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C-A OPERATIONS PROCEDURES MANUAL

13.7.1 C-A and SMD Procurement Guidelines

Text Pages 2 through 7

Attachments

Hand Processed Changes

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Signature on File
 Collider-Accelerator Department Chairman Date

Approved: _____
Signature on File
 Superconducting Magnet Division Head Date

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13.7.1 C-A and SMD Procurement Guidelines

1. Purpose

To provide information to C-A and SMD personnel regarding special requirements associated with the procurement of items/materials for use in the C-A and SMD complex.

The requirements of this document supplement the BNL's Standards Based Management System (SBMS) Subject Areas that are related to the BNL procurement process. A brief listing of those documents can be found section 7, References, of this document. A complete listing is maintained on the [SBMS home page](#).

2. Responsibilities

- 2.1 Personnel responsible for the design or performance of items or services to be purchased shall ensure that the procurement requirements of the purchase requests are clear and complete.
- 2.2 C-A Division and SMD Section management responsible for review and approval of procurement documentation should ensure that technical, environmental, safety and health (ESH) and QA requirements of the procurement are clear and complete before submittal to a potential Seller.
- 2.3 The C-A and SMD Quality Representatives (QR) shall review procurement documentation for items classified as A-1 (Critical) or A-2 (Major); or having a total value of \$10,000 or more. QA review is not required on Intra-Laboratory Requisitions or purchase order change requests which have no impact on the technical, ESH or QA requirements in the original order.
- 2.4 In addition to the specific requirements described in section five of this document, the requisitioner should determine if any other special requirements need to be addressed, for example
 - Deliveries to BNL made other than during normal business hours.
 - If delivery is required to be directly to the C-A or SMD facility instead of T100, requisitioner must coordinate with PPM as early as possible in the procurement process.
 - If the C-A or SMD point of contact is different than the requisitioner, the point of contacts name must be identified in the procurement documentation.
 - UL or BNL approved equivalent certification.
 - If the procurement is for radioactive material, the BNL SNM (Special Radioactive Material) Group must be contacted prior to delivery.

3. **Prerequisites**

None

4. **Precautions**

None

5. **Procedure**

In addition to the technical aspects of a procurement, other areas for consideration are environmental, safety and health (ESH), quality assurance system requirements, first article inspection and testing, data requirements, packaging requirements, inspection and acceptance points (source inspection), customer furnished property, and documentation change policies.

5.1 Procurement of item(s)/material which require rigging upon delivery to BNL

- 5.1.1 The requisitioner should be aware that BNL's Procurement and Property Management (PPM) Division includes the following "Special Instruction" on all purchase orders:

"Unless otherwise specified, the preservation, packaging and marking for all supplies and equipment shall meet the requirements of ASTM Standard D 3951-98 Standard Practice for Commercial Packaging. Additionally, the gross weight shall be marked on at least one side, or end panel, of each individual shipping container (transport package) that has a gross weight equal to, or greater than, 400 pounds (180 kilograms)."

- 5.1.2 The requisitioner shall ensure that [BNL-QA 101, BNL Sellers' Quality Assurance Requirements](#), is part of the procurement documentation. This will invoke paragraph 3.6, Protection of Material and Equipment.

"3.6 Protection of Material and Equipment

The Seller shall employ procedures, which assure adequate protection of material and equipment during shipment and while in storage. Such protection shall include special environmental packaging, as necessary. All items shipped (originally packaged or repackaged) to BNL or other locations cited in the purchase order or contract, shall comply with the requirements set forth in the National Motor Freight Traffic Associations' National Motor Freight definitions, specifications and basic requirements (e.g. size, strength and materials) for commonly used packages."

5.1.3 The requisitioner shall consider the following

5.1.3.1 For items that are built to order: special/unique handling and/or packaging requirements shall be contained in the procurement documentation e.g. drawings, specifications or requisitions. This includes but is not limited to the following:

- proper labeling of crates as to its contents, weight, and center of gravity;
- adequate construction of crates for the contents contained within e.g. packaging per DOT regulations;

5.1.3.2 For off the shelf/catalog items, the requisitioner shall, when applicable, indicate in the comments section of the web requisition that the vendor is responsible for compliance to all labeling and packaging requirements.

5.1.4 The requisitioner shall notify C-AD/SMD or BNL riggers of expected delivery. Ensure shipper notifies the requisitioner or C-AD/SMD point of contact for the procurement of expected delivery time.

5.1.5 If materials/items are received into the Laboratory with incomplete or inadequate documentation/packing/labeling, delivery will be held up, in some case an item may not be accepted from the shipping company.

5.2 Use of Approved Electrical Equipment

All electrical equipment installed/used within the C-A and SMD facilities must be accepted, certified, listed, or labeled by a Nationally-Recognized Testing Laboratory (NRTL). If there are many different models of a particular kind of equipment, but only one of them is accepted, certified, listed, labeled or otherwise determined to be safe by a NRTL, only that one shall be considered to be “approved”, unless it is custom-made equipment. Therefore, if an article or item of equipment is of a kind that is listed or labeled by an NRTL, only those items listed or labeled may be acquired and used within by the C-A and SMD facilities

5.2.1 Engineers and designers shall incorporate listed or labeled items or equipment into their designs, and shall place the following requirement into equipment specifications and purchase requisitions:

“If an article or item of equipment is of a kind that is listed or labeled by a nationally-recognized testing laboratory, then only items listed or labeled may be used in the design and construction of this equipment.”

5.2.2 Custom made equipment, which no NRTL accepts, certifies, lists, labels, or otherwise determines to be safe, and which is designed, fabricated for, and intended for use for a particular application within C-A and/or SMD, does not have to be listed or labeled if:

- It is determined to be safe for its intended use by its manufacturer; and
- The determination must be made on the basis of test data; and
- The test data is maintained at BNL; and
- The test data has been reviewed and accepted by the C-A Chief Electrical Engineer or designee, or SMD Electrical System Section Head, or designee.

5.2.3 In addition to the requirements of 5.2.2, electrical equipment which no NRTL accepts, certifies, lists, labels, or determines to be safe, is acceptable for use within the C-A and/or SMD facilities if the equipment is inspected or tested by the local authority responsible for enforcing occupational safety provisions of the National Electric Code.

- The local authority at BNL for electrical equipment is the Laboratory Electrical Safety Committee with enforcement through the office of the Deputy Director of Operations.
- The local authority within C-A is the C-A Chief Electrical Engineer or designee.
- The local authority within SMD is the SMD Electrical System Section Head, or designee.

5.3 Targets of theft material

Individuals procuring material which may be considered a target of theft are responsible for ensuring that upon arrival at the C-A or SMD facility the items/material are stored in a secured C-A or SMD area, and C-A/SMD QA is notified of delivery so that the inventory database can be updated (SMD items, if any, shall be entered into the C-A inventory database). Target of theft material includes copper, tungsten, platinum, aluminum or other metals that may be targeted by thieves, to be sold for their scrap or have an intrinsic value of more than \$1000, and is stored in one location. Reference C-A OPM 1.20, C-A Policy for Valuable Materials Security Contact the C-A ESHQ Division for additional information

5.4 The C-A and SMD ESH Coordinators must review purchase requisitions for items that fall into any of the following Hazardous Material groups:

Acids
Bases and Caustic Materials
Corrosive materials
Corrosive Salts
Explosives
Fall Protection/PPE/Life Safety Equipment
Flammable Gases (for non-routine work)
Flammable Liquids (for non-routine work)
Flammable Solids
High Voltage Supplies
Infectious Material

Ionizing Radiation Generating Devices (RGD)
Lasers
Magnetized Equipment and Materials
Non-Ionizing Radiation Source
Nonflammable/Non Toxic Gasses (for non-routine work)
Organic Peroxides
Oxidizers
Poisonous Solids, Liquids and Gasses
Radioactive Material
Rigging Equipment
Spontaneously Combustible Material

5.4.1 When purchasing Chemicals and other "Chemical Management System Trackable items", an additional form which is linked to the web req, must be completed prior to the submission of the particular requisition.

5.5 The requisitioner shall complete the ISM (Integrated Safety Management) questions on the web requisition. The questions are as follows:

Is any item radioactive or contain any radioactive material?

Is this requisition related to the design or manufacture of an item used to prevent, mitigate, or quantify a radiological hazard?

- If the answer to either of these questions is "YES" the purchase requisition is to be reviewed by a Quality Representative.

Does this Requisition involve any contract work to be performed on site?

- If the answer to this question is "yes", indicating that the work will be performed on site in other than an office or paperwork environment, then a Work Control Coordinator must review the scope of work and complete the rest of the form. Requisitions for services cannot be submitted until this process is completed.

5.6 Quality Assurance Requirements

5.6.1 C-A and SMD procurement documents (e.g. requisitions, contracts) for "built to order" and off-the-shelf items which are classified as QA Category A-1 (Critical) or A-2 (Major) shall reference the appropriate seller QA requirements in BNL-QA-101, BNL Seller's Quality Assurance Requirements. At the discretion of the requisitioner, the requirements of BNL-QA-101 may be applied to material classified as A-3 (Minor) or A-4 (Other).

Note 1:

BNL will perform an incoming inspection on all items/materials that have a QA Classification of A1 or A2 or have a single item value greater than \$100, 000.

Note 2:

Items that are purchased by the Supply and Material Division for general stock are automatically classified as BNL QA Category A-4 (Other). These items must be evaluated by the responsible individual to assure the items are suitable for the intended application

5.6.2 Due to the difficulty with imposing additional requirements on sellers and distributors of off-the-shelf items, the requisitioner should determine if specific testing of critical aspects of the item/material must be performed at BNL to verify compliance of procured items or if a specification or drawing should be prepared to document specific technical, ESH or quality requirements.

5.7 Deviations from procurement requirements

If the technical, ESH or quality requirements are modified or eliminated, or if a Seller or potential Seller cannot satisfy or takes exception to the technical, ESH or quality requirements, the responsible individual should consider

- Preparing additional documents (supplementary specifications, drawings, test or inspection procedures, etc.) in order to adequately verify the quality of the item.
- Determine if special testing/inspection will take place at BNL, the Seller's facility or at an off site location.
- Determine if new Seller(s) should be selected that will comply with the technical/QA requirements
- Determine if the technical, ESH or QA requirements should be modified

6. Documentation

6.1 Requisitioner should maintain appropriate supporting documentation for orders placed.

6.2 The C-A Chief Electrical Engineer, or designee, or SMD Electrical System Section Head, or designee, shall maintain records of non-NRTL listed electrical equipment within their respective facilities per 5.2.2 and 5.2.3.

7. References

- 7.1 SBMS, [Purchase Requisition Review for QA](#)
- 7.2 SBMS, [Procurement & Property](#)
- 7.3 SBMS, [Procurement & Use of Rad Materials](#)
- 7.4 SBMS, [Procurement Operations Manual](#)
- 7.5 SBMS, [Typical Flow For BNL Procurements.](#)
- 7.6 SBMS, [Credit Cards, Procurement](#)
- 7.7 SBMS, [Davis-Bacon Act](#)
- 7.8 SBMS, [Interim Procedure 2005-003, Rev 1, Use of Approved Electrical Equipment](#)

8. Attachments

None