DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 111

[Docket No. 2007N–0186]

RIN 0910–AB88

Petition to Request an Exemption From 100 Percent Identity Testing of Dietary Ingredients: Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements

AGENCY: Food and Drug Administration, HHS.

ACTION: Interim final rule.

SUMMARY: The Food and Drug Administration (FDA) is issuing an interim final rule (IFR) that sets forth a procedure for requesting an exemption from the requirement in the final rule “Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements,” published elsewhere in this issue of the Federal Register, that the manufacturer conduct at least one appropriate test or examination to verify the identity of any component that is a dietary ingredient. This IFR allows for submission to, and review by, FDA of an alternative to the required 100 percent identity testing of components that are dietary ingredients, provided certain conditions are met and establishes a requirement for retention of records relating to the FDA’s response to an exemption request.

DATES: This rule is effective August 24, 2007.

Compliance Dates: The compliance date is June 25, 2008; except that for businesses employing fewer than 500, but 20 or more full-time equivalent employees, the compliance date is June 25, 2009; and except that for businesses that employ fewer than 20 full-time equivalent employees, the compliance date is June 25, 2010.

Submit written or electronic comments by September 24, 2007.

Submit comments regarding information collection by July 25, 2007, to OMB (see ADDRESSES).

ADDRESSES: You may submit comments, identified by Docket No. 2007N–0186, and/or RIN number 0910–AB88, by any of the following methods:

Electronic Submissions

Submit electronic comments in the following ways:


Written Submissions

Submit written submissions in the following ways:

- Mail/Hand delivery/Courier (for paper, disk, or CD–ROM submissions): Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

To ensure more timely processing of comments, FDA is no longer accepting comments submitted to the agency by e-mail. FDA encourages you to continue to submit electronic comments by using the Federal eRulemaking Portal or the agency Web site, as described in the Electronic Submissions portion of this paragraph.

Instructions: All submissions received must include the agency name and docket number and Regulatory Information Number (RIN) for this rulemaking. All comments received may be posted without change to http://www.fda.gov/ohrms/dockets/default.htm, including any personal information provided. For additional information on submitting comments, see the “Comments” heading of the SUPPLEMENTARY INFORMATION section of this document.

Docket: For access to the docket to read background documents or comments received, go to http://www.fda.gov/ohrms/dockets/default.htm and insert the docket number, found in brackets in the heading of this document, into the “Search” box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

Information Collection Provisions: Submit written comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB). To ensure that comments on the information collection are received, OMB recommends that written comments be faxed to the Office of Information and Regulatory Affairs, OMB, Attn: FDA Desk Officer, FAX: 202–395–6974.

FOR FURTHER INFORMATION CONTACT: Vasilios Frankos, Center for Food Safety and Applied Nutrition (HF5–810), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, 301–436–1696.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is issuing a final rule establishing current good manufacturing practice requirements (CGMPs) for dietary supplements elsewhere in this issue of the Federal Register (hereinafter referred to as the CGMP final rule). The CGMP final rule establishes the minimum CGMPs necessary for activities related to manufacturing, packaging, labeling, or holding dietary supplements to ensure the quality of the dietary supplement. Dietary ingredients are the central defining ingredients of a dietary supplement. Because of the critical importance of ensuring the proper identity of dietary ingredients, we are requiring in the CGMP final rule that each manufacturer perform its own testing or examination (identity testing) to verify the identity of each dietary ingredient prior to use in the manufacturing process. This identity testing requirement applies to a manufacturer who purchases a dietary ingredient from a dietary ingredient supplier or who manufactures its own dietary ingredient for use in the manufacture of its dietary supplement. This requirement for 100 percent identity testing of dietary ingredients is found at Subpart E—Requirement to Establish a Production and Process Control System, § 111.75 “What must you do to determine whether specifications are met?” in the CGMP final rule. Section 111.75(a)(1) (21 CFR 111.75(a)(1)) of the CGMP final rule requires (a) Before you use a component, you must: (1) Conduct at least one appropriate test or examination to verify the identity of any component that is a dietary ingredient.

* * * *

This provision is discussed at length in section X of the CGMP final rule, published elsewhere in this issue of the Federal Register, particularly in the discussions relating to comments submitted in response to the 2003 CGMP proposed rule (68 FR 12157, March 13, 2003) (see the responses to Comments 145 and 174).

Section 111.75(a)(1) of the CGMP final rule reflects our determination that manufacturers that test or examine 100 percent of the incoming dietary ingredients for identity can be assured of the identity of the ingredient. However, we recognize that it may be possible for a manufacturer to demonstrate, through various methods and processes in use over time for its particular operation, that a system of less than 100 percent identity testing would result in no material diminution
of assurance of the identity of the dietary ingredient as compared to the assurance provided by 100 percent identity testing. To provide an opportunity for a manufacturer to make such a showing and reduce the frequency of identity testing of components that are dietary ingredients from 100 percent to some lower frequency, we decided to add to §111.75(a)(1), an exemption from the requirement of 100 percent identity testing when a manufacturer petitions the agency for such an exemption to 100 percent identity testing under §10.30 and the agency grants such exemption. Such a procedure would be consistent with our stated goal, as described in the CGMP final rule, of providing flexibility in the CGMP requirements.

We also include a requirement to ensure that the manufacturer keeps the FDA’s response to a petition submitted under §111.75(a)(1)(ii) as a record under §111.95 (21 CFR 111.95).

We did not include this exemption procedure in the CGMP final rule because we wanted to provide an opportunity for interested persons to comment on whether this exemption procedure should be modified, and if so, whether there is any additional information that may be helpful to articulate with respect to what a petition needs to show that may inform future guidance. We believe, based on comments to the proposed rule, that some manufacturers may have already developed internal processes or methods, that involve less than 100 percent identity testing, to ensure the identity of dietary ingredients. For example, some comments recommended that the frequency of testing requirements, in general, be established using a statistically valid method and that the extent of testing be reduced taking into account the history of the supplier. Other comments mentioned the use of vendor audits. Therefore, we did consider the possibility of alternatives to the requirement of 100 percent identity testing of dietary ingredients under the CGMP final rule. We chose to issue this IFR to provide an opportunity to obtain additional comment on an exemption process (see the Comments section of this document). We also determined that the manufacturer’s opportunity to collect data to establish such an assurance should not be delayed until a decision on whether the exemption procedure set forth in this IFR should be modified.

Our legal authority for the provision in §111.75(a)(1)(i) and (a)(1)(ii), and the provision in §111.75(a)(1)(ii), set forth in the following paragraph, is the same as that used in the CGMP final rule.

Therefore, we incorporate by reference the discussion of our legal authority for the CGMP final rule (section V of the CGMP final rule) in this IFR.

II. Discussion and Description of Amendments to §§111.75 and 111.95

In this IFR we are announcing amendments to the CGMP final rule, published elsewhere in this Federal Register. We redesignate §111.75(a)(1) as §111.75(a)(1)(i) and set forth a procedure for submission of a petition to FDA in a new §111.75(a)(1)(ii), under which manufacturers may request an exemption from the requirements set forth in §111.75(a)(1)(i) when the dietary ingredient is obtained from one or more suppliers identified in the petition. The codified provision set forth in this IFR clarifies that FDA is willing to consider, on a case-by-case basis, a manufacturer’s conclusion, supported by appropriate data and information in the petition submission, that it has developed a system that it would implement instead of the system required under §111.75(a)(1)(i). This system meets the requirements set forth in this IFR.

You should identify any information in the petition that you consider to be confidential commercial or trade secret information and you should segregate such information from other information in your petition. Information in a petition for exemption under §111.75(a)(1)(ii) that is confidential or trade secret information is not available for public disclosure (21 CFR 20.61). However, that would not preclude the agency from considering such information, such as that about a particular supplier’s reliability, when it considers whether to grant or deny other petitions for exemption from 100 percent identity testing from other manufacturers. For example, other manufacturers may use the same supplier as a source of the same dietary ingredient.

If the petition is granted, §111.75(a)(1)(i) would require the manufacturer to implement the system identified in the petition, which would include the scientific method developed by the manufacturer that would provide data demonstrating that less than 100 percent identity testing did not materially diminish assurance that the dietary ingredient is the correct dietary ingredient. If the petition is granted by FDA, the exemption from the requirement of 100 percent identity testing in §111.75(a)(1) would apply to the specific dietary ingredient, and any of its attributes (see discussion in section X.G.2 of the CGMP final rule), and the specific dietary ingredient...
supplier or suppliers as provided in the petition.\(^1\) The manufacturer would be responsible for documenting the tests and examinations for the dietary ingredient under the terms specified by FDA when the petition is granted, and must make and keep such records under § 111.325 (21 CFR 111.325).

When we review a manufacturer’s petition requesting an exemption from the requirement of 100 percent identity testing, we will consider taking into account other data and information that we may have—for example, from other manufacturers who use the same supplier—in order to reduce the 100 percent identity testing requirements applicable to the particular dietary ingredient from the particular supplier. Relevant information from other sources may assist in the determination made on the manufacturer’s request for exemption. FDA may request additional data and information from the manufacturer to assist in the review of the petition.

At this juncture, dietary supplement manufacturers are best positioned to develop a system to ensure dietary ingredient identity, according to their particular specifications, that they can use to determine what reduced frequency of testing can be appropriately substituted for 100 percent identity testing. The manufacturer may decide that such a system could include gathering evidence of consistency of analytical results of the dietary ingredient within an acceptable range over a period of time through a history of 100 percent identity testing by the manufacturer, along with evidence that the period of time accurately reflects the range of variability of each specific incoming ingredient (e.g., it would capture variability caused by diverse factors and also would accurately reflect the prevalence of “errors,” i.e., incorrect ingredients, in the incoming ingredient shipment lots). All sources of variability and “error” in incoming product should be identified and documented. It is important to the public health to ensure that the dietary ingredient, intended to be the dietary ingredient in the finished dietary supplement, is in fact the dietary ingredient used in the manufacture of the dietary supplement.

\(^1\) The identity of the dietary ingredient may include more than one attribute (see discussion in section X.G.2 of the CGMP final rule). For example, identity may include physical characteristics (such as crystal or powder), state of hydration, or part of the plant (roots or leaves). The term “identity” would include the manufacturer’s specification(s) that would identify the attributes a supplier must meet.

FDA will issue guidance on the information and type of data it recommends be included in the citizen petition. We will issue guidance on what such a petition should contain and how it would be processed. The guidance will include our recommendations about the type of information that a manufacturer could obtain about each supplier that it intends to use for the ingredient and its specifications that would assist us in evaluating the petition.

The approval of an exemption petition will be only for the dietary ingredient(s) and supplier(s) stated in the petition and/or FDA’s approval, under the circumstances outlined in the petition. Manufacturers may use one petition to request an exemption from 100 percent identity testing for one or more dietary ingredients and one or more suppliers; however, the petition needs to provide data and information that are specific to each dietary ingredient and each supplier. If the manufacturer changes dietary ingredient(s) or supplier(s), or any other combination thereof, FDA’s approval would not apply to the particular changed dietary ingredient (including the supplier of that ingredient). FDA’s approval also would not apply to any dietary ingredient(s) for which the supplier(s) has been changed. In these circumstances, the manufacturer would have to resume 100 percent identity testing of the dietary ingredient so affected. However, the manufacturer would not have to necessarily resume 100 percent identity testing for other dietary ingredients, approved in the same petition, that are not changed, and for which suppliers are not changed. Further, if at any time the verification testing conducted by the manufacturer, under the terms of the approved petition, results in the identification of an ingredient that is not the correct dietary ingredient, the FDA approval for that dietary ingredient and supplier would no longer be in effect and the manufacturer would have to return to 100 percent identity testing until such time as it could re-petition of a new exemption. If the manufacturer holding an approved petition becomes aware of information suggesting a change in the nature or quality of the supplier(s) (e.g., change in ownership or management) or of the dietary ingredient(s) (e.g., change in the source of the dietary ingredient) that may affect the identity of the dietary ingredient, the manufacturer should consult with FDA as to whether the approved exemption in effect or whether the manufacturer should resume 100 percent identity testing.

In addition, we are adding a new paragraph (b)(6) to § 111.95. The agency’s response to a petition would be a record of the manufacturer’s Production and Process Control System that the manufacturer must retain under § 111.95. Current § 111.95 Under this subpart, what records must you make and keep? requires that you must make and keep records required under this subpart in accordance with subpart P. The new paragraph (b)(6) added by this IFR requires that a manufacturer keep FDA’s response to a petition submitted under § 111.75(a)(1)(ii) as a record.

III. Final Regulatory Flexibility Analysis

A. Final Regulatory Impact Analysis

FDA has examined the economic impacts of the IFR under Executive Order 12866. 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). Executive Order 12866 classifies a rule as significant if it meets any one of a number of specified conditions, including having an annual effect on the economy in a material way, adversely affecting competition, or adversely affecting jobs. A regulation is also considered a significant regulatory action if it raises novel legal or policy issues. FDA has determined that this IFR is not an economically significant regulatory action as defined by Executive Order 12866.

1. Need for Regulation

Elsewhere in this issue of the Federal Register, FDA published a final rule, “Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements” (the CGMP final rule). The CGMP final rule sets forth the manufacturing practices necessary to ensure that dietary supplements are manufactured, packaged, labeled, or held in a manner that will ensure the quality of the dietary supplements during manufacturing, packaging, labeling, or holding operations.

Under § 111.75(a)(1), the CGMP final rule requires the manufacturer of a dietary supplement to conduct at least one appropriate test or examination on every incoming lot to verify the identity of any component that is a dietary ingredient before it is used in the manufacture of a dietary supplement.
This IFR modifies § 111.75(a)(1) and renumbers it as § 111.75(a)(1)(i) and adds § 111.75(a)(1)(ii). Section 111.75(a)(1)(ii) requires what is in § 111.75(a)(1) of the CGMP final rule, but adds the following exception, “unless you petition the agency under paragraph (a)(1)(ii) of this section and the agency exempts you from such testing.” We will use the term “testing” in this analysis to refer to either testing or examination of incoming ingredients, whichever is appropriate.

Section 111.75(a)(1)(ii) sets forth criteria for what must be included in a petition for an exemption from the need for 100 percent identity testing of dietary ingredients. Specifically, the petition must set forth the scientific rationale, and must be accompanied by scientific data and information, for the proposed alternative testing that will demonstrate that there is no material diminution of assurance, compared to the assurance provided by 100 percent identity testing, of the identity of the dietary ingredient before use when the dietary ingredient is obtained from one or more suppliers identified in the petition.2

If the petition is granted, then the manufacturer of the dietary supplement would not have to complete 100 percent identity testing on that particular dietary ingredient when it is received from the supplier specified in the petition.3 Instead, the manufacturer would have to conduct the tests and examinations for the dietary ingredient under the terms specified by FDA when the petition is granted. Such alternative testing would be based on a scientific method (as explained in the manufacturer’s petition to FDA) to establish that there is no material diminution of assurance of the identity of the ingredients, compared to the assurance provided by 100 percent identity testing. For example, the level of continued testing at a rate less than 100 percent should provide the statistical confidence that the probability of receiving a dietary ingredient that does not meet the established specifications for identity is less than a small chosen percentage at a statistical confidence level, e.g., 95 percent.

The exemption from 100 percent identity testing of dietary ingredients gives dietary supplement manufacturers, who choose to request an alternative testing regime and obtain permission from FDA for an exemption, potential relief from the burden of having to test the identity of every lot of dietary ingredients, while not reducing the quality of such ingredients used in the manufacture of finished products.

2. Completed risk evaluations of the ingredient supplier (performed by the manufacturer or third party auditors) finding a low risk of shipping the wrong ingredient (as well as assuring that the supplier firm had a comprehensive quality control system described later in this analysis); and,

3. A scientific showing that the information from the two prior results

2 The identity of the dietary ingredient may include more than one attribute (see discussion in section X.G.2 of the CGMP final rule). For example, identity may include physical characteristics (such as crystal or powder), state of hydration, or part of the plant (roots or leaves). The term “identity” would include the manufacturer’s specification(s) that would identify the attributes a supplier must meet.

3 Multiple dietary ingredients and suppliers can be discussed in the petition as long as testing on each ingredient and information about each supplier is fully documented.

4 What a “sufficient period of time” is would likely vary, depending, for example, on the supplier, the identity specifications, controls that are in place to ensure that a consistent product is produced, and the risk of false identity of the dietary ingredient. Therefore, the provision does not specify how long testing would need to be done before a petition would be appropriate. For purposes of this analysis, we assume that the timeframe would be 1 year.
would allow a reduced rate of testing that would result in no material diminution of assurance in the identity of the dietary ingredient as compared to continued 100 percent testing. This data will be contained in a petition to the agency as support for the recommended representative testing scheme.

If FDA grants the petition, firms will be required to do verification testing, instead of ongoing 100 percent identity testing, and to keep records of such testing.\(^5\) State 2 is presumed to exist any time there is a new supplier, new ingredients, new specification(s), or a new dietary supplement manufacturer who receives incoming dietary ingredients.

- State 3 consists of verification testing only.

**Assumptions and costs associated with this IFR**

We assume that some manufacturers will complete the 100 percent identity testing of dietary ingredients and supplier risk evaluations to provide data to support a petition request to the agency. The cost savings associated with the petition exemption process would come from those manufacturers who complete 100 percent identity testing of dietary ingredients for a period of time, obtain data that can be used as part of a qualitative evaluation of risk associated with a particular dietary ingredient/supplier combination, develop a verification testing process, and then petition the agency for the identity testing exemption. For purposes of this analysis, we expect the petition to include information about the supplier(s), the dietary ingredient(s) and its identity specification(s), information about the manufacturer and its testing, and the test results from the supplier and manufacturer for the dietary ingredient(s). We expect that the manufacturer will provide data to support a system to assure no material diminution of assurance as 100 percent identity testing, e.g., the level of continued testing at a rate less than 100 percent should provide the statistical confidence that the probability of receiving a dietary ingredient that does not meet the established specifications for identity is less than a small chosen percentage at a statistical confidence level.

We also assume that firm size, resources available, and number of incoming ingredient lots received annually will likely play a large role in which firms apply for an exemption from 100 percent testing. Firms that do not receive many ingredient lots annually will probably not find it cost effective to apply for an exemption because the costs of developing a verification testing method and conducting third party audits would reduce or eliminate any cost savings from reduced identity testing.

For those firms that do see an incentive to petition for an exemption, we assume that some proportion of them will be able to develop the information described previously in bullets 1 and 2 under State 2. We also assume that, for some firms, this information provides adequate support to allow them to implement a verification testing scheme with a level of continued testing at a rate less than 100 percent that should provide the statistical confidence that the probability of receiving a dietary ingredient that does not meet the established specifications for identity is less than a small chosen percentage at a statistical confidence level, e.g., 95 percent. Table 1 of this document shows a verification testing scheme for identity verification testing that is equal to the square root (SQRT) of \((n) + 1\).\(^6\) We request comment on the use of this sampling plan for this purpose. Under this verification testing scheme, the cost savings of applying for an exemption increases as the number of lots increase above 100 lots per year. Thus, applying for an exemption is more cost effective for firms that receive 100 lots or greater for a particular ingredient per year.

**Table 1.—Testing Rates at SQRT \((n) + 1\)**

<table>
<thead>
<tr>
<th>Number of Lots per Year</th>
<th>Total</th>
<th>10</th>
<th>50</th>
<th>100</th>
<th>1,000</th>
<th>5,000</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampled</td>
<td></td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>32</td>
<td>72</td>
<td>101</td>
</tr>
<tr>
<td>Percent sampled</td>
<td></td>
<td>40%</td>
<td>16%</td>
<td>10%</td>
<td>3.0%</td>
<td>1.4%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

If, for example, the petitioner chooses to follow FDA Office of Regulatory Affairs’ inspection guidelines that direct the conduct of field investigational activities, including those related to the assessment of violations under the adulteration provisions of the act,\(^7\) the petitioner would propose setting an upper and lower limit for verification testing of incoming ingredient lots. For example, plausible limits would be a minimum of 11 lots for manufacturers with incoming lots of 100 or less per ingredient (about 10 percent of lots), all unless the total was less than 10 annually (these manufacturers would not apply for an exemption as they would still be testing 100 percent with or without the exemption) and a maximum of 32 lots for all manufacturers that have 1,000 or more incoming lots per ingredient tested annually. We use these verification testing limits when we estimate the cost savings that follow.

**Costs to firms who petition for exemption**

As stated previously, firms that intend to petition for an exemption from 100 percent identity testing will incur costs which, at a minimum will include: Employing a statistical expert to develop a verification testing plan that can prove the firm can adhere to the standard of “no material diminution of assurance”; performing in-house, or contracting out for, a risk evaluation for each ingredient and supplier; and, providing the results of some period of 100 percent testing (which we assume

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\(^5\) The records of the verification testing would be subsumed under subpart J, §111.325 of the CGMP final rule published elsewhere in this issue of the Federal Register.

\(^6\) While statistical sampling plans are numerous, we chose the SQRT of \((n) + 1\) from a normal distribution for ease of use. The above sampling chart (of SQRT of \((n) + 1\) values) assumes normal Gaussian distribution of error and loses accuracy in the lower ends of the distribution. This method of sampling was not specifically designed for confirming identity. FDA’s Office of Regulatory Affairs, Investigations Operation Manual (IOM) uses the SQRT of \((n) + 1\) rule for compliance sampling, including chemical contamination, filth, pesticides, mold, bacteria, and identity.

\(^7\) See FDA Investigations Operations Manual 2006, sec. 4.3.7.2 on Random Sampling.
for purposes of this analysis to be 1 year).

In addition, as part of the supplier risk evaluation, we assume suppliers would demonstrate to manufacturers that they have a quality management system (QMS) in place and that it has been independently audited (certified) by a third party. We assume this QMS would, at a minimum, contain the following procedures:

1. Monitoring of manufacturing processes to ensure they are producing quality product;
2. Keeping proper records;
3. Checking outgoing product for defects, with appropriate corrective action where necessary; and,
4. Regularly reviewing individual processes and the quality system itself for effectiveness.

100 percent identity testing
The costs for 100 percent identity testing are calculated using the Identity Testing Model from the CGMP final rule published elsewhere in this issue of the Federal Register. The costs of 100 percent identity testing are costs of the final rule, not this IFR.

Statistical sampling plan for verification testing
Developing a statistical sampling plan that will assure a firm of adhering to the standard of “no material diminution of assurance” may vary with firm size, supplier or manufacturer characteristics, nature of the dietary ingredient, or type of dietary supplement manufactured. Thus, firms wishing to get an exemption from 100 percent identity testing may hire a statistician to develop a verification testing plan that will be acceptable to FDA. Using a statistician’s mean hourly wage of $31.79, plus 50 percent for overhead, we estimate it will take a statistician 20 hours to develop an appropriate plan. The total cost for a statistician would be $954 ($47.69 per hour X 20 hours). We request comment on this estimate.

Supplier risk evaluations (Third party audits)
We assume that qualitative supplier risk evaluations would be developed and then administered to a firm’s suppliers. We expect manufacturing firms would hire a risk analyst to develop an appropriate supplier risk evaluation, administer it to the suppliers in question, and then analyze the results. We estimate that it will take a risk analyst 40 hours to conduct the work necessary to have complete evaluations of ingredient suppliers’ risk.8 We use the hourly mean wage of a risk management analyst ($27.90) (Ref. 1), plus 50 percent for overhead to calculate the cost of completing the supplier risk evaluations. The total cost for supplier risk evaluations is $1,674 ($41.85 per hour x 40 hours). We request comment on this estimate.

As stated previously, since FDA is not prescribing a specific scientific method for how dietary supplement manufacturers can assure the identity of a dietary ingredient when less than 100 percent identity testing is performed, there may be many ways that dietary supplement manufacturers may conduct risk evaluations or develop a verification testing plan as part of the petition process.

One possible scenario is that market forces could cause a new industry to evolve whereby a third party or an intermediary conduct identity tests on dietary ingredients and/or perform supplier risk evaluations and sell the results. Certain suppliers of dietary ingredients may find it to their competitive advantage to hire an independent third party to conduct such testing. These intermediaries might obtain samples from a variety of suppliers over the course of a year, test those samples for identity using certain specifications, and then sell the results of the year’s testing to dietary supplement manufacturers—e.g., small businesses who cannot test on their own and would have to contract out the testing. Another possibility is that manufacturers sell the results of testing and risk evaluation to other manufacturers or the original supplier. The supplier may use such information in marketing as an incentive for manufacturers to buy that supplier’s product.

Petition process
The petitions, which we assume would include the results of 1 year’s testing (for purposes of this analysis), the recommended verification testing plan, and the supplier risk evaluation, will sort those manufacturers who have reliable suppliers from those that do not. The petition is assumed to take 8 hours per plant for assembly of the information.9 The wage for a first-line production supervisor ($23.66) (Ref. 1), plus 50 percent for overhead, is used to estimate the costs of petition assembly. The total cost of assembling a single petition, for single or multiple ingredients and suppliers, is estimated to be about $284 (8 hours x $35.49 per hour).

Costs of quality management systems and certification
For those suppliers who do not have QMS, the costs of putting them into place are likely to run into tens of thousands of dollars. A supplier would only install this type of system if they wish to sell, or continue selling, to manufacturers who are likely to petition the agency for an exemption from 100 percent testing. As presently constructed, it is likely that only larger firms who are more able to bear the fixed costs of the rule (supplier risk evaluations, certification costs, and costs of preparing petitions) are likely to petition the agency for an exemption.

Further, we assume that virtually all suppliers to these large manufacturers already have some sort of a QMS in place, particularly those that are domestic. However, it is unclear how many foreign suppliers have these systems. FDA has no data on the number of supplier firms who might have such systems and is unable to estimate the likely cost additions of either putting these systems in or the cost of certifying these systems.

Therefore, all cost estimates contained in this analysis should be viewed as lower bounds.

Total costs to firms
Table 2 shows the total costs per firm to submit a petition for an exemption from 100 percent identity testing of dietary ingredients used in the manufacture of dietary supplements.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification Testing Plan</td>
<td>$954</td>
</tr>
<tr>
<td>Risk Evaluation</td>
<td>$1,674</td>
</tr>
<tr>
<td>Petition Assembly</td>
<td>$284</td>
</tr>
<tr>
<td>Total Cost Per Firm</td>
<td>$2,912</td>
</tr>
</tbody>
</table>

Petition review
It will take FDA approximately 40 hours to review a petition. The cost of each petition review would be $1,826 (40 hours x $45.65 per hour).10

Amendments and updates to petitions
In cases where a petition has been granted and the manufacturer has changed ingredients, specifications, or suppliers or any combination thereof,

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8 This is an average cost. The time needed and therefore the cost of evaluations may be more or less depending on the number of suppliers and ingredients that are being evaluated.

9 In the analysis of the final rule we determined that vitamin and mineral products contain about 13 listed dietary ingredients per product and other dietary supplements, mainly herbals, contain about 4 listed dietary ingredients per product.

10 Pay for an employee earning a GS-13, step 7 adjusted to include locality pay for Washington, DC and the surrounding area.
we assume that the original petition would no longer be applicable and a new petition would need to be submitted. We do not attempt to calculate the costs of amendments and updates to petitions here. However, we note that manufacturers are likely to take the likelihood of these changes into account before beginning the process of gathering information to submit a petition. The sooner the likelihood of a change, the less likely a manufacturer will petition for an exemption.

If at any time verification testing conducted by the manufacturer produces an ingredient that is not the correct ingredient, the approved petition would no longer be considered in effect, and the manufacturer would need to return to 100 percent identity testing and re-petition for another exemption.

**Petition approval uncertainty**

We assume that not all firms that petition FDA will be approved for an exemption from 100 percent identity testing (for example, some petitions may contain insufficient data or an unacceptable verification testing plan). Another reason for the uncertainty in application and acceptance rates is the degree of uncertainty manufacturers face about acceptance of their plan. However, at some point, FDA may have sufficient data to provide more information about classes of dietary ingredients and supplier conditions so as to be able to provide manufacturers with more standardized information that will help them choose a plan. Some degree of uncertainty also exists for small firms as, given the verification testing plan outlined previously, firms receiving fewer than 10 incoming lots of a specific ingredient annually will not benefit from a petition exemption (all lots would still have to be tested).

We cannot know what percentage of firms will apply for exemption or what percentage of firms will be successful in their petition submission. Table 3 diagrams how firms may respond to the option of petitioning FDA for exemption based on firm size.

**Table 3.—Likelihood of Petition Attempts by Firm Size**

<table>
<thead>
<tr>
<th>Firm Size</th>
<th>Likelihood of Petition Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do not Petition</td>
</tr>
<tr>
<td>Very Small (&lt; 20 employees)</td>
<td>Most</td>
</tr>
<tr>
<td>Small (20 to 499 employees)</td>
<td>Some</td>
</tr>
<tr>
<td>Large (500 or more employees)</td>
<td>Few</td>
</tr>
</tbody>
</table>

**Estimated cost savings from petition exemptions**

The cost savings associated with the testing exemption provided for in this IFR are highly dependent on:

- The number of tests required for verification that is allowed in the place of on-going 100 percent identity testing,
- How many firms apply for exemption,
- How many ingredients firms apply for exemption from testing for, and,
- The likelihood that FDA will approve the exemption.

Nevertheless, we assume that it is likely that firms will assume their petition exemption will be successful if they provide the required documentation and assert that they will follow a verification sampling plan based on the bounded square root of (n)+1 methodology outlined previously.

**Expected cost savings from petition exemptions:** $7.3 to $37.3 million per year

Years 1 through 5 cost estimates for 100 percent testing and for verification testing are shown in table 4 of this document. The cost savings associated with this IFR are calculated by subtracting the cost estimates for year 5, respectively, from the estimated cost for 100 percent testing. Steady state costs are calculated, where the fixed costs of the risk evaluation and petition process are amortized over a 10-year period.

### Table 4

<table>
<thead>
<tr>
<th>Petition Exemption</th>
<th>Cost Savings per Ingredient per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETITION EXEMPTION</td>
<td>$7.3 to $37.3 million</td>
</tr>
</tbody>
</table>

Amortization rate over 10 years for fixed costs is 7 percent. The estimates do not change when the amortization rate is 3 percent.
to take into consideration multiple ingredients and suppliers might be included in a single petition. Several cost savings scenarios are shown in table 4 to represent uncertainty about who will petition for an exemption.

<table>
<thead>
<tr>
<th>TABLE 4. — COSTS OF IDENTITY TESTING FOR 100% TESTING AND FOR VERIFICATION SAMPLING (IN MILLIONS OF DOLLARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Estimate of 100% Identity Testing</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total Costs for 100% Identity Testing</td>
</tr>
<tr>
<td>Slower adoption of exemption</td>
</tr>
<tr>
<td>Total Costs for Verification Testing</td>
</tr>
<tr>
<td>Cost Savings</td>
</tr>
<tr>
<td>Faster adoption of exemption</td>
</tr>
<tr>
<td>Total Costs for Verification Testing</td>
</tr>
<tr>
<td>Cost Savings</td>
</tr>
</tbody>
</table>

Table 5 takes the estimates from table 4 and adjusts them to represent different rates of petition success.

<table>
<thead>
<tr>
<th>TABLE 5. COST SAVINGS WHEN PETITION SUCCESS RATE IS NOT 100% BASED ON STEADY STATE AFTER YEAR 5 ( (r=7%) ) FROM TABLE 3 (IN MILLIONS OF DOLLARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Exemption Success Rate</td>
</tr>
<tr>
<td>Cost Savings slower adoption rate</td>
</tr>
<tr>
<td>Cost Savings faster adoption rate</td>
</tr>
</tbody>
</table>

Benefits

The IFR provisions will cause no net change in the benefits from the final rule with the exception of any potential benefits from suppliers putting QMSs in place. The provisions of the IFR still lead to the following benefits:

- Reduced health costs associated with a reduced number of acute illnesses;
- Fewer product recalls; and
- Reduced health costs associated with a reduced number of chronic illnesses and conditions.

The opportunity the IFR provides for reduced identity testing of dietary ingredients should not change these benefits.

If, in fact, any suppliers install QMSs as a result of this rule, the benefits would be that raw materials would be less likely to be contaminated or adulterated. Hence, dietary supplements that are made with that raw material are also less likely to be contaminated and adulterated.

B. Final Regulatory Flexibility Analysis

FDA has examined the economic implications of this IFR as required by the Regulatory Flexibility Act (5 U.S.C. 601–612). If a rule has a significant economic impact on a substantial number of small entities, the Regulatory Flexibility Act requires agencies to analyze regulatory options that would lessen the economic effect of the rule on small entities. FDA has concluded that this IFR will not have a significant economic impact on a substantial number of small entities.

FDA determined in the CGMP final rule that there are 774 very small establishments (less than 20 employees) and 526 small establishments (20 to 499 employees) that will be affected by the requirements of the CGMP final rule. These establishments may or may not take advantage of the petition exemption process provided for in this IFR.

The likelihood of very small and small firms taking advantage of the exemption depends largely on the annual minimum number of lots of dietary ingredients for which they will have to test for identity and the size of the fixed costs associated with the supplier risk evaluation and petition costs. FDA has not specified how many lots are an acceptable minimum. If a plausible limit is a minimum of 10 lots for manufacturers with incoming lots of 100 or less per ingredient (about 10 percent of lots) and all lots total less than 10 annually, then there will be some small and very small manufacturers who will not apply for an exemption because they would still have to test 100 percent of incoming lots for identity whether they applied for an exemption or not.
C. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104–4) requires cost-benefit and other analyses before any rulemaking if the rule would include a “Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year.” The current threshold after adjustment for inflation is $118 million, using the most current (2004) Implicit Price Deflator for the Gross Domestic Product. FDA has determined that this IFR does not constitute a significant rule under the Unfunded Mandates Reform Act.

IV. Paperwork Reduction Act of 1995

This IFR contains information collection requirements that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 [the PRA] (44 U.S.C. 3501–3520). The title, description, and respondent description of these provisions are shown in the following paragraphs with an estimate of the annual recordkeeping burden. Included in the estimate is the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing each collection of information.

FDA invites comments on: (1) Whether the interim final collection of information is necessary for the proper performance of FDA’s functions, including whether the information will have practical utility; (2) the accuracy of FDA’s estimate of the burden of the interim final collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Title: Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements

Description: Section 402(g) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 342(g)) gives us explicit authority to issue a rule establishing CGMP requirements for dietary supplements. Section 402(g)(1) of the act states that a dietary supplement is adulterated if “it has been prepared, packed, or held under conditions that do not meet current good manufacturing practice regulations.” Section 402(g)(2) of the act authorizes us to, by regulation, “prescribe good manufacturing practices for dietary supplements.” Under section 701(a) of the act (21 U.S.C. 371), FDA may issue regulations necessary for the efficient enforcement of the act. Other relevant legal authority is discussed in section V of the CGMP final rule. In the PRA analysis of the CGMP final rule (section XXVIII), we discuss why records are an indispensable component of CGMP (and incorporate that discussion by reference in this IFR).

Under § 111.75(a)(1), the CGMP final rule requires the manufacturer of a dietary supplement to conduct at least one appropriate test or examination on every incoming lot to verify the identity of any component that is a dietary ingredient before it is used in the manufacture of a dietary supplement. This IFR modifies § 111.75(a)(1) and renumerates it as § 111.75(a)(1)(i) and adds § 111.75(a)(1)(ii). Section 111.75(a)(1)(ii) requires what is in § 111.75(a)(1) of the CGMP final rule, but adds the following exception, “unless you petition the agency under subparagraph (1)(ii) of this paragraph and the agency exempts you from such testing.” Section 111.75(a)(1)(ii) sets forth criteria for what must be included in a petition for an exemption from the need for 100 percent identity testing of dietary ingredients. Specifically, the petition must set forth the scientific rationale, and must be accompanied by scientific data and information, for proposed alternative testing that will demonstrate that there is no material diminution of assurance, compared to the assurance provided by 100 percent identity testing, of the identity of the dietary ingredient before use when the dietary ingredient is obtained from one or more suppliers identified in the petition.

Description of Respondents: Manufacturers, dietary supplement manufacturers, packers and repackers, labelers and re-labelers, holders, distributors, warehouses, exporters, importers, large businesses, and small businesses.

FDA estimates the burden for this information collection as follows:

<table>
<thead>
<tr>
<th>21 CFR Section</th>
<th>Number of Recordkeepers</th>
<th>Frequency per Recordkeeping</th>
<th>Total Records</th>
<th>Hours per Record</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.75 (a)(1)(b)</td>
<td>1,460</td>
<td>1</td>
<td>1,460</td>
<td>8</td>
<td>11,680</td>
</tr>
<tr>
<td>111.95</td>
<td>1,460</td>
<td>1</td>
<td>1,460</td>
<td>0.1</td>
<td>146</td>
</tr>
<tr>
<td><strong>Total One time burden</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>11,826</strong></td>
</tr>
</tbody>
</table>

1 There are no capital costs or operating costs associated with the collection of information under this IFR.

One-time Burden

In the regulatory impact analysis of the CGMP final rule, published elsewhere in this issue of the Federal Register, FDA identifies 1,460 establishments that manufacture, pack, hold, label, or otherwise process dietary supplements. We assume that at least some manufacturers would like to take advantage of the opportunity to petition FDA to eliminate the need to do 100 percent identity testing for the dietary ingredients they use in the manufacture of their products. Therefore, for this PRA analysis, we will make an assumption that every establishment will submit a petition to FDA for review and approval requesting an exemption from 100 percent identity testing for at least one dietary ingredient from at least one supplier. We ask for comment about whether manufacturers would be interested in seeking an exemption for 100 percent identity testing, and if so, for how many ingredients and from how many suppliers.

As stated in the previous analysis, the petitions, which we assume would include the results of 1 year’s testing, verification testing plan, and the supplier risk evaluation, will take 8 hours per plant for assembly of the information. Assuming that all establishments submit a petition for exemption for at least one dietary ingredient/supplier combination, the hour burden estimate for this activity is
Recall that individuals may submit one copy. Submit one electronic 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. We will address comments received and confirm or modify the IFR in a final rule. We will not consider any comments previously considered during the rulemaking for the CGMP final rule, published elsewhere in this Federal Register.

VI. Analysis of Environmental Impact

The agency has carefully considered the potential environmental effects of this action. We have concluded under § 25.30(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.

VII. Federalism

FDA has analyzed this IFR in accordance with the principles set forth in Executive Order 13132. Section 4(a) of the Executive Order requires agencies to “construe * * * a Federal statute to preempt State law only where the statute contains an express preemption provision or there is some other clear evidence that the Congress intended preemption of State law, or where the exercise of State authority conflicts with the exercise of Federal authority under the Federal statute.” FDA has determined that the IFR 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 conclude that the IFR does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

VIII. References

The following references have been placed on display in the Division of Dockets Management (HFA—305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852, and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.
2. Section 111.75 is amended by revising paragraph (a)(1) to read as follows:

§ 111.75 What must you do to determine whether specifications are met?
(a) * * *
(1) Conduct at least one appropriate test or examination to verify the identity of any component that is a dietary ingredient, unless you petition the agency under paragraph (a)(1)(ii) of this section and the agency exempts you from such testing;
(ii) You may submit a petition, under 21 CFR 10.30, to request an exemption from the testing requirements in paragraph (a)(1)(i) of this section. The petition must set forth the scientific rationale, and must be accompanied by the supporting data and information, for proposed alternative testing that will demonstrate that there is no material diminution of assurance, compared to the assurance provided by 100 percent identity testing, of the identity of the dietary ingredient before use when the dietary ingredient is obtained from one or more suppliers identified in the petition. If FDA grants the petition, you must conduct the tests and examinations for the dietary ingredient, otherwise required under § 111.75(a)(1)(i), under the terms specified by FDA when the petition is granted; and

§ 111.95 Under this subpart E, what records must you make and keep?

* * *
(b) * * *

(6) Documentation of FDA’s response to a petition submitted under § 111.75(a)(1)(ii) providing for an exemption from the provisions of § 111.75(a)(1)(i).


Andrew C. von Eschenbach,
Commissioner of Food and Drugs.


Michael O. Leavitt,
Secretary of Health and Human Services.

[FR Doc. 07–3038 Filed 6–22–07; 8:45 am]

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