures for division personnel that initiate purchases of services, supplies, and equipment (through purchase requisitions, petty cash, E-marketplace and procurement cards (ProCards)) as well as construction activities, experiments, and substantial physical or operational changes to the accelerators (through time and materials (T&M) task orders, subcontracting, and in-house work), or the acquisition of materials and equipment off government surplus. Procedures for processing requisitions can be found in reference 2.7 ADAP-05-0001 Procedure for Processing Requisitions. In addition, this procedure, in combination with FESHM 2005 Operational Readiness Clearance, serves as the AD 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. It also establishes a policy and procedures for "green" procurement.

This procedure is also intended to ensure compliance with restrictions on excavation and notification requirements pertaining to residual polychlorinated biphenyl (PCB) contamination at Main Ring Service Buildings B1 and B4 as provided in the notice to the deed and reference 2.6 (Figures 1 and 2). See Section 5.3 and Paragraph 6.4.3.2(f). As such, this procedure may not be deleted from AD's system of procedures without first finding another home for these provisions.

2.0 REFERENCES

- 2.1 Fermilab ES&H Manual(FESHM), Chapter 2005, Operational Readiness Clearance
- 2.2 Fermilab ES&H Manual(FESHM), Chapter 8060, National Environmental Policy Act Review
- 2.3 Fermilab ES&H Manual(FESHM), Chapter 5010, Review of Purchase Requisitions and Work Orders for Safety and Health Concerns
- 2.4 Fermilab ES&H Manual (FESHM), Chapter 7020, Subcontractor Safety – Other than Construction
- 2.5 Fermilab ES&H Manual(FESHM), Chapter 1100, Sustainable Acquisition Program
- 2.6 Letter, Margaret M. Guerriero, U.S. Environmental Protection Agency (EPA), Region 5, to Dr. Joanna M. Livengood and Dr. Piermaria J. Oddone, subject: 40 CFR 761.61(c) Risk-Based Approval Request, dated February 23, 2010

2.7 Accelerator Division Administrative Procedure, ADAP-05-0001
Procedure for Processing Requisitions

3.0 DEFINITIONS

- 3.1 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 are 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.
- 3.2 AD Compliance Review Stamp - a stamp used by the AD DSO on requisitions. The completed stamp signifies that authorized personnel have reviewed the requisition for ES&H implications. It is also used to document that the activity enabled by the requisition has been reviewed under NEPA and a determination has been made that it carries no potential for environmental impacts, qualifies for a routine maintenance CX, or has been the subject of a prior NEPA review and determination.
- 3.3 Requisition - for the purposes of this procedure, this term collectively refers to all of the following:
- 3.3.1 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.
- 3.3.2 E-Marketplace - A Fermilab system used to obtain equipment and materials. E-marketplace is a system to easily obtain equipment from vendors with ordering agreements.
- 3.3.3 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. Petty cash purchases for more than \$100.00 require prior approval by the Procurement Department in the Finance Section. Petty cash should not be used for purchase of chemicals, including pesticides and herbicides, or any other ES&H-sensitive item (e.g., column 1 of Attachment 1) without first notifying the AD DSO (see section 5.2.4).
- 3.3.4 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 AD daily operations.
- 3.3.5 ProCard - A 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 Training](#). A purchase requisition (see paragraph

3.3.3 above) must be completed and approved before the purchase can be made.

3.3.6 T&M Task Order Requisition - form used to purchase subcontractor labor.

3.4 Federal Action - a project or activity located (or proposed to be located) in a defined geographic area which may include design, construction, and operation of an individual facility or research development, demonstration and testing for a procedure or product that is entirely or partly financed, assisted, conducted, regulated or approved by the Department of Energy (DOE). AD is responsible for NEPA compliance for actions that are carried out by other divisions/sections on AD's behalf if they are funded by AD and AD will have operational control over the final product.

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

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

4.0 RESPONSIBILITIES

4.1 DIVISION HEAD OR DESIGNEE

- a. Ensures that proposed AD actions are reviewed for potential environmental impacts and safety and health concerns,
- b. Approves work (along with the Directorate) on energized AC electrical distribution systems >50 volts nominal, and
- c. Promote sustainable acquisition (SA) by AD employees.

4.2 AD DSO

- a. Coordinates and assigns trained personnel to assist in performing NEPA and ES&H reviews on requisitions initiated by AD personnel,
- b. Reviews and approves applicable permits (including work permit and notification forms), and
- c. Reviews hazard analyses (HAs) and, when necessary, comments on deficiencies to the approving supervisor or task manager.

4.3 DEPARTMENT HEADS

- a. Review all departmental proposed actions and carry out the NEPA compliance activities required under Section 6.1,
- b. Instruct their employees not to use a ProCard for purchase of restricted items and to consult with the AD DSO before using petty cash for purchase of chemicals, including pesticides and herbicides, and other ES&H-sensitive items,
- c. 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 AD DSO, approve justifications for use of hazardous materials when alternatives are not available,
- d. Identify waste minimization/pollution prevention opportunities connected with their activities and encourage subordinates to pursue them, and
- e. Assist the Division Head in meeting sustainable acquisition goals by directing/overseeing procurements.

4.4 PROJECT MANAGERS AND LEADERS

- a. Carry out the NEPA compliance activities required under section 6.1 in connection with projects for which they are responsible,
- b. Assist the AD Head in coordinating the NEPA and safety and health reviews for their assigned projects within AD and with the ESH&Q Section, and
- c. Identify and pursue waste minimization/pollution prevention opportunities during project planning and implementation.

4.5 SPONSORS OF VISITING SCIENTISTS/EXPERIMENTERS

- a. Carry out the NEPA compliance activities required under section 6.1 in connection with projects proposed to be conducted in/with facilities under their jurisdiction, and
- b. Ensure that visiting scientists/experimenters receive training and personal protective equipment (PPE), including personal dosimeters, appropriate for their planned activities.

4.6 AD DSO & ESH&Q SUPPORT PERSONNEL

- a. Evaluate all requisitions submitted for review, apply and/or complete the AD compliance review stamp after resolving any ES&H concerns,

- b. Review hazard analyses and, when necessary, comment on deficiencies to the approving supervisor or task manager,
- c. Ensure that the requirements of Reference 2.6 are met for any activity involving excavation that could potentially disturb residual PCB contamination at Main Ring Service Buildings B1 or B4. See Section 5.3, Paragraph 6.4.3.2(f), and figures 2 and 3, and
- e. Ensure the preference of sustainable acquisition products in conjunction with ES&H review of purchase requisitions.

4.7 CENTRAL PURCHASING GROUP STAFF AND PROCARD HOLDERS

Screen department-approved requisitions against the criteria in Attachment 1 to determine if intended actions require AD DSO review and, if appropriate, forward them to AD DSO.

4.8 AD BUILDING MANAGERS

Review and approve work permit and notification forms for activities occurring in buildings for which they are responsible.

4.9 TASK MANAGERS/CONSTRUCTION COORDINATORS

- a. Carry out the NEPA compliance activities required under section 6.1 in connection with any construction activities they initiate,
- b. Identify and pursue waste minimization/pollution prevention opportunities during project planning and implementation,
- c. Maintain awareness of the restrictions on excavation at Main Ring service buildings B1 and B4 as detailed in Section 5.3 and, if required, provide timely notice to AD DSO of impending need to excavate, and
- d. Ensure that specified sustainable products are used to carry out the subcontracts they are overseeing or directing.

4.10 SERVICE SUBCONTRACT COORDINATORS

- a. Carry out the responsibilities under Service Coordinator and (normally, unless done by another) Requisitioner in Reference 2.4.

4.11 ALL AD EMPLOYEES shall adhere to the sustainable acquisition requirements/guidance in Section 6.2 when procuring goods and services.

4.12 All Operations Department Personnel shall maintain cognizance of the need to immediately inform AD DSO of any emergency that requires excavation at the PCB-affected areas of

Main Ring service buildings B1 and B4 (see Section 5.3 and figures 2 and 3).

5.0 PROHIBITION/RESTRICTIONS

5.1 PROHIBITION

Respirators may only be obtained from the AD DSO or from the ESH&Q IH group.

5.2 RESTRICTIONS

5.2.1 Purchase of radioactive sources or services involving bringing radioactive sources or radiation-producing devices on site requires prior approval of the ESH&Q Section Radiation Source Manager. Notify the AD DSO as well.

5.2.2 AD personnel conducting any activity that involves bringing compressed gases into AD facilities from an off-site location must provide prior notification to the AD DSO. This requirement is waived if the gases are being obtained through a purchase requisition.

5.2.3 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 ESH&Q Industrial Hygiene group or AD DSO before completing a requisition.

- a. carcinogenic materials (e.g., methylene chloride, benzene, beryllium, lead-based paint)
- b. cyanide-containing chemicals
- c. class I ozone-depleting substances (see Attachment 1 of ADSP-08-0201)
- d. chemicals that contain regulated toxic metals (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver)

If, after appropriate consultation and investigation, the employee still wishes to purchase a restricted material, the AD DSO 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.

5.2.4 AD personnel wishing to purchase chemicals, pesticides, or herbicides with petty cash must first inform the AD DSO regarding the specific chemical proposed for purchase and the quantity.

5.2.4.1 Authorized personnel will incorporate the information in the appropriate tracking system and ensure that a safety data sheet (SDS) is on file for the chemical or, if necessary, ask the requestor to obtain one.

5.2.4.2 If the actual purchase differs in any way (e.g., chemical identity or quantity) from the original proposal conveyed to the authorized person, the purchaser must supply updated information as soon as possible.

5.2.5 Items proposed to be obtained from government excess must be screened by the AD DSO prior to finalizing arrangements. Items in the right column of Attachment 1 are exempt from this restriction.

5.3 SPECIAL RESTRICTIONS PERTAINING TO MAIN RING SERVICE BUILDINGS B1 AND B4

5.3.1 U.S. EPA has given Fermilab permission to consider residual PCB contamination in the groundwater at service buildings B1 and B4 as "disposed in place" pursuant to sampling and a risk analysis. This permission is contingent, in part, upon Fermilab notifying the agency, in writing, at least 10 days prior to excavating any soil or other material in the area where the contaminated groundwater exists.

5.3.2 Responsible parties intending to initiate excavation at either of these buildings must first contact the AD DSO or the Environmental Protection Group or other authorized ESH&Q personnel to arrange this notification. See figures 2 and 3 for the affected areas. Allow at least two weeks in order to get the notice through the Fermilab and DOE Fermi Site Office approval chains. In the event of an emergency requiring immediate excavation, contact with AD DSO must be made as expeditiously as possible, preferably immediately by having the Main Control Room utilize the emergency call list, but in no case later than the morning of the next business day. All Operations Department personnel should maintain cognizance of this requirement in the event that excavation is initiated by an entity outside of AD (e.g., FESS). The notice to EPA must include the location and dimensions of the excavation.

5.3.3 Should excavation be necessary, and groundwater is encountered, a sample must be collected and analyzed, unfiltered, for PCBs. Results must be transmitted to EPA within 10 days of receipt from the lab. Contact the AD DSO, ESH&Q Environmental Protection Group or Hazard Control Technology Team (HCTT) to arrange sampling/analysis.

6.0 INSTRUCTIONS FOR IMPLEMENTATION

See Figure 1 for a flow diagram of the AD ES&H review process. The procedures for the review of the purchase according to NEPA are below.

6.1 NEPA COMPLIANCE

6.1.1 Initial environmental evaluation by responsible party, the [environmental impact checklist](#) Technical Appendix B of FESHM 8060 can be used to commence the evaluation.

6.1.1.1 When initiating or assigning new activities, i.e., as early as possible in the planning stage, each responsible party covered by this section shall determine whether the activity will potentially result in any environmental impacts.

6.1.1.2 The [FESS Environmental Review Form](#) should be used to document the review of the proposed activity. Impacts noted on the ERF can be addressed in the Hazard Analysis created for the activity. Other ES&H concerns shall also be addressed in the HA which may be subject to further review.

6.1.2 Formal NEPA Review

6.1.2.1 NEPA review is often initiated when the AD Central Purchasing or responsible party submits a requisition for goods and services required for the activity to the AD DSO for general ES&H review.

6.1.3 Procedures for the Fermilab NEPA Program can be found in [FESHM 8060](#).

6.1.3.1 The AD DSO will determine if a proposed action qualifies as a routine maintenance CX. An affirmative decision ends the NEPA process unless the scope of the project changes (see section 6.1.6).

6.1.6 Changes in Scope

If an activity that is either planned or in progress undergoes a substantial change in scope from its initial form, the responsible party must bring the change to the attention of the AD DSO for reconsideration of any previous determination made under this section.

6.2 SUSTAINABLE ACQUISITION

Fermilab's Sustainable Acquisition (SA) program has been developed to support the Department of Energy and Fermilab's commitment to Executive Order 13693 - Planning for Federal Sustainability in the Next Decade. The purpose of the order is to maintain Federal leadership in sustainability and reduce greenhouse gas emissions. Please refer to [FESHM 1100 - Sustainable Acquisition Program](#) for helpful guidance, requirements and the [Sustainable Facility Tool](#) for purchasing research and assistance.

6.3 SCREENING AND SUBMISSION OF REQUISITIONS FOR REVIEW BY THE AD DSO

- 6.3.1 All requisitions initiated in AD shall be screened by AD Central Purchasing or, as applicable, a ProCard holder, or E-marketplace license holder against the criteria in Attachment 1. Those falling under the criteria in column 1 of Attachment 1 require ES&H review and must be submitted to the AD DSO before further processing.
- 6.3.2 Petty cash vouchers, personnel requisitions, and requisitions for non-ES&H-related conferences, workshops, schools, etc., do not require review and need not be submitted.
- 6.3.3 ProCard Purchases reference the [ProCard User's Guide](#)

6.4 AD DSO REVIEW OF AD ACTIONS

6.4.1 Processing

The AD DSO shall review requisitions or other documents submitted to them to determine NEPA applicability and identify ES&H concerns, in accordance with the procedure in Reference 2.2.

6.4.2 NEPA Review

- 6.4.2.1 The reviewer shall examine the package (requisition and any accompanying hazard analysis, work permit, or [Environmental Review Form](#), Environmental Evaluation Checklist in Technical Appendix B of [FESHM 8060](#) or other document describing the activity), and fill out the NEPA portion of the requisition. If the activity has no environmental impacts, the reviewer may write N/A (not applicable) in the CX line. If there are potential impacts, but the activity and impacts fall within the scope of one of the CXs listed below, the reviewer shall note the appropriate CX. If the package represents a portion of an activity that has already had a NEPA determination, the reviewer may write, "previously approved." See FESHM 8060 for the NEPA review flowchart and categorical exclusion descriptions.

6.4.3 ES&H Review

- 6.4.3.1 All requisitions and projects submitted to the AD DSO shall be reviewed for ES&H issues in accordance with applicable FESHM chapters. The reviewer(s) shall approve the requisition by filling out the ES&H portion of the AD compliance stamp after all ES&H implications have been considered.
- 6.4.3.2 The review shall also ensure that the required paperwork is completed or in process, as appropriate, and the required management approval obtained in the following cases:
 - a. Work permit and notification forms submitted either with requisitions or independently shall be reviewed for proper

completion of the required elements, such as permits and training. Forms are approved by the AD DSO or designee.

- b. All packages involving construction must be reviewed by a member of the AD DSO and/or the ESH&Q construction safety group, who will ensure that approved task managers are assigned and that all required documents are completed or in process. They will also review these projects for purposes of conducting safety compliance inspections when work is underway.
- c. Hazard Analyses for non-electrical jobs will be reviewed. Any obvious significant deficiencies will be reported to the approving supervisor/task manager/ construction coordinator.
- d. Electrical hazard analyses/work permits shall be referred to the AD/DSO and/or the AD Deputy Head for review.
- e. Exhibit A from Reference 2.4 must be appended to requisitions involving on-site service subcontracts.
- f. See section 5.3 for actions involving excavation in the restricted areas at either B1 or B4 service building.

6.4.4 Packages on which both portions of the AD compliance stamp have been completed will be routed as follows:

6.4.4.1 Requisitions will be returned to the Central Purchasing Group and may then be forwarded for further approvals or processing, as appropriate.

6.4.4.2 Packages not involving procurements will be returned to the originating responsible party.

7.0 DISTRIBUTION OF THE CONTENTS OF THIS CHAPTER

7.1 An electronic controlled copy of this procedure is maintained at <http://www-bdnew.fnal.gov/esh/adsp/ADSP-08-0601.pdf>.

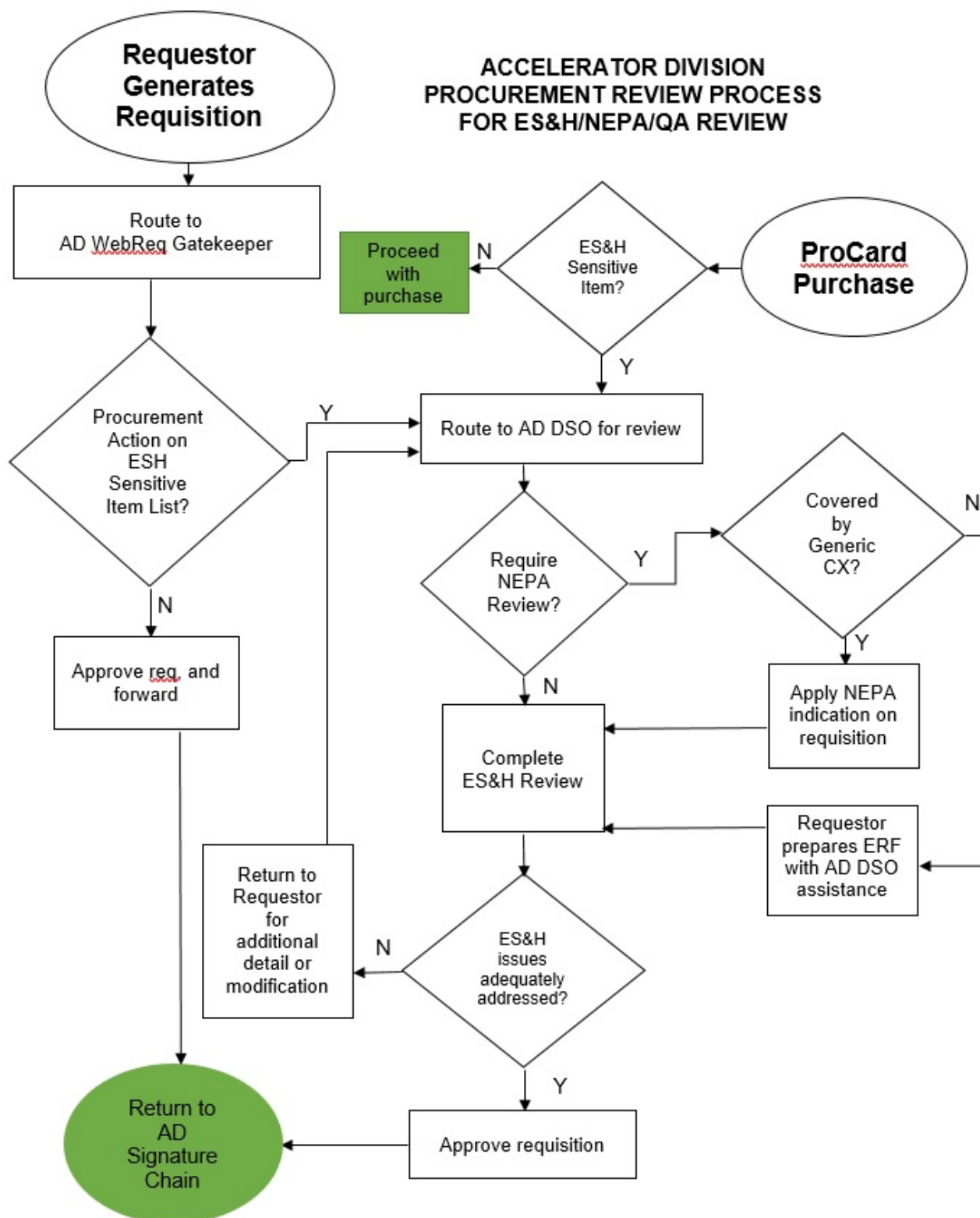
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ATTACHMENT 1 CRITERIA FOR USE IN DETERMINING THE NEED FOR
ES&H REVIEW OF PROPOSED PROCUREMENTS

NEED AD DSO REVIEW	DO NOT NEED AD DSO REVIEW
New T&M requisitions and change orders to existing T&M requisitions that alter the scope of work	T&M requisition change orders which do <u>not</u> alter the scope of work
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	Electrical/electronic equipment, materials, parts, and supplies, except when equipment, materials, parts, or supplies contain toxic, hazardous, or radioactive materials or oil or if particular equipment is explicitly called out for ES&H review
Lasers or equipment containing lasers as a component, <u>except</u> printers and similar office equipment	Contract change orders which do <u>not</u> change the scope of work
Personal protective equipment, including (but not limited to) hardhats, gloves, special purpose clothing, respirators, safety glasses, and footwear, <u>except</u> eyewear and footwear purchased through the FNAL safety eyeglasses and footwear program, which are not processed through the normal purchase requisition system	Off-site manufacturing of parts or equipment, <u>except</u> when finished parts or equipment to be shipped to Fermilab contain toxic, hazardous, or radioactive materials or oil <u>or if</u> particular equipment is explicitly called out for ES&H review
Chemical products and toxic and hazardous materials, including (but not limited to) toxic metals, paints, epoxies, and compressed gases	Rental agreements, <u>except</u> for rental of equipment which is explicitly called out for ES&H review
Equipment that uses chemicals; produces dust, gas, or vapors required to be exhausted through a stack or vent; or generates a liquid effluent requiring disposal	Mechanical equipment, materials, parts, and supplies, including hand tools, <u>except</u> when equipment, materials, parts, or supplies contain toxic, hazardous, or radioactive materials or oil <u>or if</u> particular equipment is explicitly called out for ES&H review
Radioactive material	Office supplies and equipment, including furniture
Equipment capable of generating ionizing radiation	Televisions, (TV) monitors, cameras, video recorders, and related imaging and image displaying devices

NEED AD DSO REVIEW	DO NOT NEED AD DSO REVIEW
Chainsaws, lawnmowers, and other exterior grounds maintenance tools and equipment	Computers and associated peripherals, including laser printers, and software; note, however, that EPEAT requirements may apply
Pressure vessels or equipment incorporating pressure vessels, such as air compressors	Shop supplies, materials, and equipment, including furniture and storage units and hand tools, <u>except</u> when equipment, materials, parts, or supplies contain toxic, hazardous, or radioactive materials or oil <u>or if</u> particular equipment is explicitly called out for ES&H review
Power tools, fixed or portable	Fermilab machine shop time
Powder-actuated tools	Books and periodicals
Medical and first-aid supplies	Travel-related expenses
ES&H-related training	Seminars, conferences, and training, <u>except</u> ES&H-related training
Material handling equipment, including (but not limited to) cranes, hoists, rigging materials, powered industrial trucks, and "golf" carts	
Portable ladders, scaffolding, powered platforms and vehicle-mounted elevating work platforms	
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, and arm/wrist braces and other body support devices	

FIGURE 1 AD REQUISITION FLOW CHART



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FIGURE 2 B1 PCB REMEDIATION AND GROUNDWATER SAMPLING RESULTS

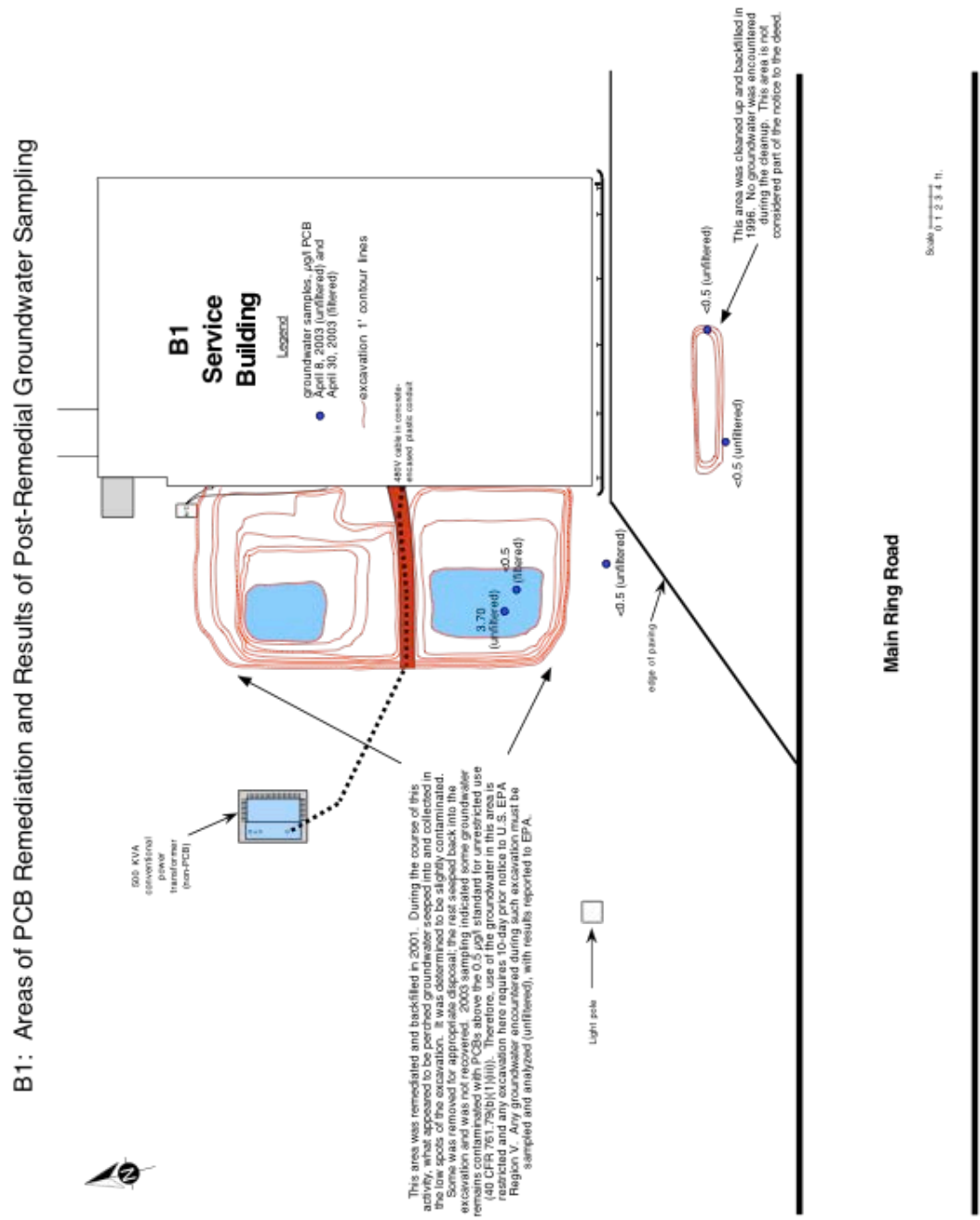


FIGURE 3 B4 PCB REMEDIATION AND GROUNDWATER SAMPLING RESULTS

