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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 600

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[Docket No. 2003N-0528]

Revision of the Requirements for Spore-Forming Microorganisms

AGENCY: Food and Drug Administration, HHS.

ACTION: Direct final rule.

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**SUMMARY:** The Food and Drug Administration (FDA) is amending the biologics regulations by providing options to the existing requirement for separate, dedicated facilities and equipment for work with spore-forming microorganisms. FDA is amending the regulations due to advances in facility, system, and equipment design and in sterilization technologies that will allow work with spore-forming microorganisms to be performed in multiproduct manufacturing areas. We are publishing this rule because the existing requirement for always using separate, dedicated facilities and equipment for work with spore-forming microorganisms is no longer necessary. We are taking this action as part of our continuing effort to reduce the burden of unnecessary regulations on industry and to revise outdated regulations without diminishing public health protection. We are issuing these amendments directly as a final rule because they are noncontroversial and there is little likelihood that we will receive any significant comments opposing the rule. Elsewhere in this issue of the **Federal Register**, we are publishing a companion proposed rule under our usual procedures for notice and comment in the event that we receive any significant adverse comments on the direct final rule. If we receive

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any significant adverse comments that warrant terminating the direct final rule, we will consider such comments on the proposed rule in developing the final rule.

**DATES:** This rule is effective [*insert date 5 months after date of publication in the **Federal Register***]. Submit written or electronic comments on or before [*insert date 75 days after date of publication in the **Federal Register***]. If we receive no significant adverse comments during the specified comment period, we intend to publish a confirmation document on or before the effective date of this direct final rule confirming that the direct final rule will go into effect on [*insert date 5 months after date of publication in the **Federal Register***]. If we receive any significant adverse comments during the comment period, we intend to withdraw the direct final rule before its effective date by publication of a document in the **Federal Register**.

**ADDRESSES:** Submit written comments on the direct final rule to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Submit electronic comments to <http://www.fda.gov/dockets/ecomments>.

**FOR FURTHER INFORMATION CONTACT:** Valerie A. Butler, Center for Biologics Evaluation and Research (HFM-17), Food and Drug Administration, 1401 Rockville Pike, suite 200N, Rockville, MD 20852-1448, 301-827-6210.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Spore-forming microorganisms are used in the production of certain biological products. These microorganisms may be used as source material for further manufacture into final products used in the prevention, treatment, or cure of a disease or condition of human beings. By their very nature, these

microorganisms pose a great challenge to manufacturers. Bacteria produce spores as a means to survive adverse environmental conditions, while some fungi use them as a form of reproduction. Spores show great resistance to high temperature, freezing, dryness, antibacterial agents, radiation, and toxic chemicals. Under favorable conditions, spores can germinate into actively growing bacteria and fungi. Many of these spore-forming microorganisms are pathogenic to humans and have been implicated in causing morbidity and mortality. To ensure the safety of a biological product manufactured in a facility in which spore-forming microorganisms are present, these microorganisms must be kept under tight control to avoid the release of spores into the manufacturing atmosphere and potential contamination of other products.

Due to the unique survival properties of spore-forming microorganisms, current FDA regulations require that work with these microorganisms be conducted separately from manufacturing operations for other products. (Currently, FDA regulations use the term “spore-bearing” microorganisms. In this rulemaking, we are revising these regulations to use the term “spore-forming” because it is a more commonly used term. For the purposes of these regulations, spore-forming microorganisms include both the spore and vegetative cells.) Under § 600.11(e)(3) (21 CFR 600.11(e)(3)), all work with spore-forming microorganisms must be performed in an entirely separate building, or in a completely walled-off portion of a if that portion is constructed so as to prevent contamination of other areas and if entrances to such portion are independent of the remainder of the building. Section 600.11(e)(3) further requires that all vessels, apparatus, and equipment used for spore-forming microorganisms be permanently identified and reserved

exclusively for use with those organisms. This provision also states that any materials destined for further manufacturing may be removed from this area only under conditions that will prevent the introduction of spores into other manufacturing areas.

In accordance with Executive Order 12866, which directs Federal agencies to review their regulations and eliminate or modify those that are outdated or otherwise in need of reform, we are revising § 600.11(e)(3) to allow greater manufacturing flexibility regarding work with spore-forming microorganisms. The revisions provide that work with spore-forming microorganisms may be performed in multiproduct manufacturing areas when appropriate controls to prevent contamination of other products and areas exist. We recognize that advances in facility, system, and equipment design and in sterilization technologies have increased the ability of manufacturers to control and analyze the manufacture of biological products and the equipment used in their manufacture. The use of appropriate controls and procedures and processes provide an adequate degree of confidence that a product meets the expected levels of safety and purity. Areas of special concern, such as containment, contamination with pathogenic and/or toxic agents, sterilization, and disinfection can be addressed using currently available and required procedures and processes.

This direct final rule does not apply to spore-forming microorganisms used for testing of biological products to determine the growth-promoting qualities of test media used to ensure the sterility of each lot of product or as biological indicators for validation of steam sterilization cycles. The rule also does not change the requirements for those products set forth in §§ 600.11(e)(2) and 610.12 (21 CFR 610.12).

## II. Highlights of the Direct Final Rule

We are amending our regulations involving spore-forming microorganisms as set forth below.

### *A. Work With Spore-Forming Microorganisms*

We are revising § 600.11(e)(3) to provide greater flexibility in production facilities and procedures for work with spore-forming microorganisms.

Revised § 600.11(e)(3)(i) states that manufacturing processes using spore-forming microorganisms conducted in a multiproduct manufacturing site must be performed under appropriate controls to prevent contamination of other products and areas within the site. We regard a manufacturing site as an entire complex of buildings, connected or separate, that belongs to one entity engaged in the manufacture of any one product or multiple products. An area within a manufacturing site is a specified location within a facility (physical structure) associated with the manufacturing of any one product or multiple products. Revised § 600.11(e)(3)(i) further states that prevention of spore contamination can be achieved by using a separate, dedicated building or, if manufacturing is conducted in a multiproduct manufacturing building, by using process containment. Finally, revised § 600.11(e)(3)(i) states that all product and personnel movement between the area where the spore-forming microorganisms are manufactured and other manufacturing areas must be conducted under conditions that will prevent the introduction of spores into other areas of the facility.

Revised § 600.11(e)(3)(ii) states that if process containment is employed in a multiproduct manufacturing area, procedures must be in place to demonstrate adequate removal of the spore-forming microorganism(s) from the manufacturing area for subsequent manufacture of other products. Revised

§ 600.11(e)(3)(ii) further states that these procedures must provide for adequate removal or decontamination of the spore-forming microorganisms on and within manufacturing equipment, facilities, and ancillary room items as well as the removal of disposable or product dedicated items from the manufacturing area. Finally, revised § 600.11(e)(3)(ii) states that environmental monitoring specific for the spore-forming microorganism(s) must be conducted in adjacent areas during manufacturing operations and in the manufacturing area after completion of cleaning and decontamination.

Under revised § 600.11(e)(3)(ii), processing and propagation of spore-forming microorganisms must be conducted in areas and using systems that are not used for any other purpose at the same time. Prior to processing and propagation of any organism, procedures must be designed and in place to prevent contamination with pathogenic and/or toxic agents, as well as to decontaminate, sterilize and/or disinfect, as appropriate, all affected areas and systems. It is important to demonstrate control over and containment of spore-forming microorganisms during their propagation and processing in order to prevent contamination of the product. Products derived from spore-forming microorganisms should not be removed from designated areas unless this can be done in a manner that prevents contamination of other products. These containment procedures will provide a level of assurance that products made using spore-forming microorganisms remain safe, pure, and of high quality.

The agency anticipates developing a guidance document to assist manufacturers in complying with these more flexible provisions on work with spore-forming microorganisms.

### *B. Substitution of “Spore-Forming” for “Spore-Bearing”*

As noted previously in this document, we are replacing the term “spore-bearing” in our regulations with the term “spore-forming” because the latter has become the more commonly used term to describe these microorganisms. Accordingly, in addition to § 600.11(e)(3), we are revising §§ 600.10(c)(3) (21 CFR 600.10(c)(3)) and 600.11(e)(1) and (e)(2) by substituting the term “spore-forming” for the term “spore-bearing”.

### **III. Rulemaking Action**

In the **Federal Register** of November 21, 1997 (62 FR 62466), FDA described its procedures on when and how the agency will employ direct final rulemaking. We have determined that this rule is appropriate for direct final rulemaking because we believe that it includes only noncontroversial amendments and we anticipate no significant adverse comments. Consistent with our procedures on direct final rulemaking, FDA is publishing elsewhere in this issue of the **Federal Register** a companion proposed rule to revise the biologics regulations to allow greater flexibility in production facilities and procedures for work with spore-forming microorganisms. The companion proposed rule provides a procedural framework within which the rule may be finalized in the event that the direct final rule is withdrawn because of any significant adverse comments. The comment period for the direct final rule runs concurrently with the companion proposed rule. Any comments received in response to the companion proposed rule will be considered as comments regarding the direct final rule.

We are providing a comment period on the direct final rule of 75 days after date of publication in the **Federal Register**. If we receive any significant adverse comments, we intend to withdraw this direct final rule action before

its effective date by publication of a notice in the **Federal Register**. A significant adverse comment is defined as a comment that explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. In determining whether an adverse comment is significant and warrants terminating a direct final rulemaking, we will consider whether the comment raises an issue serious enough to warrant a substantive response in a notice-and-comment process in accordance with section 553 of the Administrative Procedure Act (5 U.S.C. 553). Comments that are frivolous, insubstantial, or outside the scope of the rule will not be considered significant or adverse under this procedure. A comment recommending a regulation change in addition to those in the rule would not be considered a significant adverse comment unless the comment states why the rule would be ineffective without the additional change. In addition, if a significant adverse comment applies to an amendment, paragraph, or section of this rule and that provision can be severed from the remainder of the rule, we may adopt as final those provisions of the rule that are not the subjects of a significant adverse comment.

If any significant adverse comments are received during the comment period, FDA will publish, before the effective date of this direct final rule, a document withdrawing the direct final rule. If we withdraw the direct final rule, any comments received will be applied to the proposed rule and will be considered in developing a final rule using the usual notice-and-comment procedures.

If FDA receives no significant adverse comments during the specified comment period, FDA intends to publish a confirmation document, before the effective date of the direct final rule, confirming the effective date.

#### **IV. Analysis of Impacts**

##### *A. Review Under Executive Order 12866, the Regulatory Flexibility Act, and the Unfunded Mandates Reform Act of 1995*

FDA has examined the impacts of the direct final rule under Executive Order 12866, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Public Law 104–4). Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). We believe that this direct final rule is consistent with the regulatory philosophy and principles identified in the Executive order. In addition, the direct final rule is not a significant regulatory action as defined by the Executive order and so is not subject to review under the Executive order.

The Regulatory Flexibility Act requires agencies to analyze whether a rule may have a significant economic impact on a substantial number of small entities. Because the direct final rule allows for greater flexibility in production facilities and procedures for work with spore-forming microorganisms, it would not result in any increased burden or costs on small entities. Therefore, we certify that the direct final rule will not have a significant economic impact on a substantial number of small entities. Therefore, under the Regulatory Flexibility Act, no further analysis is required.

The Unfunded Mandates Reform Act requires that agencies prepare a written statement under section 202(a) of anticipated costs and benefits before proposing any rule that may result in an annual expenditure by State, local and tribal governments, in the aggregate, or by the private sector, of \$100 million (adjusted annually for inflation). Because the rule does not impose mandates on State, local, or tribal governments, or the private sector, that will result in an expenditure in any one year of \$100 million or more, FDA is not required to perform a cost-benefit analysis according to the Unfunded Mandates Reform Act.

### *B. Environmental Impact*

The agency has determined under 21 CFR 25.31(h) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

### *C. Federalism*

We have analyzed this direct final rule in accordance with the principles set forth in Executive Order 13132. We have determined that the rule does not contain policies that have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, we have concluded that the rule does not contain policies that have federalism implications as defined in the order and, consequently, a federalism summary impact statement is not required.

## V. Paperwork Reduction Act of 1995

This direct final rule contains no collections of information. Therefore, clearance by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) is not required.

## VI. Request for Comments

Interested persons may submit to the Division of Dockets Management (see **ADDRESSES**) written or electronic comments regarding this direct final rule. Submit a single copy of electronic comments to <http://www.fda.gov/dockets/ecomments> or two paper copies of any written comments, except that individuals may submit one paper copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

## List of Subjects in 21 CFR Part 600

Biologics, Reporting and recordkeeping requirements.

■ Therefore, under the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act, and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 600 is amended as follows:

### **PART 600—BIOLOGICAL PRODUCTS: GENERAL**

■ 1. The authority citation for 21 CFR part 600 continues to read as follows:

**Authority:** 21 U.S.C. 321, 351, 352, 353, 355, 360, 360i, 371, 374; 42 U.S.C. 216, 262, 263, 263a, 264, 300aa–25.

#### **§ 600.10 [Amended]**

■ 2. Section 600.10 *Personnel* is amended in paragraph (c)(3) by removing the words “spore-bearing” and adding in their place the words “spore-forming”.

■ 3. Section 600.11 is amended in paragraph (e)(1) by removing the words “spore-bearing” and adding in their place the words “spore-forming”; in paragraph (e)(2) by removing the words “spore-bearing” in the heading and text, and adding in their place the words “spore-forming”; and by revising paragraph (e)(3) to read as follows:

**§ 600.11 Physical establishment, equipment, animals, and care.**

\* \* \* \* \*

(e) \* \* \*

(3) *Work with spore-forming microorganisms.* (i) Manufacturing processes using spore-forming microorganisms conducted in a multiproduct manufacturing site must be performed under appropriate controls to prevent contamination of other products and areas within the site. Prevention of spore contamination can be achieved by using a separate dedicated building or by using process containment if manufacturing is conducted in a multiproduct manufacturing building. All product and personnel movement between the area where the spore-forming microorganisms are manufactured and other manufacturing areas must be conducted under conditions that will prevent the introduction of spores into other areas of the facility.

(ii) If process containment is employed in a multiproduct manufacturing area, procedures must be in place to demonstrate adequate removal of the spore-forming microorganism(s) from the manufacturing area for subsequent manufacture of other products. These procedures must provide for adequate removal or decontamination of the spore-forming microorganisms on and within manufacturing equipment, facilities, and ancillary room items as well as the removal of disposable or product dedicated items from the manufacturing area. Environmental monitoring specific for the spore-forming

microorganism(s) must be conducted in adjacent areas during manufacturing operations and in the manufacturing area after completion of cleaning and decontamination.

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Dated: 12/11/03  
December 11, 2003.

  
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Jeffrey Shuren  
Assistant Commissioner for Policy.

[FR Doc. 03-????? Filed ??-??-03; 8:45 am]

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