Table of Contents

1.0 Purpose

This procedure describes the controls, processes, and documentation required for requesting approval to distribute products and materials and the actual distribution by Biopharmaceutical Development Program (BDP), Materials, Management, and Inventory Control (MMIC).

2.0 Scope

This procedure applies to BDP employees involved in the request for distribution and the process of distributing products and materials to external recipients. This procedure covers Good Laboratory Practices (GLP), Current Good Manufacturing Practices (CGMP), and Research and Development products and materials produced by the BDP on behalf of the National Cancer Institute (NCI). This procedure does not apply to QC samples; for distributions of QC samples please follow ***SOP 22953 - Distribution of Process Analytics Samples***. This procedure does not apply to the distribution of documentation; see ***SOP 21417 - Distribution of Documents to External Recipients***.

3.0 Authority and Responsibility

3.1 MMIC is responsible for preparing products and materials for shipment/transportation following applicable Frederick National Laboratory for Cancer Research (FNLCR) procedures for shipping.

3.2 BDP staff is responsible for the request of distribution, processing the distribution, and obtaining approval of documents for the shipment of product and materials on behalf of the National Cancer Institute/Biological Resources Branch (NCI/BRB). The Director, Regulatory Compliance, Biopharmaceutical Quality Assurance (BQA), or designee, reviews, and approves documentation prior to distribution.

3.3 The Requestor, or designee, is responsible for the completion of the EHS Request for Shipment form prior to submitting the distribution request for approval.

3.4 The requestor is responsible for completing Section A of BDP Materials Distribution Record (Form 20201-01).

3.5 The Project Scientist or designee is responsible for verifying the information in Section A of **Form 20201-01** is complete and accurate. The Project Scientist or designee is also responsible for providing the Biopharmaceutical Quality Assurance Documentation (BQAD), via email, with **Form 20201-01** and all supporting documentation to obtain the proper approvals.

3.6 Products Intended for Human Use

3.6.1 The Associate Director, Regulatory Affairs (RA), or designee, is responsible for verifying that the receiving party of a shipment of product intended for use in humans is qualified to receive the product.

3.6.2 The receiving institution and PI must:

3.6.2.1 Provide proof that they have submitted an Investigational New Drug (IND) application to the FDA (an example would be an IND Receipt letter).

3.6.2.2 Have obtained Institutional Review Board (IRB) approval to receive the product and initiate a clinical trial using the material to the shipped.

3.6.3 The Associate Director, RA shall supply this information to CTEP for NExT and CTEP sponsored studies for verification of study approval and clinical site suitability.

3.6.3.1 Upon receipt of CTEP approval, the product can be shipped to the PI/clinical site.

3.6.3.2 The Associate Director, RA, or designee shall indicate their and CTEP's approval by signing Section A of **Form 20201-01**.

3.7 The Director, Regulatory Compliance BQA, is responsible for approving requests for distribution prior to shipment.

3.8 The Chief, Biological Resources Branch, is responsible for approving requests for distribution prior to shipment.

3.9 BQA is responsible for quality oversight of this procedure.

4.0 Definitions

4.1 Hand Carry: Materials are delivered directly to the recipient by BDP personnel.

4.2 NIH Courier: Daily courier service provided by the Transportation Department to the NCI/NIH Bethesda campus.

4.3 Special Courier: Any courier service that is required to ensure same day delivery of materials, outside of the normal delivery area of the NIH Courier.

4.4 Commercial Transport (FedEx, DHL, UPS, etc.): Time-sensitive items are sent utilizing these services for areas outside the special courier delivery range.

4.5 Freight Forwarder (World Courier, Cavalier, etc.): Specialized transport companies that meet the need to deliver materials to their designations in compliance with cold chain, customs, and international requirements.

4.6 Products/Materials: As defined in this procedure, any item other than a document or QC Sample for analysis.

4.7 External Recipient: Any third party not part of BDP/FNLCR, or NCI/DTP.

5.0 Guidelines for Shipment of CGMP Products and Materials

5.1 The packing and shipment of CGMP final product from the FNLCR will be coordinated by MMIC personnel. The requested shipping method will be evaluated and, if appropriate, used to transport final product to its destination. Commercial transport or a freight forwarder may be used to ship product overnight. For CGMP final products, two separate, dedicated runs may be used to minimize the risk of catastrophic loss.

NOTE: Prior to shipment of CGMP Final Product for human use, written approval from the Director, Regulatory Compliance BQA, (or designee) is required (by signing **Form 20201-01**). This approval comes after proof that an IND application was submitted to the FDA and IRB approval letters have been provided. BDP Regulatory Affairs coordinates receipt of this information.

5.2 A **minimum** of forty-eight (48) hours' notice is required by MMIC and Environmental Health and Safety (EHS) for domestic shipments (see Form **20303-02, Inventory Withdrawal Request**).

5.3 A **minimum** of seventy-two (72) hours' notice is required by MMIC and Environmental Health and Safety (EHS) for international shipments (see **Form 20303-02, Inventory Withdrawal Request**).

5.4 The packaging and shipment of master cell banks (requiring the use of a liquid nitrogen shipping container or dry ice) from FNLCR will be coordinated by MMIC personnel using qualified EHS personnel to pack the product per OSHA guidelines. A **minimum** of forty-eight (48) hours' notice is required by MMIC and EHS for this type of material shipment.

6.0 Distribution of Products and Materials to External Recipients

6.1 Requests for Shipment

6.1.1 The BDP requestor is responsible for confirming via email that MMIC can accommodate the desired date (datalogger availability, resource limitations, etc.) **PRIOR TO** initiating the request.

6.1.2 The BDP requestor is responsible for completing Section A of BDP Materials Distribution Record (**Form 20201-01**).

NOTE: A copy of the original request (from the PI or BRB) **MUST** be attached to **Form 20201-01** (e.g., a copy of an email or Project Team Meeting Minutes)

6.1.3 The requestor completes the on-line EHS Request for Shipment Form (https://ncifrederick.cancer.gov/Cad/ShippingWizard/Dashboard/Default.aspx).

6.1.4 The Project Scientist, or designee, confirms that the information in Section A on **Form 20201-01** agrees with the EHS Request for Shipment.

6.1.5 The Requestor, or designee, provides BQAD with the distribution record and all supporting documentation (EHS form, COAs, SDSs, Inventory Withdrawal Request, etc.), via email, to assign a distribution number and obtain all approval signatures on the Distribution Form and assemble a package to be given to MMIC prior to shipment.

6.1.5.1 If the material to be shipped is in MMIC inventory, the requestor is responsible for submitting an inventory withdrawal form, form 20303-02, in accordance with ***SOP 20303 – CGMP Product Accountability***.

6.1.5.2 Shipments of materials/products intended for human administration must receive prior written approval from BDP Regulatory Affairs, see Section 3.6 above. The RA representative (or designee) will sign and date Section A on Form 20201-01.

NOTE: Additional forms and approvals may be required for international shipments. Contact BDP Administration for assistance and guidance to complete the required forms.

6.1.6 BQA Administration is responsible for obtaining approval signatures on the above forms by the Director, Quality Assurance and Chief, Biological Resources Branch, or designees.

6.2 Content Labeling

6.2.1 CGMP products must be labeled with BQA approved and controlled labels, as per ***SOP 21403 - Origination, Modification, and Control of Labeling for GMP and GLP Products***.

6.2.1.1 The secondary container must be appropriately labeled with the name of the material (clearly identifying the contents), lot number, manufacturing date, concentration, volume, and warning statement, as per ***SOP 26101 - Labeling, Transport, Submission, Storage, and Handling of Biohazardous Materials within the BDP***, if applicable.

6.2.2 Samples of CGMP pre-products must be labeled with the name of the material (clearly identifying the contents), lot number, manufacturing date, concentration, volume, and warning statement, as per ***SOP 26101 - Labeling, Transport, Submission, Storage, and Handling of Biohazardous Materials within the BDP, if applicable***.

Non-GMP Products must be affixed with appropriate labels as identified by BQA. At a minimum, this must contain the name (clearly identifying the contents), lot number(s), manufacturing date, concentration, volume, and warning statement, as per ***SOP 26101 - Labeling, Transport, Submission, Storage, and Handling of Biohazardous Materials Within the BDP***, if applicable.

6.3 MMIC Processing

6.3.1 The approved **Form 20201-01** (and accompanying documents) is forwarded to MMIC personnel to be included in the shipment.

6.3.2 MMIC completes Section C of **Form 20201-01**.

6.3.3 MMIC packages the material unless alternate arrangements are made. EHS personnel will perform packaging of liquid nitrogen shipments. Reference ***SOP 26101 - Labeling, Transport, Submission, Storage, and Handling of Biohazardous Materials Within the BDP***.

6.3.3.1 Shipment of biohazardous and/or potentially infectious material requires consultation with the Project Scientist. If material is a virus being shipped under an IND, follow the applicable virus shipment protocol.

NOTE: Products stored at ≤-70°C or -10 to -30°C must be shipped on dry ice. Those products requiring a temperature of 2-8°C must be shipped with the use of chemical ice bricks or wet ice.

NOTE: If requested, MMIC shall include temperature or other data monitoring devices in the shipment. These devices will be placed according to the Project Scientist's instructions.

6.3.4 For final product, MMIC will package shipments one lot at a time, to eliminate the possible mixing of lots and to minimize risk of product loss.

6.3.5 At the time of packaging, an additional person from BQA, the Project Scientist or designee (if applicable), or MMIC will provide a second verification of product lot and count. If discrepancies occur, the distribution/packaging is stopped, and BQA shall be notified to assist in reconciling the material. Verification of packaging is documented on the BDP Materials Distribution Record, **Form 20201-01**.

6.3.6 MMIC includes a copy of **Form 20201-01** and other relevant documentation identified in an appropriately labeled 8" x 11" envelope or plastic Ziploc™ style bag with the shipping box(es). It is the responsibility of the requestor to confirm the shipment was successfully received by the recipient. This will preferably be by email.

6.4 Packaged materials are picked up by the Transportation Department or delivered by MMIC personnel to the Transportation Department. The Transportation Department notifies MMIC of the tracking number before the close of business on the day of the shipment.

NOTE: Transportation makes pickups from each building twice per day. If the material is not ready at the pick-up time, then MMIC personnel may transport the material to Transportation.

6.5 MMIC notifies the requestor and/or Project Scientist that the shipment is in route so that the requestor can notify the recipient of the shipment and provide the tracking number (if applicable).

6.6 When the shipment is received, the Project Scientist, requestor, or MMIC obtains documentation from the recipient that the shipment arrived in good condition. An email or a faxed document is acceptable. If the recipient is unresponsive, documentation of delivery from the courier is acceptable. When a data logger is returned, the data from the logger will be downloaded and reviewed. Should temperature excursions be noted, MMIC will notify the Project Scientist and BQA for resolution. Documentation of receipt/delivery and (where applicable) temperature monitoring data are attached to the original **Form 20201-01**.

6.6.1 The Project Scientist, requestor or designee, is responsible for obtaining documentation to verify completion of successful delivery and providing that documentation to MMIC.

6.7 MMIC forwards the original **Form 20201-01**, downloaded datalogger data (if the datalogger was returned) and any other associated documentation from the shipment to BQAD.

6.8 BQAD files completed **Form 20201-01** and associated documentation in the project file.

7.0 Records

7.1 BQAD maintains complete records of shipments requested by Section 4.0, including **Forms 20201-01**, and EHS Request for Shipment forms.

7.2 BQAD maintains a database of deliveries of products and materials to requestors. Each distribution is assigned a unique number in the database.

8.0 References and Related Documents

8.1 **SOP 20303** *CGMP Product Accountability*

8.2 **SOP 21403** *Origination, Modification, and Control of Labeling for GMP and GLP Products*

8.3 **SOP 21417** *Distribution of Documents to External Recipients*

8.4 **SOP 22953** *Distribution of Process Analytic Samples*

8.5 **SOP 26101** *Labeling, Transport, Submission, Storage, and Handling of Biohazardous Materials Within the BDP*

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10.0 Attachments

10.1 Attachment 1 Distribution of Products and Materials to External Recipients Flow Chart

Attachment 1

Distribution of Products and Materials to External Recipients Flow Chart