Be sure to keep a copy of this completed form for your records.

Analysis of Consent Order To Aid Public Comment

The Commission has accepted, pursuant to its rules, a consent agreement from Centurion International, Inc., Centurion Homes Corporation, Inc., and Centurion Homes Corporation of California, Inc. All of these companies are headquartered in Waco, Texas. These companies manufacture mobile homes. Included with the mobile homes is a warranty promising that the respondents will repair or remedy defects in materials and workmanship. In addition, the respondents formerly sold extended service contracts on mobile homes through a now-defunct subsidiary.

In a complaint issued at the same time, the Commission charged the respondents with violating Section 5 of the Federal Trade Commission Act by failing to honor their warranties and service contracts. Respondents, by themselves and through various subsidiaries, some of which are now defunct, manufactured mobile homes. When manufacturing stopped at certain mobile home plants, respondents thereafter disclaimed waranty liability, even though, the complaint charged, respondents were liable for the warranty promises. When respondents' service contract subsidiary, Tri-Star, ceased doing business, respondents also disclaimed liability on the service contracts. The complaint also charges respondents with violations of the Magnuson-Moss Warranty Act and the rules promulgated thereunder by failing to make certain required disclosures and by attempting to disclaim implied warranties in violation of law.

The order requires respondents to locate consumers who were improperly denied waranty and service contract performance and to remedy covered defects or reimburse consumers if the defects have been remedied at the consumer's expense. In addition, the order requires respondents to make the disclosures required by the Warranty Disclosure Rule and prohibits respondents from disclaiming implied warranties.

Emily H. Rock,

Secretary.

[FR Doc. 83-34217 Filed 12-22-83; 8:45 am]

BILLING CODE 6750-01-M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 300

[Docket No. RM80-40-000]

Procedures and Filing Requirements for Rates of Power Marketing Agencies; Extension of Time for Comments

December 19, 1983.

AGENCY: Federal Energy Regulatory Commission, DOE.

ACTION: Notice of proposed rulemaking; extension of comment period.

SUMMARY: On October 21, 1983, the Commission issued a Notice of Proposed Rulemaking involving procedures and filing requirements for rates and power marketing agencies (48 FR 49301, October 25, 1983). The comment period is being extended at the request of Tri-State Generation and Transmission Association, Inc. and the U.S. Department of Energy.

DATE: Comments must be submitted on or before February 6, 1984.

ADDRESS: Submit comments to: Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426.

FOR FURTHER INFORMATION CONTACT: Kenneth F. Plumb, Secretary, (202) 357-8400.

SUPPLEMENTARY INFORMATION:

December 19, 1983.

On December 7, 1983 and December 16, 1983, Tri-State Generation and Transmission Association, Inc. (Tri-State) and the U.S. Department of Energy (DOE) filed respective motions for an extension of time to file comments in response to the Commission's Notice of Proposed Rulemaking issued October 21, 1983, in the above-docketed proceeding. Tri-State's motion states that it requires additional time to comment on the substantive issues which are raised in the proposed rule. In support of its request for additional time, DOE states that the Secretary of Energy has recently signed a new Delegation Order [No. 0204-108, 48 FR 55664 (December 14, 1983)] which expressly defines the Commission's role in confirming and approving rates for the Alaska, Southeastern, Southwestern, and Western Area Power Administrations and makes other changes in existing arrangements. DOE requests that an extension be granted in order to allow DOE and other interested parties to submit comments which will reflect the new delegation order.

The Commission is granting the requests to extend the comment period. Upon consideration, notice is hereby given that an extension of time for the filing of comments is granted to and including February 6, 1984.

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-34152 Filed 12-22-83; 8:45 am]

BILLING CODE 6717-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 184

[Docket No. 77N-0034]

GRAS Status of Licorice (Glycyrrhiza), Ammoniated Glycyrrhizin, and Monoammonium Glycyrrhizinate

Correction

In FR Doc. 83-32646 beginning on page 54983 in the issue of Thursday, December 8, 1983, make the following corrections:

1. On page 54989, second column, in § 184.1408(a)(1), second line, "rhizone" should have read "rhizome".

2. In the third column, the table in § 184.1408(c), in the "Functional use" column, fourth line of the fourth entry, "§ 170.3(n)(12)" should have read "§ 170.3(o)(12)".

BILLING CODE 1505-01-M

21 CFR Part 201

[Docket No. 82N-0395]

Aspartame as an Inactive Ingredient in Human Drug Products; Labeling Requirements; Correction

AGENCY: Food and Drug Administration.

ACTION: Proposed rule; correction.

SUMMARY: The Food and Drug Administration (FDA) is correcting a document that proposed to declare aspartame suitable for use as as inactive ingredient in human drug products provided that the label and labeling of the drug products declare the presence and amount of the component phenylalanine that is contained in the drug product per dosage unit. This

document corrects a docket number and an editorial error. By correcting the latter error, FDA makes clear that reformulations of new drugs to add aspartame will require prior FDA approval before the reformulations are placed into effect.

FOR FURTHER INFORMATION CONTACT: Ed Farha, National Center for Drugs and Biologics (HFN-7), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857; 301-443-6490.

SUPPLEMENTARY INFORMATION: In FR Doc. 83-32643 appearing at page 54993 in the issue for Thursday, December 8, 1983, the following corrections are made:

1. On page 54994, in the second column, second full paragraph, 19th line, "Docket No. 80N-0120" is corrected to read "Docket No. 82F-0305".

§ 201.21 [Corrected]

2. On page 54995, under § 201.21 *Declaration of presence of Phenylalanine as a component of aspartame in over-the-counter and prescription drugs for human use,* in paragraph (d), in the fifth line, "§ 314.8(d)" is corrected to read "§ 314.8."

Dated: December 19, 1983.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-34053 Filed 12-22-83; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Part 201

[Docket No. 82N-0395]

Aspartame as an Inactive Ingredient in Human Drug Products; Labeling Requirements

Correction

In FR Doc. 83-32643 beginning on page 54993 in the issue of Thursday, December 8, 1983, make the following corrections:

1. On page 54993, third column, the first line under "Supplementary Information" should have read "Aspartame [L-aspartyl-L-phenylalanine".

2. On page 54995, second column, third line of §201.21 (b), "active" should have read "inactive".

BILLING CODE 1505-01-M

21 CFR Part 886

[Docket No. 82N-0180]

Reclassification of Daily Wear Spherical Contact Lenses Consisting of Rigid Gas Permeable Plastic Materials; Withdrawal of Proposed Rule

AGENCY: Food and Drug Administration.

ACTION: Withdrawal of proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is withdrawing its proposed rule to reclassify marketed daily wear spherical contact lenses consisting of certain rigid gas permeable plastic materials from class III (premarket approval) into class I (general controls). FDA has determined, after providing two opportunities for submission of comments and evidence, after holding a public hearing followed by an additional period for submission of comments and evidence, and after reconsidering the basis for FDA's tentative conclusion that class I would provide reasonable assurance of the safety and effectiveness of the device, that there is insufficient new, publicly available, valid scientific evidence to show that the device is safe and effective, to characterize the device adequately for the purpose of reclassification, or to demonstrate that either class I or class II (performance standards) would provide reasonable assurance of the safety and effectiveness of the device. Class III is necessary to provide such assurance.

EFFECTIVE DATE: December 23, 1983.

FOR FURTHER INFORMATION CONTACT: Albert Van de Griek, National Center for Devices and Radiological Health (HFK-402), Food and Drug Administration, 8757 Georgia Ave., Silver Spring, MD 20910, 301-427-7940.

SUPPLEMENTARY INFORMATION: For the convenience of the reader, the following is an index of the sections throughout this document:

I. History of the Proceedings

In the **Federal Register** of November 26, 1982 (47 FR 53402), FDA published a proposed rule to reclassify marketed daily wear spherical contact lenses consisting of certain rigid gas permeable plastic materials from class III into class I. (For convenience, the lenses proposed for reclassification are referred to throughout this document as rigid gas permeable lenses and all other references to lenses refer to contact lenses.) Interested persons were given until December 27, 1982, to comment on the proposal. In the **Federal Register** of December 10, 1982 (47 FR 55497), FDA extended the comment period to January 26, 1983. Following a review of the comments received during this period, FDA determined that resolution of complex scientific issues raised by the comments would be facilitated by reopening the comment period to receive additional information on certain specific issues. Therefore, in the **Federal Register** of April 15, 1983 (48 FR 16293), FDA reopened the comment period for 30 days. Several requests for a public hearing before the Commissioner of Food and Drugs were received. In the **Federal Register** of April 26, 1983 (48 FR 18836), FDA announced that a public hearing would be held to afford interested persons an opportunity to present information and views on the issues involved in the reclassification proceeding. The hearing, which was held on May 26, 1983, was followed by an additional 15-day comment period to allow interested persons to submit written comments on matters raised at the hearing. The comment period following the hearing closed on June 10, 1983.

II. Overview of the Basis for FDA's Decision

A. Background

Section 513(e) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 360c(e)) authorizes FDA to reclassify a device based on "new information" respecting the device. (See the preamble to the proposed rule (47 FR 53404) for a comprehensive discussion of the meaning of the term "new information.") The "new information" on which any reclassification of a device is based is required to consist of "valid scientific evidence," as defined in

§ 860.7 of the regulations governing medical device classification procedures (21 CFR 860.7). FDA relies only upon such evidence to determine whether there is reasonable assurance that a device is safe and effective (§ 860.7(c)(1)). As the agency explained in the preamble to the final rule establishing Part 860 (21 CFR Part 860), the purpose of the Medical Device Amendments of 1976 (Pub. L. 94-295) (the amendments) is to assure the safety and effectiveness of medical devices intended for human use and such assurance necessarily demands a high standard of proof (43 FR 32988; July 28, 1978).

For the purpose of reclassification, the valid scientific evidence upon which the agency relies is required to be publicly available, i.e., may not be based on trade secret or confidential commercial information in any premarket approval application (PMA) for a medical device or on trade secret or confidential commercial information from any investigation concerning the safety and effectiveness of a device (section 520(c) of the act (21 U.S.C. 360j(c))). Such valid scientific evidence also may not be based upon the detailed summary of information respecting the safety and effectiveness of any device for which there is an approved PMA (section 520(h)(3) of the act) and which FDA is required to make available to the public upon issuance of an order approving a PMA (section 520(h)(1) of the act).

In the preamble to the proposed rule (47 FR 53404), FDA stated:

> To reclassify a device under section 513(e) of the act, the statute and the regulations require that the new, publicly available, valid scientific evidence of safety and effectiveness show (1) why the device should not remain in its present classification and (2) that the proposed reclassification will provide reasonable assurance of the safety and effectiveness of the device. In the case of a device classified in class III and proposed for reclassification into class I, the statute and the regulations require such evidence of safety and effectiveness to show (1) why the device should not remain in class III and (2) that general controls will provide reasonable assurance of the safety and effectiveness of the device.
>
> The general controls are those authorized by or under sections 501 (adulteration), 502 (misbranding), 510 (registration, listing, and premarket notification), 516 (banned devices), 518 (notification and other remedies), 519 (records and reports), and 520 (general provisions including current good manufacturing practice requirements) of the act (21 U.S.C. 351, 352, 360, 360f, 360h, 360i, and 360j).

In the preamble to the proposed rule, FDA summarized the data on which the proposed reclassification was based (47 FR 53406-53409) and tentatively concluded that rigid gas permeable lenses should be reclassified into class I, rather than into class II upon the effective date of a performance standard established under section 514 of the act (21 U.S.C. 360d) (47 FR 53404). In FDA's judgment at that time, the information discussed in the preamble showed that the device was safe and effective for its intended use. FDA also believed that the general controls provisions of the act would be sufficient to provide reasonable assurance of the safety and effectiveness of the device. The decision to propose reclassification into class I, rather than class II once a performance standard was established, was based on FDA's belief that although sufficient information existed to establish a standard to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses, there was no need to establish a performance standard to provide such assurance.

Issuance of a proposed rule to reclassify a device from class III into class I under section 513(e) of the act does not preclude promulgation of a final rule the reclassify the device into class II, if the evidence warrants such action, particularly where, as in this proceeding, the preamble to the proposed rule invited comments on the appropriateness of reclassification into class II, before or after the establishment of a performance standard under section 514 of the act for the device. A class II device is one for which general controls by themselves are insufficient to provide reasonable assurance of the safety and effectiveness of the device, for which there is sufficient information to establish a performance standard to provide such assurance, and for which "it is therefore necessary to establish * * * a performance standard under section 514 to provide reasonable assurance of its safety and effectiveness" (section 513(a)(1)(B) of the act; 21 CFR 860.3(c)(2)).

In the preamble to the proposed rule (47 FR 53410), FDA invited comments on several specific issues including the following questions:

1. Do the data presented in this proposal constitute sufficient "valid scientific evidence" of safety and effectiveness to support reclassification of each marketed lens consisting of CAB or polyacrylate-silicone?

a. If not, what additional publicly available data are there to support reclassification?

b. If so, are general controls sufficient to provide reasonable assurance of the safety and effectiveness of the device?

c. If general controls are not sufficient to provide reasonable assurance of the safety and effectiveness of the device, is there sufficient information to establish a performance standard to provide such assurance?

d. If general controls are not sufficient, and there is sufficient information to establish a performance standard to provide reasonable assurance of [the] safety and effectiveness of the device, is a performance standard necessary to assure any of the lens properties or design characteristics that FDA has identified as "clinically significant" * * * or to protect against any of the concerns raised in the 1975 notice declaring as new drugs all contact lenses consisting of polymers other than PMMA * * *?

e. Should any reclassification take effect (i) before or (ii) after such a standard has been established?

* * * * *

3. With respect to the lenses proposed for reclassification, FDA has limited data on their use for the correction of hyperopia and in some cases aphakia. May FDA reclassify a lens for use in the correction of myopia, hyperopia, and aphakia based solely or primarily on data showing that the lens is safe and effective (a) for the correction of myopia? (b) for the correction of myopia and aphakia?

4. Does specifying the materials of which the lenses proposed for reclassification are principally composed adequately identify the lenses for the purpose of reclassification?

5. * * *. [T]he safety or effectiveness of a specific rigid gas permeable contact lens is affected by its specific composition, design, and various other clinically significant properties.

a. Do the data presented in this proposal provide sufficient "valid scientific evidence" of the safety and effectiveness of CAB or polyacrylate-silicone lenses of any specific composition, design, or other characteristic?

b. If the data do not provide this evidence, may the identified lenses be reclassified because of FDA's tentative decision that the safety and effectiveness of composition, design, or other clinically significant properties of specific lenses can be assured through premarket notification submissions and substantial equivalence determinations?

* * * * *

B. Insufficient Evidence of Safety and Effectiveness

In response to question 1 above, a number of comments presented cogent arguments that the data described in the preamble to the proposal do not constitute sufficient new, publicly available, valid scientific evidence (valid scientific evidence) of safety and effectiveness to support reclassification. FDA agrees in general with these comments, which are discussed in detail in section III.C. of this document. Additional comments in response to question 1.a. and in response to the April 15, 1983 notice reopening the comment period, in an effort to supply the valid scientific evidence of safety and effectiveness required for reclassification, submitted detailed summaries of a portion of clinical trials conducted on two specific polyacrylate-silicone contact lenses, and a detailed summary of the preclinical evaluation of one of the lenses. (No data pertaining to the safety or effectiveness of cellulose acetate butyrate (CAB) rigid gas permeable lenses were provided in or submitted with any comments.) As discussed in paragraph 14 of this document, serious questions have been raised concerning the completeness of the submitted data. Even if there were no such questions, however, the data merely would serve to show the safety and effectiveness of two polyacrylate-silicone lenses characterized only by brand name and made of unspecified material. Such a showing would be insufficient to justify reclassification because, among other things, the information would fail to establish the safety and effectiveness of polyacrylate-silicone lenses as a generic type of device.

C. Inadequate Characterization of Materials

CAB or polyacrylate-silicone materials that might be used for manufacturing rigid gas permeable lenses can consist of thousands of formulations and have a wide variety of physical and chemical properties. Only a small percentage of such materials have the necessary combination of characteristics of nontoxicity, biocompatibility, light transmission, and machinability to serve as the basis for the design and manufacture of safe and effective contact lenses. Comments from opponents of reclassification argue, and a comment from one proponent of reclassification agrees, that minor changes in lens material formulation or manufacturing process can significantly affect the safety and effectiveness of lenses manufactured from the material. A comment opposing reclassification further argues that although controlled minor changes in a single variable by a manufacturer can result in predictable changes in safety and effectiveness, major or multiple changes, or a change from one manufacturer to another, can result in changes in the lens' clinical performance that are not easily predicted.

FDA agrees with the comments opposing reclassification. If specific CAB or polyacrylate-silicone lenses had been shown to be safe and effective by valid scientific evidence and had been characterized by polymer formulation and manufacturing processes, such information might have been sufficient to have allowed comparison, for the purpose of determining substantial equivalence, with other lenses that had been shown to be very similar in polymer formulation and manufacturing process, and, as a result, to have allowed an inference of comparable safety and effectiveness of such other lenses. However, no information about polymer formulation and no information about manufacturing processes was disclosed in or submitted with any of the comments, and FDA is prohibited by sections 301(j) and 520(c) of the act (21 U.S.C. 331(j) and 360j(c)) from disclosing such information from PMA's or files for investigational devices under development pursuant to an investigational device exemption (IDE) because such information constitutes trade secret data. Lacking information about polymer formulation and manufacturing processes, it is not possible to compare one rigid gas permeable lens to another for the purpose of determining substantial equivalence; individual CAB and polyacrylate-silicone lenses are sufficiently different from one another that the fact that they are made from CAB or polyacrylate-silicone does not allow an inference of comparable safety and effectiveness.

In summary, clinical evidence of the safety and effectiveness of a limited number of individual lenses, characterized only by general family of material, i.e., CAB or polyacrylate-silicone, brand name, and manufacturer, would be insufficient to serve as a basis for reclassification of a generic type of device.

D. Inadequacy of Class I or Class II to Provide Reasonable Assurance of Safety and Effectiveness

Two comments from proponents of reclassification argue in response to questions 1.b. and 5.b. above that the safety and effectiveness of polyacrylate-silicone lenses, as identified in a definition offered by both comments, can be evaluated against a group of parameters with assigned acceptance limits that are proposed in these comments as criteria for the determination of substantial equivalence after the reclassification of such lenses into class I. These parameters include certain physical, optical, chemical, toxicological, and biocompatibility criteria, but exclude clinical evaluation. The comments argue that lenses that met the assigned limits for the parameters would be safe and effective, which would negate the need for clinical trials as well as the need for identification of the lenses with detailed information or polymer formulation and manufacturing processes. The comments accordingly argue that the absence of information concerning formulation and processing is not a bar to reclassification. The comments further argue that use of these parameters would allow FDA to determine substantial equivalence of new lenses to reclassified lenses and would ensure the adequacy of FDA review of premarket notification submissions to screen out unsafe or ineffective lenses. Other comments argue that to establish such parameters as criteria for determining substantial equivalence to a class I device would be defacto imposition of a performance standard. These comments urge the agency to use such parameters as the basis for the development of a performance standard under section 514 of the act, and to reclassify the lenses into class II.

To suffice as a basis for reclassification into class I or class II, such a group of parameters, whether used to determine substantial equivalence or as the basis for a performance standard, would of necessity have to be shown capable of providing reasonable assurance of safety and effectiveness of the lenses by valid scientific evidence. No comments contained, and FDA is unaware of, any evidence that if a lens met these parameters, there would be reasonable assurance that the lens was safe and effective, or in the event of reclassification, that the lens would be substantially equivalent in terms of safety and effectiveness to any lens that had been reclassified. The absence of the requisite evidence precludes using the parameters offered by the comments as a basis for reclassification of rigid gas permeable lenses into class I or class II.

E. Need for Clinical Trials

Several comments argue that the results of nonclinical laboratory studies

cannot be used to predict the clinical performance of a contact lens. Other comments argue that the clinical performance of a contact lens can be readily predicted from nonclinical laboratory studies.

None of the comments submitted any data to support their arguments. FDA is unaware of any combination of nonclinical laboratory studies capable of predicting the clinical performance of any contact lens on the human eye. Such studies serve well to screen out materials that should not go on to clinical trials. For example, in vitro or animal toxicity tests of a material or a material extract may reveal an overt cytotoxic effect to an undifferentiated cell line (the correlation of this effect to an ocular response in humans has not been established) or gross systemic or ocular toxicity. These tests are presumptive in nature and serve at best to provide reasonable assurance that subjects in a clinical trial would not be placed at undue risk from exposure to a new or modified material used to make a contact lens. However, nonclinical laboratory studies cannot provide any data on human ocular biocompatibility, or on adequacy of design (e.g., weight, thickness, geometry, centration), comfort, stability, durability, fit, and visual acuity, nor can the results of such studies be used as the sole basis from which to predict the clinical performance of an approved contact lens for which approval for a new indication is sought.

FDA believes that the safety and effectiveness of a contact lens is a function of the complex interrelationship of material, design, and manufacture that results in a unique set of physical, chemical, mechanical, and optical characteristics. When prescribed and fitted properly, a lens with this unique set of characteristics should provide safe and effective visual correction in a human eye with a specific diagnosed ametropia. FDA believes that contact lenses made from a new material, including material that has been significantly modified, contact lenses made to significantly modified designs, and contact lenses for which approval for a new indication is sought, cannot at this time be shown to be safe and effective without clinical, as well as preclinical, evaluation.

F. Conclusion

FDA has carefully reviewed and analyzed all the comments received as well as the oral and written testimony presented at the public hearing and has further reviewed the data discussed in the preamble to the proposed rule. On the basis of all this information, FDA has concluded, contrary to the tentative conclusions stated in the proposal, that there is insufficient valid scientific evidence to show that the rigid gas permeable lenses propcsed for reclassification are safe and effective, to characterize the device adequately for the purpose of reclassification, or to demonstrate that either class I or class II would provide reasonable assurance of the safety and effectiveness of the device. Class III is still necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses.

This document withdraws FDA's first proposal to reclassify a device under section 513(e) of the act. The agency initiated this proceeding because it tentatively concluded that the new, publicly available, valid scientific evidence of safety and effectiveness it had gathered was sufficient to show that rigid gas permeable lenses should not remain in class III and that class I would provide reasonable assurance of the safety and effectiveness of the lenses. However, as shown by the specific issues raised in the premeable to the proposed rule (47 FR 53410), the April 15, 1983 notice reopening the record, and the agency's decision to hold a public hearing on the proceeding (see 48 FR 18836), FDA was concerned about the sufficiency of the evidence it relied on in the proposal, and promulgation of a final rule reclassifying the lenses was far from certain. In response to the notice-and-comment procedures mandated by the act and the regulations, as well as the public hearing on the proposal, FDA received comments and oral and written testimony that required it to reevaluate the evidence upon which it relied in the proposal, and to evaluate additional information presented by interested persons. As a result of its evaluation and reevaluation of all the information in the record of this proceeding, FDA learned that the safety and effectiveness data summarized in the preamble to the proposal were seriously deficient in many respects, that lenses made of CAB or polyacrylate-silicone are the products of complex polymer formulation and manufacturing processes, that the information it would have to require in a premarket notification submission to determine whether a new lens is substantially equivalent to a reclassified lens would exceed the authority of section 510(k) of the act and Subpart E of Part 807 of the regulations governing premarket notification procedures (21 CFR Part 807, Subpart E), and that there is not sufficient valid scientific evidence to develop a performance standard under section 514 of the act to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses. In short, FDA learned that at this stage in their development, there is no substitute for clinical trials to provide reasonable assurance of the safety and effectiveness of these lenses.

III. Analysis of Comments

The agency received approximately 200 comments on the proposal, including written and oral testimony presented at the May 26, 1983 public hearing. Comments were received from manufacturers of contact lenses and contact lens materials, optical laboratories, clinical investigators of contact lenses, industry associations, members of Congress, and other interested persons. The following is a summary of the significant comments received and FDA's responses to them.

A. Classification

1. One comment suggests that rigid gas permeable lenses are not class III devices under section 520(l)(1)(E) of the act. According to the comment, the notice published in the **Federal Register** of September 30, 1975 (40 FR 44844), which declared as new drugs contact lenses consisting of polymers other than polymethylmethacrylate (PMMA), was principally concerned with hydroxyethylmethacrylate (HEMA) contact lenses and was grounded on incorrect information as to the composition of then marketed PMMA lenses. The comment points out that then marketed PMMA lenses did not consist "entirely" of PMMA, citing the preamble to the proposed rule (47 FR 53404). The comment then argues that if the September 30, 1975 notice, which included a proposed rule to codify the agency's position, had not been withdrawn by a notice published in the **Federal Register** of January 13, 1978 (43 FR 1986), literal application of the September 30, 1975 notice would have required FDA to regulate all contact lenses as new drugs before enactment of the amendments. The comment also argues that the September 30, 1975 notice, as allegedly interpreted by a notice published in the **Federal Register** of December 16, 1977 (42 FR 63472) (the transitional notice) and the January 13, 1978 notice, applies only to HEMA (soft) lenses, and that rigid gas permeable lenses are more closely related to PMMA lenses than to soft lenses.

FDA disagrees with the comment. The term "soft" as used in reference to contact lenses in the September 30, 1975 notice, the transitional notice, and the January 13, 1978 notice encompasses all lenses other than those made of PMMA.

That one of more of these notices used the term "soft contact lenses" as a synonym for "non-PMMA lenses" thus has no bearing on the classification of lenses consisting of polymers other than PMMA. Futhermore, the September 30, 1975 notice, which made it plain that FDA had in the past regarded, and would continue to regard, as new drugs, contact lenses consisting of polymers other than PMMA, expressly cited CAB, polycarbonate, and silicone as examples of such other polymers (40 FR 44845). The notice, which advised that the agency had taken this position since the 1960's, accordingly applies to rigid gas permeable as well as soft lenses.

As a result of the September 30, 1975 declaration, under section 520(l)(1)(E) and (1)(3)(D)(i) of the act, non-PMMA contact lenses on the date of enactment of the amendments (the enactment date) were automatically classified into class III without need for regulations or other action on the part of the agency. The transitional notice and the January 13, 1978 notice, which withdrew the 1975 proposed rule but did not affect its declaration, simply provided interested persons further notice that non-PMMA lenses were class III devices subject to the premarket approval requirements of section 515 of the act (21 U.S.C. 360e).

Although the September 30, 1975 notice stated that FDA had in the past regarded, and would continue to regard, contact lenses consisting "entirely of PMMA" as devices, the notice stated: "[t]he Agency has undertaken a study to determine the extent to which adjuvants such as cross-linking agents, resin bases, catalysts, colorants, and antioxidants are used in the manufacture of contact lenses consisting of PMMA to determine the effects of such adjuvants on the essential physicochemical characteristics of PMMA and thus to determine which of these contact lenses may be regarded as devices and which should be regarded as new drugs" (40 FR 44845). The September 30, 1975 notice thus recognized that then marketed PMMA lenses did not consist "entirely" of PMMA, and "literal application" of the notice would not have required FDA to regulate all contact lenses as new drugs before enactment of the amendments.

FDA acknowledges that rigid gas permeable lenses are more closely related to PMMA lenses than to soft lenses. However, the components of rigid gas permeable lenses, e.g., CAB, silicone acrylate monomers, and derivatives of acrylate monomers, are not adjuvants. For this reason, as well as by the express terms of the September 30, 1975 notice, rigid gas permeable lenses are not PMMA lenses within the meaning of that notice.

FDA advises that any CAB lens for which a new drug application (NDA) was filed and no order of approval or refusal to approve had been issued on the enactment date, e.g., MESO Contact Lens, is a class III device under section 520(1)(1)(B) of the act; that any CAB lens for which a notice of claimed investigational exemption for a new drug (IND) was in effect on the enactment date, e.g., MESO Contact Lens, CABCURVE® Contact Lens, is a class III device under section 520(1)(1)(C) of the act; and that any CAB lens that is substantially equivalent to a CAB lens covered by section 520(1)(1)(B) or (C) is a class III device under section 520(1)(1)(D) of the act.

FDA advises that any polyacrylate-silicone lens for which an IND was in effect on the enactment date, e.g., POLYCON®, is a class III device under section 520(1)(1)(C) of the act and that any polyacrylate-silicone lens that is substantially equivalent to polyacrylate-silicone lens covered by section 520(1)(1)(C) of the act is a class III device under section 520(1)(1)(D) of the act.

B. Identification

2. One comment argues that CAB and polyacrylate-silicone lenses constitute a generic type of device having essentially the same characteristics and that, under § 860.120(b) of the regulations governing reclassification, any reclassification should extend to all devices falling within that generic type. The comment recommends that proposed § 886.5360 (21 CFR 886.5360) be amended to provide a generic description of the device by eliminating the limitation to lenses in commercial distribution. Another comment argues that the proposed rule, which the comment characterizes as based on the composition of the device and its status as a contact lens subject to approved NDA's or PMA's, is unsound as a matter of policy and violates section 520(c) of the act. The comment points out that FDA, in the preamble to the proposed rule to classify ophthalmic devices, stated: "[i]t is not practical for FDA to publish an identification of each type of device that is so detailed as to anticipate every product feature that may be relevant in determining whether a new device is substantially equivalent to previous devices classified by regulation. * * *" (47 FR 3695; January 26, 1982). The comment claims that classification must reflect the potential risk of illness or injury and the need for varying levels of controls associated with the type or category of device rather than the specific device, and states that this focus on the type or category of device and the risks associated with such type or category has been FDA's previous approach to classification of all ophthalmic devices under the act and is required by the act. For these reasons, the comment requests that FDA withdraw proposed § 886.5360 and, if reclassification is deemed warranted, propose a classification of the category or type of device identified as "contact lenses."

FDA agrees that the identification paragraph of any classification regulation should provide a generic description of the device. As explained in sections II.B. and C. and paragraphs 13, 23, and 24 of this document, however, the lens proposed for reclassification—a daily wear spherical lens consisting of CAB or polyacrylate silicone—has not been adequately characterized for the purpose of reclassification. Accordingly, indentification of the generic type of device as "the contact lens," or even "the rigid gas permeable lens," even broader identifications than included in the proposal, could not be adequate for that purpose. FDA notes that if the proposed rule had been revised and promulgated to identify the generic type of device as "the rigid gas permeable lens," or as "the contact lens," and a manufacturer had submitted a premarket notification seeking to market a new lens, FDA, to determine whether the new lens was substantially equivalent to any lens in the generic type, still would have compared the new lens to lenses already covered by the final rule (see § 807.87 (f) and (h) of the regulations governing premarket notification procedures).

FDA disagrees that identifying a device based on its composition or regulatory status violates the letter or the spirit of the act or the regulations issued under it. So long as there is sufficient valid scientific evidence showing: (1) Why a device should not remain in its present classification; and (2) that a change in its classification will provide reasonable assurance of the safety and effectiveness of the device, nothing in section 520(c) of the act or any other section of the act, or in any of the regulations implementing any section of the act, precludes identifying the device by composition and previous status under section 505 (21 U.S.C. 355) or 515 of the act. FDA notes that the proposed rule to classify ophthalmic devices includes a proposal to classify into class II a device, namely, the PMMA contact lens, identified in part by composition (47 FR 3736).

C. Adequacy and Safety and Effectiveness Data

3. Several comments state that rigid gas permeable lenses may not be reclassified into a class other than class III unless there is adequate valid scientific evidence of safety and effectiveness to support reclassification.

FDA agrees with these comments (see the preamble to the proposed rule (47 FR 53404) and section II.A. of this document). Lacking adequate valid scientific evidence that rigid gas permeable lenses are safe and effective, and that class I would be sufficient to provide reasonable assurance of the safety and effectiveness of such lenses, FDA may not reclassify them from class III into class I or class II.

4. One comment states that the burden of proof that reclassification is appropriate is on FDA and on those who support reclassification, regardless of whether those opposing reclassification can or do submit evidence showing that reclassification is not appropriate.

FDA agrees with this comment. The legal standard for reclassification is set out in the preamble to the proposed rule (47 FR 53404) and in section II.A. of this document. FDA addressed the question of burden of proof in the April 15, 1983 notice reopening the comment period (48 FR 16293):

> FDA recognizes that to reclassify the contact lenses at issue in this rulemaking from class III into class I, it must have new, publicly available, valid scientific evidence of safety and effectiveness demonstrating why the lenses should not remain in class III and why the "general controls" authorized by the act will provide reasonable assurance of the safety and effectiveness of the lenses. * * * Although this notice requests specific evidence showing why the lenses should not be reclassified, as well as evidence showing why they should be reclassified, FDA has not shifted the burden of proof to those opposing reclassification.

5. Several comments argue that the evidence needed to reclassify a contact lens is at least equal to that which would be necessary to meet FDA's guideline concerning testing of contact lenses, "FDA Contact Lens Guidelines on Toxicology, Microbiology, Clinical Manufacturing Evaluation and Controls" (Ref. 5 of the proposal) (the contact lens guideline), and that FDA may not reclassify a lens proposed for reclassification unless the valid scientific evidence of the safety and effectiveness of that lens meets the criteria of the guideline.

FDA guidelines state procedures or standards of general applicability that are not legal requirements but are acceptable to FDA for a subject matter which falls within the laws administered by the Commissioner (21 CFR 10.90(b)). Conformance to the contact lens guideline accordingly is not a legal prerequisite for premarket approval. It follows that conformance to the guideline is not a legal prerequisite for reclassification of contact lenses. The evidence of safety and effectiveness of the contact lenses proposed for reclassification has been evaluated by FDA against the criteria for valid scientific evidence specified in § 860.7 of the regulations.

FDA believes that the evidence needed to show that a rigid gas permeable lens is safe and effective for the purpose of reclassification is similar, but not necessarily identical to, the evidence suggested in the contact lens guideline to show safety and effectiveness for premarket approval. For example, for the purpose of reclassification, comprehensive clinical data combined with detailed information on polymer formulation and manufacturing processes might obviate the need for the detailed reporting of preclinical testing suggested in the guideline.

6. Several comments refer to FDA's statement in the preamble to the proposed rule that the safety of rigid gas permeable lenses is shown by the absence of reports in the literature of serious, irreversible adverse effects on health presented by the device, and the absence of such reports in FDA's Device Experience Network (DEN). The comments argue that rather than serving as evidence for reclassification of the device, the lack of evidence of such adverse effects is evidence of the success of the present class III classification in assuring that only safe and effective lenses are marketed. The comments further argue that extrapolation from the safety record of approved devices to that of future deregulated devices is inappropriate.

The comments do not accurately restate the preamble, which cited the absence of reports in the literature as one item of evidence of the safety of rigid gas permeable lenses and simply noted that no serious, irreversible adverse effects on health presented by the device had been reported to DEN (47 FR 53405). FDA agrees, however, that the safety record of rigid gas permeable lenses to date represents the performance of lenses for which there are approved PMA's. The agency acknowledges that DEN is not comprehensive and advises that the mere absence of negative reports in this voluntary reporting system cannot establish the safety of a device. Before a device may be reclassified under section 513(e) of the act from class III into class III into class I or class II, the act and the regulations require that the safety, as well as the effectiveness, of the device be established by valid scientific evidence.

7. A few comments suggest that FDA has not conducted an adequate search for evidence of serious or permanent injury from contact lens wear. One comment provided copies of published articles dealing with complications caused by certain silicone elastomer lenses marketed in Germany and Japan; other comments provided bibliographies of published articles dealing with injuries allegedly related to contact lens wear.

Before issuing the proposed rule, FDA searched diligently for evidence of serious, irreversible adverse effects presented by each of the lenses proposed for reclassification when used in accordance with its labeling and under proper professional supervision, and found no such evidence. Since then, FDA has reviewed articles cited in the comments as containing evidence of such effects. This latest review confirms FDA's earlier findings. Injuries to the eye related to use of approved contact lenses invariably are traceable to factors associated with improper lens use, care, or fitting. While such reports of injuries argue forcefully for the need for continued diligence in the regulation of contact lenses, they do not preclude reclassification if there is adequate, valid scientific evidence of the safety and effectiveness of the devices when used and fitted properly.

The silicone elastomer lenses associated with the reported complications in wearers of the lens in Germany and Japan were not, as admitted in the comment, of the type proposed for reclassification, and by definition would require premarket approval before being marketed in the United States.

8. One comment argues that safety and effectiveness data for contact lenses having different clinically significant properties and design characteristics cannot be pooled to show the safety and effectiveness of all lenses consisting of CAB or all lenses consisting of polyacrylate-silicone. The comment states that there are thousands of formulations of CAB which vary from one another in such significant characteristics as toxicity and dimensional stability. The comment concludes that generally accepted scientific methods for use of test results would dictate that data for lenses with differing safety and effectiveness parameters not be pooled.

FDA agrees with this comment. Data on the polymer formulation and manufacturing processes for the different approved CAB lenses are not publicly available. Unless the CAB lenses are shown to be identical by such data, the agency may only assume that each CAB lens has different safety and effectiveness parameters from other such lenses. In addition, pooling of the clinical safety and effectiveness data on which the proposed rule was based would be inappropriate because of the deficiencies in the data (see paragraphs 10 through 12 of this document). There is in the record no information identifying by polymer formulation, manufacturing process, and related parameters any of the rigid gas permeable lenses proposed for reclassification. Absent such information, the safety and effectiveness of one rigid gas permeable lens cannot be compared with the safety and effectiveness of another rigid gas permeable lens. This lack of characterizing data precludes pooling of data from clinical investigations.

9. In response to question 3 in the preamble to the proposed rule, two comments argue that any reclassification of rigid gas permeable lenses should include indications for the correction of hyperopia and aphakia as well as myopia because there appears to be no basis upon which to limit to specific refractive corrections the significance of the data presented in the preamble. Five comments argue on the contrary that data showing that a lens is safe and effective for myopia cannot be used to support the safety and effectiveness of the lens for the correction of hyperopia and aphakia. These comments state that lenses indicated for the correction of hyperopia and aphakia are of necessity significantly different in design and geometry from lenses indicated for the correction of myopia. These comments also state that lenses for the correction of hyperopia and aphakia generally require an increased lens center thickness compared to lenses for the correction of myopia. Increased lens center thickness results in a reduction in the oxygen permeability of the lens and concomitant safety and effectiveness concerns unique to these lenses, according to the comments. Therefore, the comments opposing reclassification conclude that only clinical trials can provide reasonable assurance of safety and effectiveness of a contact lens indicated for the correction of hyperopia or aphakia.

Because FDA is withdrawing the proposed rule, the question whether FDA may reclassify rigid gas permeable lenses for myopia, hyperopia, and aphakia based solely or primarily on data showing that the device is safe and effective for the correction of myopia, or myopia and aphakia, is moot. FDA advises, however, that none of the comments provide any evidence to support the contention that reclassification of rigid gas permeable lenses indicated for the correction of myopia, hyperopia, and aphakia could be based solely or primarily on data demonstrating the the lenses are safe and effective for the correction of myopia or for the correction of myopia and aphakia.

FDA agrees with the comments that argue that the lens characteristics required to provide safe and effective correction of hyperopia or aphakia are significantly different from the lens characteristics required to provide safe and effective correction of myopia. However, lenses indicated for the correction of hyperopia and aphakia may be identical in design and concomitant safety and effectiveness characteristics where the range of magnification for the two indications overlap. The aphakic eye is a worst case for both safety and effectiveness considerations for a contact lens because of physiological changes to the cornea from the insult of surgery. Among other things, these changes could result in alterations in corneal oxygen requirements. Consequently, FDA advises that for lenses identical in material, design, and magnification range, the safety and effectiveness of a lens for the correction of hyperopia may, in large measure, be inferred from evidence of the safety and effectiveness of a lens for the correction of aphakia. Similarly, if the safety and effectiveness concerns that are unique to a lens intended for the aphakic eye are adequately addressed by clinical trials of the lens in aphakic eyes, the safety and effectiveness of that lens may, in large measure, be inferred from evidence of its safety and effectiveness for the correction of hyperopia. FDA advises, however, that it has not been demonstrated by valid scientific evidence that the safety and effectiveness of a lens for the correction of hyperopia can be inferred solely from evidence of the safety and effectiveness of a lens for the correction of aphakia, or that the safety and effectiveness of a lens for the correction of aphakia can be inferred solely from evidence of the safety and effectiveness of a lens for the correction of hyperopia.

10. One comment generally criticizes the published articles (Refs. 22–27 (see 47 FR 53411)) relied on in the preamble to the proposed rule as valid scientific evidence of the safety and effectiveness of CAB lenses. The comment states that the articles are deficient in that they do not consistently state clear objectives, that they do not have an adequate method of subject selection, that they do not include sufficient information to allow comparisons between test and control groups, and that most of the articles are based on retrospective clinical evaluation, and therefore suffer from the bias of evaluating successful patients. The comment states that none of the articles include complete ocular data, and implies that the number of patients studied is inadequate.

FDA acknowledges that the articles criticized by the comment have some deficiencies in study protocols, in patient selection criteria, in the number of patients studied, or in reporting of important clinical results. FDA notes that no evidence of the safety or effectiveness of any CAB lens was included in or submitted with any comment on the proposed rule. Consequently, the deficiencies noted in the comment and which, as discussed below, show that the articles do not constitute valid scientific evidence of safety and effectiveness, preclude reclassification of CAB lenses.

a. *"A Clinical Study of CAB Lens Wear" by Kline and DeLuca (Ref. 22).* This study, which apparently was retrospective, reports on 100 myopic patients who could tolerate an unidentified CAB lens on an initial visit. The investigators' criteria for success were comfort, 8 hour wearing time, 20/25 visual acuity, and no adverse reactions. No data are provided on any of these criteria, nor is the period the patients were followed reported. Most of the article addresses fitting characteristics. FDA agrees with the comment that this study does not qualify as a controlled clinical investigation capable of demonstrating that the study lens is safe and effective for daily wear.

b. *"Clinical Experience with the Cabcurve Contact Lens" by Sigband (Ref. 23).* This study reports on 65 patients, including 54 myopes, 4 hyperopes, and 7 aphakes, who were "contact lens failures." The study includes no data on visual acuity, except a table of summarizing best visual acuity achieved, and no data on any other evaluation criterion. The study population, which included only 55 successful patients, is small. However, the question of size is overshadowed by the absence of adequately reported data on any significant evaluation criterion.

c. *"Gas-Permeable Cellulose Acetate Butyrate (CAB) Contact Lens" by Hales (Ref. 24).* This study, which apparently is retrospective, reports on 50 patients who had been unsuccessful wearers of hard contact lenses and who were subsequently fitted with an unidentified CAB lens. The study contains one chart of visual acuity with CAB lenses as compared to visual acuity with hard lenses. No other data are provided. The small retrospectively reviewed patient population and the absence of data for any criterion except visual acuity renders this study inadequate to determine the safety and effectiveness of the lens under study.

d. *"Oxygen-Transmitting Hard Contact Lens" by Mandell (Ref. 25).* This study alludes to an experiment in which nine PMMA contact lens wearers were refitted with an unidentified CAB lens to determine whether the change would alleviate persistent edema associated with wearing the PMMA lenses. No data are provided on any criterion except edema. The study does not purport to establish the safety and effectiveness of lenses made of CAB.

e. *"Extended Wear of CAB Contact Lenses in Aphakic Patients" by Garcia (Ref. 26).* This study appears to be a well-conducted study of continuous extended wear (for 1 to 6 weeks between removals for cleaning) of a CAB lens for the treatment of aphakia. Patients were followed for an average of 24 months. However, the study's summary presentation of data does not allow scientific evaluation of the safety and effectiveness of the lens for continuous wear, or therefore, for daily wear. For example, the report contains no visual acuity data or quantitative data on edema, slit lamp findings, or epithelial staining, which are all necessary to permit scientific evaluation of the safety and effectiveness of the lens. Because the study "lack[s] sufficient details to permit scientific evaluation," the study is "not regarded as valid scientific evidence to show safety or effectiveness" (21 CFR 860.7(c)(2)). The study lenses were identified as the Rynco Scientific Corp. Rx 56 Lens (used early in the study) and the Danker and Wohlk, Inc., Meso CAB lens (used late in the study).

f. *"Corneal Response to Extended Wear of CAB Contact Lenses in Aphakia" by Kaplan and Trimber (Ref. 27).* The purpose of this study was to determine the effect of extended wear of Danker Labs., Inc., MESO CAB lenses on corneal thickness. The authors made no claim of establishing the safety or effectiveness of CAB lenses.

In conclusion, FDA agrees with the comment that Refs. 22–27 are inadequate to show the safety and effectiveness of CAB lenses.

11. A few comments state that the two published articles relied on in the preamble to proposed rule ("Clinical Evaluation of the Polycon 8.5 Design" (Ref. 30) and "Patient Responses to Gas-Permeable Hard (Polycon) Contact Lenses" (Ref. 31); see 47 FR 53411) do not constitute adequate valid scientific evidence of the safety and effectiveness of the specific polyacrylate-silicone lens reported on. Therefore, the comments argue that the articles cannot constitute adequate valid scientific evidence of the safety and effectiveness of all contact lenses made of polyacrylate-silicone and proposed for reclassification. The comments state that Ref. 30 defines success as the ability to wear the lens for 10 hours per day, but includes no data from which to determine either safety or effectiveness, i.e., there are no data on epithelial staining, neovascularization, corneal edema, change in keratometry readings, corneal thickness, endothelial cell counts, or visual acuity before or after lens wear. Further, the comments state that although Ref. 31 includes most of the data believed to be necessary to evaluate a lens, it reports on only 46 patients and does not indicate how long the patients in the study were followed.

FDA agrees with these comments. All the data referred to by the comments are essential to any determination of the safety and effectiveness of a contact lens. Ref. 30 contains insufficient data to allow a scientific judgment of the safety and effectiveness of the lens under study. Ref. 31, with only 31 successful study patients and an indefinite followup period, is insufficient to demonstrate the safety and effectiveness of the lens under study because the study population is to small to generalize in a meaningful way and because no quantitative data are provided for any significant evaluation criterion except edema. It necessarily follows that because the data included in Refs. 30 and 31 do not provide sufficient valid scientific evidence of the safety and effectiveness of the lenses studied by the investigators, Refs. 30 and 31 cannot establish the safety and effectiveness of lenses not included in the studies.

12. A few comments including a comment from the lens' manufacturer, discuss Refs. 30 and 31 of the proposal and state that the material used to make the lenses in these studies, identified only as POLYCON®, has been replaced by an improved material, POLYCON II® and tinted POLYCON II®. The comment from the manufacturer points out that the two latter lenses were approved by FDA only after preclinical and clinical studies following FDA's contact lens guideline demonstrated that lenses made of the new materials were safe and effective. The comment from the manufacturer further states that POLYCON® and POLYCON II® materials differ in polymer constituent ratios with concomitant differences in oxygen permeability and wettability, major factors in determining safety and effectiveness. The comments argue that FDA never would have approved the PMA for the POLYCON® lens, much less the POLYCON II® lens, on the basis of the data in the cited references. Consequently, the data cannot be an adequate basis for reclassification of the general category of polyacrylate-silicone lenses.

FDA agrees with these comments. FDA required complete nonclinical laboratory studies and clinical investigations for the POLYCON II® and tinted POLYCON II® lenses because changes had been made in the polymer ratios in the first case, and in certain polymer constituents in the second case. The evidence of safety and effectiveness of lenses of POLYCON® was therefore determined to be inapplicable to POLYCON II® and to tinted POLYCON II®. The data in the cited studies would not have been adequate to support premarket approval of POLYCON® and would have been considered inapplicable to POLYCON II®. It follows that the data in the cited studies are insufficient to show the safety and effectiveness of polyacrylate-silicone lenses as a generic type of device for the purpose of reclassification.

13. Six comments submitted data from clinical investigations of two different polyacrylate-silicone contact lenses, the Paraperm O_2™ and the Optacryl 60, covering a total of approximately 1,100 patients. One of the comments also included data from the laboratory testing (preclinical evaluation) of the Optacryl 60 lens. The comments argue that these data, most of which were the same as the clinical and preclinical data submitted in PMA's for these lenses, constitute ample valid scientific evidence of safety and effectiveness to serve as the basis for reclassification of rigid gas permeable lenses made of polyacrylate-silicone. The comments further argue that similarity of favorable results between the different varieties of polyacrylate-silicone show that the polyacrylate-silicone lenses constitute a generic type of device and that changes in polymer ratios do not give rise to divergent clinical results.

FDA disagrees with these comments. Questions concerning the completeness

of the submitted data are discussed in paragraph 14 of this document. Those questions aside, none of the comments contains polymer formulation or manufacturing processes or any other information that would allow characterization of the lenses studied, and as explained in sections II.B. and C. and paragraphs 23 and 24 of this document, evidence of the safety and effectiveness of a specific polyacrylate-silicone lens cannot be generalized to another polyacrylate-silicone lens without such information.

Taken at face value the data submitted with these comments support the conclusion that the lenses designated as the Paraperm O_2™ and Optacryl 60 are safe and effective. However, because the polymer ratios of the two lenses were not identified in the comments, conclusions pertaining to the effect on safety and effectiveness of differences in polymer ratios cannot be drawn. The assumption that the polymer ratios of Paraperm O_2™ and Optacryl 60 are different only allows the conclusion that polyacrylate-silicone lenses of more than one polymer ratio may be found to be safe and effective. It does not logically follow that changes in polymer ratios do not give rise to divergent clinical results.

Changes in the ratio of the principal ingredients of polyacrylate-silicone polymers, as illustrated by the following table, adapted from a table in a U.S. Patent for a polyacrylate-silicone lens material (Ref. 1), can be expected to result in significant changes in the oxygen permeability of lenses made from the ingredients listed in the table. Differences in oxygen permeability of the magnitude shown on the chart can be expected to give rise to divergent clinical results that significantly affect safety and effectiveness (Refs. 1 and 2).

Composition				Oxygen permeability (Dk)
SIGMA	EGMA	EDMA	MMA	
Parts				mL.cm./cm.²sec.cm.Hg
30	5	5	60	3.0×10^{-10}
40	7	5	48	6.2×10^{-10}
50	9	5	36	11.4×10^{-10}
60	11	5	24	18.4×10^{-10}
70	13	5	12	25.5×10^{-10}
80	10	5	5	31.8×10^{-10}

Note.—
EGMA: Ethylene glycol monomethacrylate.
EDMA: Ethylene glycol dimethacrylate.
MMA: Methyl methacrylate.
SIGMA is identified in the text of the patent as: Methyldi-(trimethylsiloxy)sylylpropylglycerol methacrylate.
Oxygen permeability (Dk) is expressed as the product of the diffusion coefficient for O_2 movement in the material (D) and the solubility constant for O_2 in the material (k).

14. Two comments question whether the safety and effectiveness data submitted with other comments on the Paraperm O_2™ and Optacryl 60 contact lenses constitute valid scientific evidence of the safety and effectiveness of these lenses. The comments point out that the data submitted cover approximately 1,100 subjects whereas the studies included more than 100,000 subjects. The comments question the basis for selection of the subjects included in the submitted data, whether the selection process biased the results of the studies, what the incidence was of adverse reaction in the total study population, and what efforts FDA has made to establish that these data do not represent a select subject population or group. The comments argue that if these questions are open, the data cannot be considered to be valid scientific evidence of safety and effectiveness.

In general, absent information about effectiveness and the incidence of adverse reactions in a total study population, and how the data submitted were selected from those available, FDA cannot determine whether the submitted data show, by valid scientific evidence, that an investigational device is safe and effective (see, e.g., § 860.7(f)(1) (ii) and (v)). In any event, because the lenses in the clinical investigations are only identified by general family of material, i.e., ploxacrylate-silicone, brand name, and manufacturer, and no information is provided to characterize them by polymer formulation or manufacturing processes, the data do not and cannot show the safety and effectiveness of polyacrylate-silicone lenses as a generic type of device for the purpose of reclassification (see sections II.B. and C. and paragraphs 13, 23, and 24 of this document).

15. Two comments state that the data from the clinical investigations of the Paraperm O_2™ and the data from nonclinical laboratory studies and clinical investigations of the Optacryl 60 polyacrylate-silicone rigid gas permeable lenses, discussed in paragraphs 13 and 14 of this document, have been reviewed by the Ophthalmic Device Section of the Ophthalmic; Ear, Nose, and Throat; and Dental Devices Panel (the Section), an FDA advisory committee, during the Section's review of PMA's for the subject lenses. The comments argue that because the Section recommended approval of the PMA's for the Paraperm O_2™ lens and the Optacryl 60 lens, the data constitute valid scientific evidence within the meaning of § 860.7(c).

The question whether the data constitute valid scientific evidence of the safety and effectiveness of the studied lenses is discussed in paragraph 14 of this document. FDA advises that during the Section's review of the PMA's, the Section did not consider all the issues relevant to reclassification, e.g., the adequacy of the characterization of the devices or the adequacy of class I or class II to provide reasonable assurance of the safety and effectiveness of the devices. In any event, a PMA approval recommendation from an advisory committee simply is a recommendation and is not a determination by FDA that data in the PMA constitute valid scientific evidence.

16. More than 100 comments were received from professionals in the contact lens industry who regularly prescribe, fill prescriptions for, and fit contact lense. More than 80 of these comments were from persons who identified themselves as investigators of polyacrylate-silicone contact lenses. As defined in § 812.3(i) of the regulations providing procedures for the conduct of clinical investigations of devices (the IDE regulations) (21 CFR 812.3(i)), an investigator is an individual who gathers safety and effectiveness data for a sponsor who intends to seek premarket approval for a device. Each of the more than 100 comments favors reclassification of polyacrylate-silicone lenses from class III into class I.

FDA responds to these comments in paragraphs 17 to 21 of this document.

17. The comments from investigators argue that the data gathered as a result of the investigators' studies and similar investigations provide more than ample valid scientific evidence of the safety and effectiveness of polyacrylate-silicone contact lenses. Some investigators, including one investigator who studied 1,100 polyacrylate-silicone lenses, one who studied 3,000 polyacrylate-silicone lenses, and one who studied 7,000 polyacrylate-silicone lenses, cite the number of lenses studied.

FDA disagrees with these comments, the number of lenses investigated notwithstanding. FDA is prohibited by section 520(c) of the act from using as the basis for the reclassification of a device trade secret or confidential commercial information obtained under section 520(g) of the act (exemption for devices for investigational use). Consequently, except for those trade secret and confidential commercial data from clinical investigations that were made public in other comments and that are discussed elsewhere in this document, such data gathered by investigators are not available to FDA for the purpose of reclassification.

18. As evidence of safety, more than 30 investigators state that in their use of polyacrylate-silicone contact lenses, they have observed no adverse reactions.

Statements by individual investigators that no adverse reactions were found do not constitute valid scientific evidence within the meaning of § 860.7 of the regulations. Section 860.7(c)(2) states in part "* * * reports lacking sufficient details to permit scientific evaluation * * * are not regarded as valid scientific evidence to show safety or effectiveness." To meet the test of valid scientific evidence and permit scientific evaluation such reports need to include, at a minimum, a uniform scientifically acceptable definition of adverse reaction, the number of patients studied, and comprehensive summaries of the results of examinations for edema and staining as well as slit lamp examinations, and of all reports of discomfort, blurred vision, and of patients who discontinued use of the lenses or were otherwise lost to followup.

19. Several comments from investigators argue that when all other things are equal, the polyacrylate-silicone lenses that have been subjected to clinical investigations are superior to PMMA lenses because the former have been shown to be gas permeable and, thus, provide better oxygenization of the cornea. These comments state that this increase in oxygenization results in reduced edema and greater wearer comfort, and allows the lens to be tolerated by the wearer for a longer period of time than PMMA lenses. There are no significant differences in the machining (lathing, grinding, and polishing) characteristics of the two materials, according to the comments. Therefore, the comments argue that any lens that can be made of PMMA also can be made of polyacrylate-silicone. Consequently, polyacrylate-silicone lenses should not be classified into a higher class than lenses made of PMMA, which FDA has proposed to classify into class II.

FDA disagrees with these comments. The classification of contact lenses made of PMMA is not legally relevant to the classification of rigid gas permeable lenses. As discussed in the September 30, 1975 notice (40 FR 44845), contact lenses made of PMMA have been marketed in the United States since the early 1950's. Due to their extensive history of safe and effective human use, PMMA lenses were regulated as devices prior to the enactment of the amendments and thus never required administrative approval for marketing. In contrast, rigid gas permeable lenses were first marketed in the United States in the late 1970's and always have required premarket approval. Indeed, since the introduction of hydrophilic (soft) contact lenses in the 1960's, FDA has regarded all contact lenses other than those made of PMMA as new drugs requiring premarketing clearance (see paragraph 1 of this document). The September 30, 1975 notice explains that the agency's decision to require such clearance for all contact lenses made from non-PMMA materials "* * * was based on a recognition that new plastic materials that had not been shown to be safe and effective [for use] were being introduced for use in the manufacture of contact lenses. The introduction of these new materials led to new lens design and use, new manufacturing methods, and new methods for lens care. [FDA] is concerned that the use of these contact lenses may result in serious eye damage if the new material of which they are composed is unsafe for use in the eye, if the user cannot feasibly care for the lenses, or if the highly complex procedures for the manufacture of these lenses are not carefully controlled to assure a product of uniform quality" (40 FR 44845).

As explained in paragraph 1 of this document, rigid gas permeable lenses were automatically classified into class III on the enactment date of the amendments in accordance with section 520(l)(1) (B), (C), and (E) of the act. Such lenses may only be reclassified into class I or class II in accordance with the provisions of the act and the regulations as discussed in the preamble to the proposed rule (47 FR 53404) and in section II.A. of this document.

Neither the safety nor the effectiveness of polyacrylate-silicone lenses has been established by valid scientific evidence other than in PMA's. Furthermore, FDA is not aware of, and no comments provided, evidence that there are no significant differences in the machining characteristics of PMMA and any of the formulations of polyacrylate-silicone used to manufacture any of the investigational lenses about which comments were submitted. On the contrary, one comment from an investigator cites machining differences, including increased tool wear, longer polishing times, and reduced yield for polyacrylate-silicone compared to PMMA. FDA believes that these differences reflect potential significant differences in the characteristics of PMMA and polyacrylate-silicone lenses, for example, surface finish and uniformity.

20. Ten comments from investigators note that approved lenses are routinely modified in optical laboratories to improve the fit for specific patients. The potential superior fit of custom fitted lenses is cited as an advantage of the investigational lenses over approved lenses, and as an argument for reclassification. Custom fitted lenses, specifically the polyacrylate-silicone lenses under investigation by those submitting comments, result, according to the comments, in a better fit and concomitant better comfort and tolerance for those patients whose eyes do not precisely match the dimensions of approved lenses. Approved polyacrylate-silicone lenses are only available in a limited number of configurations, according to the comments. Therefore, the comments argue that custom fitted investigational polyacrylate-silicone lenses allow successful fitting of a larger portion of the potential lens wearing population than is currently possible with approved polyacrylate-silicone lenses. Custom fitted lenses also are said to allow a more perfect fit for those patients for whom the best fit of an approved lens is a compromise.

FDA acknowledges that some portion of the user population cannot always be fitted successfully from a fixed set of lenses, and that some of the individuals might be fitted successfully through modification of off-the-shelf lenses. FDA notes that nothing in the act or the regulations forbids optical laboratories from modifying approved lenses to meet the needs of specific patients so long as the specifications of the lenses, as modified, remain within the specifications of the PMA's for the approved lenses. For this reason, there is no basis for the argument that investigational lenses are subject to "custom fitting," while approved lenses are not. Further, the comments appear to presuppose that the investigational lenses in question have been shown to be safe and effective in the first place; the comments do not add to the body of valid scientific evidence that is required to establish the safety and effectiveness of the lenses proposed for reclassification. The comments, therefore, are not relevant to the question of reclassification.

21. More than 20 comments from investigators argue that FDA should not regulate prescribing and fitting of polyacrylate-silicone lenses by limiting reclassification to spherical lens designs. According to these comments, prescribing and fitting are best left to the experts in the practice of optometry and ophthalmology. These comments further argue that competition among laboratories that make lens blanks into finished lenses and between fitters or prescribers of lenses will rapidly force off the market those members of each

group who provide lenses that are either uncomfortable or do not provide adequate visual acuity. These comments also point out that FDA approval of a contact lens does not prevent poor fitting or prescribing and claim that because the choice of designs in off-the-shelf lenses is limited, the problem of poor fitting or prescribing is exacerbated.

FDA limited the proposed rule to reclassify rigid gas permeable lenses to spherical designs because of a complete lack of valid scientific evidence of safety and effectiveness of lenses of other than spherical designs. No such evidence of the safety and effectiveness of lenses of other than spherical designs was submitted during the comment periods or at the public hearing on the proposal (see paragraph 22 of this document). FDA recognizes that its approval of a PMA for a contact lens will not prevent practitioners from erring when fitting or prescribing the lens; however, the inability of the agency to prevent such errors in no way justifies the reclassification of a lens into class I or class II.

22. Several comments state that nonspherical lenses, including toric, bitoric, and bifocal lenses, should have been included in the proposed reclassification of rigid gas permeable lenses. The comments argue that any gas permeable lens material that is suitable for spherical contact lenses will be equally suitable for nonspherical lens designs. The historical use of PMMA for lenses of both spherical and nonspherical designs and the similarities of rigid gas permeable materials to PMMA are cited in support of this argument. Other comments argue that nonspherical rigid gas permeable lenses were correctly excluded from the proposed rule because there is insufficient valid scientific evidence of the safety and effectiveness of such lenses for any indication.

Because FDA is withdrawing the proposed reclassification of rigid gas permeable lenses, the question whether nonspherical lens designs should have been included in the proposal is moot. FDA advises, however, that spherical, toric, bitoric, and bifocal lenses are indicated for different ametropias and that there is no valid scientific evidence, other than in PMA's, that any nonspherical rigid gas permeable lens is safe and effective for any indication. FDA recognizes that many characteristics of contact lenses that affect safety are material-specific and that these characteristics, e.g., toxicity and oxygen permeability, will not be altered by changes from spherical to nonspherical lens design. Other characteristics affecting effectiveness, as well as safety, are functions of design and material in combination. Thus, for example, valid scientific evidence that spherical and toric lenses made of the same material are safe and effective for the correction of hyperopia, myopia, and astigmatism do not constitute such evidence that a bifocal lens that: (1) Is also made of that material; and (2) combines design elements of the spherical and toric lenses is effective or safe for the correction of presbyopia (see *United States* v. *Wesley-Jessen, Inc.*, Civil No. 82C874 (N.D. Ill., March 11, 1982) (transcript of proceedings)).

The machining and polishing characteristics and hence the lens surface characteristics of rigid gas permeable materials are not identical to those of PMMA, nor are wetting characteristics, rigidity, or balance. Such differences may or may not result in differences in edema, staining, centration, orientation, and tear pumping characteristics. Therefore, the safety and effectiveness of PMMA lenses of spherical and nonspherical designs do not establish, by valid scientific evidence, the safety and effectiveness of rigid gas permeable lenses of spherical or nonspherical designs.

D. Adequacy of Characterization

23. One comment argues that characterization of rigid gas permeable lenses by materials is adequate for the purpose of reclassification, citing the proposed rule to classify PMMA contact lenses (47 FR 3746), and quoting the preamble to the proposed rule to classify ophthalmic devices (47 FR 3695): "The identification statement is necessarily broad because it applies to a category or type of device rather than to a specific device. * * * It is not practical for FDA to publish an identification of each type of device that is so detailed as to anticipate every product feature that may be relevant in determining whether a new device is substantially equivalent to previous devices classified by the regulation."

As a general rule, characterization of a device by material, at least in part, for the purpose of identifying the generic type of device in a classification regulation is appropriate. In the case of rigid gas permeable lenses, however, FDA has concluded that such characterization is not feasible (see sections II.B. and C. and paragraphs 13 and 24 of this document).

24. Several comments state that a lens defined as consisting of a material described as polyacrylate-silicone can include a broad range of characteristics and that this is not a substantive definition. The comments note that patents based upon new composition of materials for the manufacture of rigid gas permeable lenses reveal large numbers of materials falling within the broad scope of polyacrylate-silicone. The comments claim that these materials are unique beyond all prior art, prior art including the polyacrylate-silicone material of the POLYCON® lens evaluated in Refs. 30 and 31 of the proposal (also see paragraphs 11 and 12 of this document). The comments argue that it is neither reasonable nor scientifically valid to extrapolate evidence of safety and effectiveness from lenses of this one material, or any unique materials for which data may be available, to lenses of other unique materials within the general type of material, but for which data are not available. The comments cite several references, including patents, that illustrate some of the changes in characteristics that result from changes in formulation or process. The comments conclude that whether a contact lens made from a particular polyacrylate-silicone material is safe and effective can be determined only by conducting preclinical and clinical evaluations of the type identified in FDA's contact lens guideline. Consequently, the comments state, evidence of the safety and effectiveness of a specific lens of a particular polymer formulation and manufacturing process can only serve as evidence of the safety and effectiveness of that lens. Such evidence fails to demonstrate the safety and effectivness of a generic type of device.

FDA agrees with the comments. The term silicone acrylate, even when limited by the definition in the preamble to the proposed rule (47 FR 53406): "Polyacrylate-silicone copolymer contact lenses consist of complex siloxanyl methacrylate polymers * * *. Such lenses contain PMMA for rigidity and polymerized silicone for oxygen permeability", or by the definition offered by the comments discussed in paragraph 26 of this document, encompasses a virtually infinite set of combinations of principal and adjunctive ingredients. The number of such combinations suitable for the manufacture of contact lenses, albeit perhaps finite, is unknown, as is the range of variation of ingredient ratios, polymerization processes, and resultant material characteristics. (Much of this information may be known to manufacturers of contact lenses, but none of it was inlcuded in or submitted with any of the comments, and FDA is prohibited by sections 301(j) and 520(c)

of the act from disclosing such information from PMA's or files for investigational devices under development pursuant to IDE's because such information constitutes trade secret data.)

As discussed in sections II.B. and C. and paragraphs 13 and 23 of this document, the existence of a predictable relationship between a lens polymer formulation, manufacturing process, physical and other quantifiable parameters, and its safety and effectiveness has not been demonstrated by any valid scientific evidence. Lacking knowledge of such a relationship one cannot infer from evidence that any rigid gas permeable lens of unique polymer formulations, produced by a unique process, and having unique properties is safe and effective, that any other rigid gas permeable lens also is safe and effective unless both lenses are sufficiently characterized to demonstrate that they are virtually identical.

Any effort to use the evidence of safety and effectiveness of a specific rigid gas permeable lens or lenses as the basis for reclassification of a generic type of lens, regardless of how narrowly or broadly that generic type of lens is identified, requires detailed characterization of the lens or lenses from which the evidence is drawn and the lenses to which the characterization applies. This characterization necessarily includes details of raw materials, polymer constitutents and ratios, and manufacturing information. Without such characterization there is no basis for extrapolation of evidence of the safety and effectiveness from one lens to any other.

E. Adequacy of General Controls

Several comments argue for and several comments argue against the adequacy of class I to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses. These arguments center around the adequacy of two principal provisions of the general controls, premarket notificaton under section 510(k) of the act and current good manufacturing practice requirements under section 520(f) of the act and the current good manufacturing practice (CGMP) regulations (21 CFR Part 820).

25. One comment argues that the premarket approval process does not ensure safe and effective contact lenses or their accessories. The comment cites examples of how the marketplace allegedly has exposed flaws in or led to improvements of lenses and lens accessories that had received FDA approval, and concludes that introduction of new daily-wear contact lenses by the premarket notification process would be as safe as, and more efficient than, introduction of such lenses under the premarket approval process. The comment argues, therefore, that the lenses should be reclassified into class I.

FDA disagrees with this comment. The legal standard governing reclassification under section 513(e) of the act is discussed in the preamble to the proposed rule (47 FR 53404) and in section II.A. of this document. FDA recognizes that approval of a PMA for a contact lens or a contact lens accessory does not always ensure that the device will perform flawlessly in the marketplace. In addition, approval of a PMA does not protect or prevent a device from being rapidly replaced by a new or improved device as a result of needs expressed by consumers and practitioners. This is especially true in the contact lens industry, where the state-of-the-art is one of rapid and continued innovation and refinement. Nonetheless, opinions about the adequacy of premarket approval to ensure safe and effective contact lenses cannot justify reclassification and do not add to the body of valid scientific evidence that is required to establish the safety and effectiveness of the lenses proposed for reclassification.

26. Two comments provide a proposed definition of polyacrylate-silicone lens materials and a set of parameters with assigned acceptance limits. The proposed definition of polyacrylate-silicone reads: "copolymers composed principally of simple alkyl acrylate or alkyl methacrylate monomers and silicone substituted acrylate or methacrylate monomers. Additional components present in minor proportions include the crosslinkers, wetting agents, stabilizers, and catalysts currently used to manufacture cross-linked PMMA. The silicone-substituted acrylate or methacrylate monomer is further identified as an acryloxy or methacryloxy alkyl or aryl substituted silicone. A silicone is further defined as a polymeric chemical structure having a backbone of alternating silicon and oxygen atoms." The set of parameters includes composition, luminous transmittance, index of refraction, oxygen permeability, dimensional stability, tensile strength, flexural strength, cytotoxicity, eye irritation, resistance to bacteria, extractables, preservative uptake, wettability, and care system compatibility. The comments argue that polyacrylate-silicone lenses whose material met the definition and all the parameters, including certain preclinical testing requirements, would be safe and effective, and that the set of parameters would therefore be adequate to determine whether any new lens was substantially equivalent to a reclassified lens. The comments further argue that evidence of safety and effectiveness need not include data and information on lens polymer formulation or manufacturing process to provide an adequate basis for reclassification because evaluation against the parameters would screen out all unsafe and ineffective lenses.

FDA disagrees with these comments. The definition provided in the comments describes a broad group of polymers that could be accurately titled, "polyacrylate-silicone." As pointed out in one of the two comments, however, materials meeting the definition suggested by the comments could include any number of formulations that were either suitable or unsuitable for the manufacture of safe and effective contact lenses. The definition contains no provisions to distinguish between suitable and unsuitable polyacrylate-silicone materials, much less between safe and effective and unsafe and ineffective lenses made from the materials.

Use of a set of parameters with assigned acceptance limits without valid scientific evidence that lenses meeting such limits would be safe and effective provides no assurance of lens safety and effectiveness and is inadequate to serve as a basis for determining substantial equivalence. As stated in section II.E. and paragraph 34 of this document, FDA is unaware of any combination of nonclinical laboratory studies capable of predicting with reasonable assurance the safety and effectiveness of any contact lens on the human eye. In addition, neither comment contained, and FDA is unaware of, any valid scientific evidence that a lens meeting the parameters included in the comments, or any other set of criteria, would be safe or effective, or that use of the parameters included in the comments, or any other set of criteria, would provide an adequate basis on which to determine whether a new lens was substantially equivalent to a reclassified lens in terms of safety and effectiveness. Neither the parameters included in the comments nor any other set of criteria could serve as a basis for reclassification unless they were supported by valid scientific evidence showing that their use in determination of substantial equivalence would provide reasonable assurance of the safety and effectiveness of the new lens as compared to the reclassified lens. As

discussed in sections II.B. and C. and paragraphs 13, 23, and 24 of this document, lacking such evidence, information characterizing lenses by polymer formulation and manufacturing processes is essential to any evidence of safety and effectiveness that could serve as a basis for reclassification, and would be essential to determine substantial equivalence of any new lens in the event that any rigid gas permeable lens were reclassified.

27. Several comments object to the statement in the preamble to the proposal concerning the information that FDA would require to be included in a premarket notification submission under section 510(k) of the act for a contact lens. The comments argue that requiring all this information would exceed FDA's authority under section 510(k) of the act and would amount to a "mini-premarket approval" requirement.

FDA agrees in part with these comments. In the preamble to the proposal, FDA stated that the manufacturer of a contact lens should be prepared to demonstrate substantial equivalence in terms including but not limited to, design; composition; optical transmission and homegeneity, and index of refraction; and other physical properties including oxygen permeability, chemical and physical stability, tensile and flexural strength; biocompatibility, including cytoxicity, eye irritation and nonsupport of bacterial growth; impurities; leachables; heavy metal levels; preservative uptake and release; and lens care/cleaning regimen compatibility as well as compliance with the CGMP regulations. All this information concerns the basic characteristics of contact lenses. If FDA had reclassified the lenses, such information would have been needed by FDA in a premarket notification submission to determine whether a new contact lens was substantially equivalent to a reclassified lens in terms of safety and effectiveness.

Section 807.87(h) of the regulations governing premarket notification procedures provides that FDA may require the submission of any information that is necessary for FDA to determine whether a device is substantially equivalent in terms of safety and effectiveness to a preamendments device or to a transitional or postamendments device reclassified unto class I or class II. For a contact lens, this information may include any or all of the information cited above, and may also include, where necessary to determine comparability of safety and effectiveness, limited data from nonclinical laboratory studies and clinical investigations.

As discussed in sections II.C. and E. and paragraphs 13 and 34 of this document, extensive data from studies and investigations are necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses. FDA recognizes that requiring so much information would result in the submission of data so complete as to be indistinguishable from the data needed to determine the safety and effectiveness of a device in the first instance rather than on a comparison basis. The data required in a premarket notification submission would then be indistinguishable from the data required in a PMA. FDA agrees that imposing such a requirement as an *a priori* condition for determining substantial equivalence would exceed the authority of section 510(k) of the act and Subpart E of Part 807. If such extensive submissions would be necessary to determine substantial equivalence in terms of safety and effectiveness of the device, it follows that class I controls would be inadequate to provide reasonable assurance of safety and effectiveness of the device.

28. One comment argues that if the testing of lenses that is necessary to show that a lens is substantially equivalent to a reclassified lens approximates that which would be necessary for a premarket approval application, "such expansion of the 510(k) concept would not be justified."

FDA agrees with the comment. Where, as in this case, the type and amount of information that would be required to show substantial equivalence in terms of safety and effectiveness would approximate the type and amount of information required to obtain approval of a PMA for a device, reclassification of the device based on reliance on the process under section 510(k) of the act would not be justified.

29. One comment argues that if FDA requires lenses of new materials to be virtually identical to lenses of reclassified materials, it will be impossible to market alternate contact lens materials under section 510(k) of the act. The comment claims that such an interpretation of the substantial equivalence requirement would hinder the marketing of improved rigid gas permeable materials.

FDA agrees that if it had reclassified any of the lenses proposed for reclassification and required that any new lens be virtually identical to a reclassified lens, it would not have been possible to market under section 510(k) of the act lenses made of alternate materials. Whether such a requirement would have hindered the marketing of "improved" rigid gas permeable lenses is unknown. FDA advises, however, that any postamendments device, including any contact lens, that is not substantially equivalent to a preamendments device or a postamendments device that has been reclassified is automatically classified into class III under section 513(f) of the act and cannot legally be marketed unless it is the subject of an approved PMA or has been reclassified.

30. One comment states that all CAB and polyacrylate-silicone materials that are "equally suitable for their intended use, as compared to already approved lens materials, should be recognized as substantially equivalent to those materials * * *".

FDA disagrees with the comment. The act applies to devices as defined in section 201(h) of the act (21 U.S.C. 321(h)), rather than raw materials. If, however, the act applied to raw materials, any postamendments raw materials, including any contact lens raw material, that was not substantially equivalent to a preamendments raw material or a postamendments raw material that had been reclassified would be automatically classified into class III under section 513(f) of the act and could not legally be marketed unless it were the subject of an approved PMA or had been reclassified. FDA notes that the comment provides no definition of the concept of "equal suitability."

31. Several comments state that enforcement of the CGMP regulations is essential to ensure adequate quality control of contact lens manufacture and to prevent the distribution of unsafe or ineffective lenses. Some of these comments point out that according to the preamble to the proposed rule (47 FR 53405), manufacturers would be required to demonstrate compliance with the CGMP regulations to establish substantial equivalence. Some of these comments argue that to ensure such compliance, FDA would have to inspect the manufacturing sites identified in premarket notification submissions and that such inspections could not be scheduled and completed in the 90 days allowed for review by FDA of such submissions. In such case, the comments note, the person submitting the premarket notification could market lenses without an inspection by FDA of the person's manufacturing facility. Some of these comments also note that FDA has no requirements for mandatory CGMP inspections of facilities in which

class I devices are manufactured and that the lack of such regular inspections could result in the marketing of unsafe or ineffective contact lenses, if the lenses were reclassified into class I.

FDA agrees that compliance with the CGMP regulations is essential to ensure the manufacture of safe and effective contact lenses because of the need for consistency in formulating, processing, and finishing these devices. Because FDA is withdrawing the proposed rule, the question whether FDA may require the inclusion in a premarket notification submission of sufficient information to determine whether a manufacturer's facility is in compliance with the CGMP regulations as part of the premarket notification review is moot. FDA, of course, has the authority to conduct CGMP inspections of any device establishment, including any device manufacturing facility, regardless of the classification of a device, to determine whether the facility is in compliance with the regulations.

F. Adequacy of Class II

32. Several comments, including those that responded explicitly to questions 1. d. and e. of the preamble to the proposed rule, argue that class II would be the most appropriate regulatory class for rigid gas permeable lenses. Most of these comments also argue that any reclassification of rigid gas permeable lenses into class II should not take effect before a performance standard under section 514 of the act is established for such lenses. Some comments argue that there is, while others argue that there is not sufficient valid scientific evidence to establish such a standard. A number of comments state that a performance standard covering lens properties or design characteristics, such as the clinically significant properties and design characteristics cited in the preamble to the proposed rule (47 FR 53405), would be sufficent to provide reasonable assurance of safety and effectiveness of the lenses. Several other comments argue that any such standard needs to include a requirement for clinical investigation of the lenses.

FDA stated in the preamble to the proposed rule (47 FR 53405):

> This proposal to reclassify daily wear spherical contact lenses composed of CAB or polyacrylate-silicone into class I, rather than into class II upon the effective date of a performance standard promulgated in accordance with section 514 of the act, is based on FDA's tentative conclusion that general controls are sufficient to provide reasonable assurance of the safety and effectiveness of such lenses. FDA believes that sufficient information exists to establish a section 514 standard to provide reasonable assurance of the safety and effectiveness of the device; however, FDA does not believe it is necessary to establish such a standard to provide such assurance.

FDA has determined that its tentative conclusion about the adequacy of general controls was in error and that sufficient information does not exist to establish a performance standard under section 514 of the act. The requirement that reclassification of a device be based on valid scientific evidence of safety and effectiveness applies to reclassification from class III into class II, as well as to reclassification from class III into class I. As discussed in sections II.B. and III.C. of this document, FDR has concluded that there is insufficient valid scientific evidence other than in PMA's to show that rigid gas permeable lenses are safe and effective. For this reason, FDA cannot conclude that such lenses should not remain in class III, or determine whether reclassification into class II, as opposed to class I, would provide reasonable assurance of their safety and effectiveness. Furthermore, any performance standard that addressed and set parametric limits on lens properties or design characteristics, such as the clinically significant properties and design characteristics cited in the preamble to the proposed rule, the set of parameters listed and discussed in section II.D. and paragraph 26 of this document, or the material properties delineated in ANSIZ80.6–1983 (see paragraph 33 of this document) would have to be based on valid scientific evidence that the standard would provide reasonable assurance of the safety and effectiveness of the lenses covered by the standard. As discussed in section II.D. and paragraphs 26 and 32 of this document, FDA has concluded that no such evidence is publicly available. Absent sufficient information to establish a performance standard to provide reasonable assurance of the safety and effectiveness of a device, the device may not be reclassified into class II, because under section 513(a)(1)(B) of the act, a class II device is a device for which, among other things, "there is sufficient information to establish a performance standard to provide" reasonable assurance of safety and effectiveness.

FDA believes that in lieu of a standard under section 514 of the act prescribing performance criteria, a standard under that section prescribing testing and evaluation criteria to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses might be feasible. At this time, however, such a standard could not be developed based on information available in the public domain. FDA notes that if there were sufficient valid scientific evidence to develop a testing and evaluation standard, its existence would serve as a principle part of the basis for the reclassification into class II of any rigid gas permeable lens to be covered by the standard. Consequently, any resulting reclassification could not become effective prior to the effective date of such standard.

33. A few comments suggest that a voluntary standard (ANSI Z80.6–1983) titled, "American National Standard for Ophthalmics—Conventional Hard Plastic Contact Lenses—Physiochemical Properties," published by the American National Standards Institute, Inc. (ANSI) could serve as the basis for the establishment of a performance standard under section 514 of the act in the event that FDA decided to reclassify rigid gas permeable lenses into class II rather than class I. Some of these comments argue that the existence of ANSI Z80.6–1983 is adequate evidence that there is sufficient information to develop a performance standard. One comment submitted a copy of ANSI Z80.6–1983 to the record.

No comments submitted, and FDA is unaware of, any evidence that a lens made of a material that meets ANSI Z80.6–1983 is safe and effective. While it may be feasible to show, through a series of measures of approved rigid gas permeable lenses, that all such lenses meet the subject standard, there is no basis to conclude that any other lens that meets the standard would necessarily be either safe or effective. Quite the contrary, ANSI Z80.6–1983 addresses only a limited number of physiochemical properties of contact lens materials. Adherence to the voluntary standard would not ensure that lenses made from materials meeting the standard would be nontoxic, biocompatible, or effective.

G. Need for Clinical Trials

34. Several comments state that clinical trials are necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses. Some of the comments state that if such lenses were reclassified, at least limited clinical trials would be necessary to establish the safety and effectiveness of lenses made of a new or modified material or lenses made by a new manufacturer. The comments argue that differences in lens polymer formulation, changes in manufacturing process or process control, or changes from one manufacturer to another can result in changes in the lens' clinical performance that can only be

adequately evaluated in a clinical trial. Two comments argue on the contrary, that lenses meeting a definition of polyacrylate-silicone provided in the comments, and a set of parameters with assigned acceptance limits, also provided in the comments, would be safe and effective and therefore would not need clinical evaluation. Another comment states that the persons who claim that clinical trials are necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses have failed to provide any valid scientific evidence that such trials are necessary.

Each of these comments and related arguments are summarized and addressed in section II. C and E. and paragraphs 13, 22, 24, and 26 of this document. FDA has regulated contact lenses as new drugs or class III devices for more than a decade, and is unaware of any combination of nonclinical laboratory studies capable of predicting the performance of any contact lens on the human eye. Nothing in the comments that provided the definition and the set of parameters, or in any other comments, establishes that clinical trials are not necessary to provide reasonable assurance of the safety and effectiveness of polyacrylate-silicone lenses, or that polyacrylate-silicone lenses whose material met the definition and the parameters would be safe and effective.

As stated in secion II.E. of this document, FDA believes that the safety and effectiveness of a contact lens is a function of the complex interrelationship of material, design, and manufacture that results in a unique set of physical, chemical, mechanical, and optical characteristics. When prescribed and fitted properly, a lens with this unique set of characteristics should provide safe and effective visual correction in a human eye with a specific diagnosed ametropia. FDA believes that contact lenses made from a new material, including material that has been significantly modified, contact lenses made to significantly modified designs, and contact lenses for which approval for a new indication is sought, cannot at this time be shown to be safe and effective without clinical, as well as preclinical, evaluation.

FDA agrees that none of the comments provided any valid scientific evidence that clinical trials are necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses. As explained in paragraph 4 of this document, however, the burden of proof in this proceeding requires FDA (or the proponents of reclassification) to establish, by valid scientific evidence of safety and effectiveness, that rigid gas permeable lenses should not remain in class III and that class I (or class II) will provide reasonable assurance of the safety and effectiveness of such lenses. The opponents of reclassification are not required to provide any evidence to establish that reclassification is inappropriate.

H. Economic Impact of Reclassification

35. Many comments support reclassification from class III into class I on economic grounds.

FDA notes that only a few of the comments contain any economic data to support their claims, and that none of these data was substantiated by accompanying documentation. In any event, even if the claims were substantiated, FDA could not have legally reclassified any rigid gas permeable lens, nor could the agency legally reclassify any other class III device into class I or class II, absent the requisite valid scientific evidence of safety and effectiveness (see the preamble to the proposed rule (47 FR 53404) and section II.A. of this document).

36. Many comments cite the current classification of rigid gas permeable lenses as "a completely unnecessary barrier to competition" that threatens the viability and welfare of small businesses. The comments, citing recent poor business and layoffs, attribute the hardship of the small contact lens manufacturer to the current classification.

As explained in paragraph 1 of this document, all rigid gas permeable lenses are class III devices as a result of, among other things, (1) the September 30, 1975 notice and (2) section 520(1)(l)(E) and (1)(3)(D)(i) of the act. The 1975 notice was based on concerns about the safety and effectiveness of lenses consisting of polymers other than PMMA (see paragraph 19 of this document). These concerns continue to justify classification of such lenses into class III, as discussed more fully in section II.B. and paragraphs 13, 23, 24, and 26 of this document. Thus, classification into class III is not "unnecessary." Furthermore, a number of small companies hold approved PMA's for non-PMMA lenses, including rigid gas permeable lenses. FDA notes that approved PMA's for several polyacrylate-silicone lenses cover a total of more than 250 contact lens finishing laboratories, and that the agency has advised each of the PMA holders how more such laboratories can be approved as additional manufacturing sites without the need for the PMA holders or the laboratories to gather additional clinical data. FDA has received no evidence of the cause of the poor business and resultant layoffs cited in the comments.

37. Several comments complain of the "de facto monopoly" held by large manufacturers that hold approved PMA's. One of these comments complained that the requirements associated with securing premarket approval cost "in the neighborhood of $1 million."

FDA does not agree with the comments. Small companies can and do obtain approved PMA's. Although the figure of $1 million is unsubstantiated, FDA is aware that the requirements for premarket approval are stringent and as discussed in paragraph 36 of this document, has taken steps to make the premarket approval process less burdensome for the contact lens industry. The agency advises, however, that Congress chose to protect the data in PMA's from use by others seeking premarket approval and from use by others and by FDA for the purpose of reclassification (see the preamble to the proposed rule (47 FR 53404) and section II.A. of this document).

38. One comment claims that although the cost of rigid gas permeable lenses would decline as a result of reclassification, patients would have more fitting and other problems with the reclassified lenses, resulting in higher costs overall. The comment assumes that on average the patient wearing the reclassified lenses would require two additional professional office visits is at $30 each for proper fitting. The comment further assumes 1,680,000 new patients, arriving at "an increase of $100,800,000 in avoidable health care costs."

FDA does not agree with this comment, which was not supported by any valid economic data. FDA therefore rejects this comment as speculative.

39. One comment argues that the economic benefits claimed by FDA for reclassification can be obtained without reclassification of rigid gas permeable lenses. The comment notes that since 1971 the number of manufacturers holding approved PMA's for hydrogel (soft) contact lenses, also a class III device, has increased from 1 to 30, with many small manufacturers obtaining approved PMA's. The comment also claims that the price of soft contact lenses has declined significantly over the years, and predicts the same progression for rigid gas permeable lenses without reclassification.

FDA partially agrees with this comment. FDA has noted the increase in

the number of approvals of PMA's for soft contact lenses, but FDA is unaware of any data to support the claims regarding costs or the assumption that rigid gas permeable lenses will follow the same progression.

40. One comment claims that the marginal economic benefits to late market entrants resulting from reclassification would be offset by increased risks to the consumer, and that reclassification would have an adverse impact on innovation.

FDA does not agree with this comment, which was not supported by any valid economic data. FDA therefore rejects this comment as speculative.

I. Contact Lens Accessories

41. One comment argues that rigid gas permeable lens accessories are not class III devices under section 520(l)(1)(E) of the act because such accessories are not devices which FDA, by a notice published in the **Federal Register** before enactment of the amendments, declared to be new drugs subject to section 505 of the act. Several comments argue that regardless of the classification or regulatory status of rigid gas permeable lenses, accessories for use with such lenses should be subject to the same level of regulatory control as the lenses because the accessories are an integral part of the safety and effectiveness of the lenses.

FDA advises that the term "device" includes "and * * * accessory" (section 201(h) of the act). Thus, accessories for use with rigid gas permeable lenses are class III devices under section 520(l)(1)(E) of the act because rigid gas permeable lenses are class III devices under that section (see paragraph 1 of this document). Similarly, any accessory for use with a rigid gas permeable lens for which an NDA was pending on the enactment date, e.g., MESO Contact Lens, is a class III device under section 520(l)(1)(B) of the act, and any accessory for use with a rigid gas permeable lens for which an IND was in effect on the enactment date, e.g., MESO Contact Lens, CABCURVE® Contact Lens, POLYCON®, is a class III device under section 520 (l)(1)(C) of the act. Furthermore, any rigid gas permeable lens accessory that is substantially equivalent to an accessory for use with a rigid gas permeable lens for which an NDA was pending or an IND was in effect on the enactment date is a class III device under section 520(l)(1)(D) of the act.

FDA also advises that any rigid gas permeable lens accessory for which an NDA was pending on the enactment date, e.g., BOILnSOAK®, PREFLEX®, is a class III device under section 520(l)(1)(B) of the act; that any rigid gas permeable lens accessory for which an IND was in effect on the enactment date, e.g., PREFLEX®, FLEXSOL®, FLEX-CARE™, is a class III device under section 520(l)(1)(C) of the act; and that any rigid gas permeable lens accessory that is substantially equivalent to such an accessory covered by section 520(l)(1)(B) or (C) is a class III device under section 520(l)(1)(D) of the act.

FDA is withdrawing the proposed rule, and as discussed in paragraph 42 of this document, has concluded that there is insufficient valid scientific evidence of the safety and effectiveness of rigid gas permeable lens accessories to initiate proceedings to reclassify these devices. Accordingly, the question whether the lenses and the accessories should be subject to the same level of regulatory control regardless of the classification or the regulatory status of the lenses is moot.

42. Several comments argue that although there are no well-controlled clinical studies addressing the safety and effectiveness of accessories used with rigid gas permeable lenses, reclassification of the accessories can be supported by the lack of significant reports of adverse effects associated with their use and by the substantial marketing experience associated with these devices. One comment states that accessory solutions for rigid gas permeable lenses should be reclassified because they have a substantial marketing history of safe and effective use with PMMA lenses. Comments opposed to the reclassification of rigid gas permeable lens accessories argue that clinical trials and class III controls are necessary to provide reasonable assurance of the safety and effectiveness of such accessories. These comments argue that there are numerous reports in the scientific literature of adverse reactions associated with contact lens accessories, such as bacterial infections, corneal ulcers, giant papillary conjunctvitis, eye irritation and discomfort, as well as allergic and sensitivity reactions. These comments also argue that contact lens solutions may cause temporary or permanent damage to lenses, e.g., changes in lens parameters, distortion, gummy deposits, or discloration. These comments conclude that there is insufficient valid scientific evidence to demonstrate the safety and effectiveness of rigid gas permeable lens accessories, and, therefore, that FDA does not have a sufficient basis on which to reclassify such accessories.

The legal standard for reclassification set out in the preamble to the proposed rule (47 FR 53404), and reiterated in section II.A. of this document, applies to the issue of reclassification of rigid gas permeable lens accessories. To reclassify rigid gas permeable lens accessories, the act and the regulations require valid scientific evidence of safety and effectiveness to demonstrate why the accessories should not remain in class III and why class I or class II would provide reasonable assurance of their safety and effectiveness.

FDA recognizes that several accessories (e.g., disinfecting, cleaning, lubricating, and rewetting solutions) that have been used with rigid gas permeable lenses also have been used with PMMA lenses. FDA believes, however, that the safety and effectiveness of accessories intended for use with rigid gas permeable lenses cannot be demonstrated solely on the basis of a history of substantial marketing experience with lenses made of significantly different materials and a lack of reports of adverse effects associated with the use of the accessories with lenses made of significantly different materials. In any event, DEN is not comprehensive; there currently are no reporting requirements applicable to PMMA lenses; and there is no history of substantial marketing experience of these accessories with rigid gas permeable lenses. FDA is unaware of, and did not receive in the comments, any valid scientific evidence of the safety and effectiveness of accessories intended for use with rigid gas permeable lenses. FDA, therefore, cannot determine whether class I or class II controls would provide reasonable assurance of the safety and effectiveness of rigid gas permeable lens accessories and may not at this time initiate proceedings to reclassify these devices.

J. Tinted Contact Lenses

43. One comment states that in amending section 706 of the act (21 U.S.C. 376), Congress could not have intended that devices already on the market, including tinted contact lenses, would be deemed to be adulterated on the date of enactment of the amendments.

FDA agrees in part, and disagrees in part, with the comment. FDA's responsibility for regulating color additives used in or on devices began on May 28, 1976, when the amendments became law. Among other things, the amendments expanded to coverage of the color additive provisions of the act, so that a color additive that is used in or on device and that comes in direct contact with the body of man or other animals for a significant period of time

is subject to regulation under section 706 of the act. Section 706(a) provides that a color additive shall be deemed unsafe within the meaning of section 501(a)(4) of the act for any particular use, unless that use is "listed" (approved) pursuant to a regulation issued under section 706(b) of the act.

Congress did not provide in the amendments for a transition or phase-in period for the agency's new regulatory authority over color additives used in devices. For this reason, on the date of enactment of the amendments, any device in commercial distribution that contained an unlisted color additive that came in direct contact with the body for a significant period of time was technically adulterated within the meaning of section 501(a)(4) of the act. Although the act authorizes regulatory action against adulterated devices, FDA does not believe that Congress intended FDA to take enforcement action against devices containing an unlisted color additive immediately upon enactment of the amendments. In deciding whether to approve or deny approval of a PMA for a device that contains a color additive that is subject to section 706 of the act, however, FDA believes that is cannot ignore the requirement in section 706 of the act that an unlisted color additive used in or on the device be deemed unsafe. Furthermore, approval of such a PMA without regard to the requirements of section 706 would frustrate the intent of section 515(d)(2)(A) of the act, which requires FDA to deny approval of a PMA if "there is a lack of showing of reasonable assurance that [the] device is safe * * *."

44. One comment states that FDA had approved PMA's for at least two tinted contact lenses, even though the color additive used to color the lenses had not been listed for that use before the applications were approved. The comment argues that FDA's subsequent decision to subject color additives in class III contact lenses to the color additive, as well as the premarket approval, provisions of the act was unfair and raised very serious constitutional due process questions.

FDA notes that the color additive in question was listed for use to color contact lenses by a final rule published in the **Federal Register** of March 29, 1983 (48 FR 13020). As noted in paragraph 50 of this document, several other color additives have been listed for use to color contact lenses.

FDA acknowledges that it approved PMA's for two contact lenses tinted with a color additive that was not listed for use to color a contact lens when the applications were approved. After the first approval but before the second approval, FDA concluded that it could not refrain from applying the color additive provisions of the act to tinted contact lenses (see paragraph 43 of this document). In this circumstance, it was decided that the least unfair method of proceeding would be to complete action on the pending PMA without listing the color additive for use in the lens, and to enforce the color additive provisions with respect to future PMA's. FDA realized then, and realizes now, that subjecting different manufacturers of similar lenses to different requirements is undesirable. The agency chose that course as the lesser of two evils, believing then, as it does now, that it could not defend the continued processing of PMA's without regard to the legal requirements of the act.

FDA advises that it is developing a policy for implementing the color additive provisions of the act with respect to preamendments devices that contain color additives that come in direct contact with the body for a significant period of time. FDA also is developing proposed changes in the procedural regulations for color additives to govern regulation of color additives in devices. Appropriate opportunity for comment will be given interested persons when the agency proposes the policy and the procedures. FDA fully intends to ensure consistent regulatory treatment of all devices that contain color additives that are subject to section 706 of the act.

45. One comment points out that the definition of color additive in section 201(t) of the act (21 U.S.C. 321(t)) does not include dyes or pigments "added to a device." The comment then argues that FDA views the Congress' failure to amend the definition to include a reference to devices as an error that the agency may ignore in the interest of avoiding what it deems to be an illogical result. Another comment argues that colorants in tinted contact lenses are not color additives within the meaning of section 201(t) because the colorants are not capable of imparting color to the human body.

FDA disagrees with the comments. Section 201(t) defines a "color additive" as a substance "capable * * * of" imparting color "when added or applied to a food, drug, or cosmetic, or to the human body." A colorant used to tint a device satisfies the "capable of" test if it can impart color when it is added or applied to the human body, whether or not it can impart color to the body when it is used in a device. The second comment did not provide any evidence that colorants used to tint contact lenses are not capable of imparting color to the human body.

46. One comment argues that a colorant used in or on a device is not a "color additive" unless the colorant is capable of migrating from the device in such a manner and in such quantity to give rise to a toxicological concern.

FDA disagrees with the comment. The definition of "color additive" in section 201(t) of the act, which is discussed in paragraph 45 of this document, does not distinguish between: (1) Substances that meet the definition and migrate in such a manner and in such quantity to give rise to a toxicological concern and (2) substances that meet the definition and do not migrate in such a manner and in such quantity to give rise to a toxicological concern. A colorant used to tint a device is a color additive if the colorant can impart color when it is added or applied to the human body.

47. One comment states that colorants used in tinted contact lenses facilitate finding a dislodged or decentered lens, thus contributing to its medical function. The comment argues that colorants used in contact lenses should therefore be excluded from the definition of color additive in section 201(t) of the act.

FDA advises that a substance that meets the definition of color additive in section 201(t) of the act is a color additive unless FDA determines, by regulation, that the substance " is used (or intended to be used) solely for a purpose or purposes other than coloring." Thus, the fact that a substance used to color a contact lens also contributes to its medical function does not provide any basis for FDA to determine that the substance is not a color additive within the meaning of section 201(t) of the act.

48. One comment claims that FDA's interpretation of the term "direct contact" in section 706(a) of the act leads to an absurd, unjust, or unintended result, namely, the regulation under section 706 of color additives used to tint contact lenses and other devices. The comment argues that the phrase "direct contact for a significant period of time" does not contemplate situations in which a colorant, as used in a device, cannot come in contact with the body in any physiologically or toxicologically significant sense.

FDA disagrees with the comment. The plain language of section 706(a) of the act requires the agency to subject to the requirements of section 706 any color additive that is used in or on a device and that comes in "direct contact" with the body for a significant period of time, and nothing in section 706(a) or its legislative history suggests that Congress intended the term "direct

contact" or "significant period of time" to comprehend physiological or toxicological significance.

FDA's interpretation does not imply a belief that color additives used to tint contact lenses and other devices necessarily pose a health problem. The color additive provisions of the act are not intended to deal only with additives known to present a risk, but are designed, instead, to allow the agency to evaluate the safety of additives used in regulated products in a systematic way.

In FDA's view, tinited contact lenses involve the sort of use of a color additive in a device that was meant to be evaluated in accordance with the color additive provisions of the act. Contact lenses come in direct contact with the eye and are worn for prolonged periods of time every day. Whether and to what extent a lens' tint leaches out of the lens material in these circumstances is a matter of legitimate regulatory inquiry. Because the tint is a color additive, this inquiry is properly conducted under the color additive provisions of the act.

49. One comment argues that the phrase "significant period of time" in section 706(a) of the act must be interpreted logically to avoid an absurd result, namely, the regulation under section 706 of color additives in contact lenses and other devices, unintended by Congress. The comment claims that in the case of a device from which a colorant readily migrates, a significant period of time might be measured in minutes, whereas in the case of contact lenses and other devices (e.g., dentures) from which a colorant cannot migrate in significant amounts, the length of time during which the device may safely be placed in contact with the body may be practically limitless.

FDA agrees that a color additive used in or on a contact lens or any other device is not subject to section 706 of the act unless the color additive "comes in direct contact with the body of man * * * for a significant period of time" (section 706(a) of the act). For the reasons given in paragraphs 48 and 50 of this document, FDA has concluded that color additives used to tint contact lenses come in contact with the body in the manner and for the period of time contemplated by the statute, and, therefore, that the safety of such additives for use in such lenses is required to be established in accordance with section 706 of the act and Part 70 of the regulations governing color additives (21 CFR Part 70). As explained in paragraph 51a of this document, however, a color additive used to tint a contact lens is not subject to the requirements of section 706 if there is a nontinted barrier impermeable to the color additive between the "colored" portion of the lens and every surface of the lens that comes in direct contact with the body, or the color additive is otherwise imprisoned within the lens in such manner that all of the color additive is and remains below every surface of the lens that comes in such contact.

FDA notes that no data concerning the migration or safety of colorants used to tint contact lenses or any other devices were included in or submitted with the comment.

50. Many comments state that color additives have been used in contact lenses for many years without any known adverse effects and that FDA therefore should have included tinted lenses in the proposed rule.

Because FDA is withdrawing the proposed rule, the question whether to include tinted lenses in any reclassification is moot. FDA advises, however, that regardless of the classification or regulatory status of tinted contact lenses, FDA believes that as such lenses are currently fabricated, the color additives used to tint the lenses are added to the lenses in such a way that at least some of each color additive will come in direct contact with the eye when the lenses are worn. In addition, the lenses are intended to be placed on the eye for several hours each day for 1 year or more. Thus, the color additives come in direct contact with the body for a significant period of time and, therefore, are subject to section 706 of the act. FDA notes that since publication of the proposed rule, several color additives have been listed for use in contact lenses (see, e.g., 48 FR 31374 (July 8, 1983); 48 FR 22705 (May 20, 1983); 48 FR 13020 (March 29, 1983)). FDA emphasizes, however, that as discussed in paragraph 51a of this document, any person submitting a PMA for a tinted lens may demonstrate in the application that the dye or pigment used to tint the lens does not come in direct contact with the body for a significant period of time and, thus, is not subject to section 706 of the act.

FDA agrees that tinted contact lenses have been marketed for many years. The lack of reports of adverse effects associated with such lenses does not, however, show that color additives are safe for use in tinting contact lenses. Indeed, because DEN is not comprehensive (see paragraph 6 of this document) and there currently are no reporting requirements applicable to all tinted lenses, the lack of reports of adverse effects does not and cannot establish that color additives are safe for tinting contact lenses.

Under section 706(b)(4) of the act, the so-called "general safety clause" for color additives, a color additive may not be listed for a particular use unless the data presented to FDA establish that the color additive is safe for that use. Although what is meant by "safe" is not explained in the general safety clause, the legislative history makes clear that this word is to have the same meaning for color additives as for food additives. (See. H.R. Rep. No. 1761, "Color Additive Amendments of 1960," Committee on Interstate and Foreign Commerce, 86th Cong., 2d Sess. 11 (1960).) The Senate report on the Food Additives Amendment of 1958 states that although proof of safety beyond any reasonable doubt is not possible, safety does require "proof of a reasonable certainty that no harm will result from the proposed use of an additive." S. Rep. No. 2422, "Food Additives Amendment of 1958," Committee on Labor and Public Welfare, 85th Cong., 2d Sess. 6 (1958).

FDA has incorporated this concept of safety into its color additive regulations. Under § 70.3(i), a color additive is "safe" if "there is convincing evidence that establishes with reasonable certainty that no harm will result from the intended use of the color additive." Under this standard, the lack of reports of adverse effects associated with tinted contact lenses could not establish the safety of the color additives used to tint the lenses, even if, as is not the case, DEN were comprehensive or reports of such effects associated with all tinted contact lenses were required to be submitted to the agency.

51a. One comment argues that the agency has no information that would indicate any significant leaching, migration, or elution of color additives from tinted contact lenses. Another comment claims to have evidence from leaching studies of a number of color additives used to tint contact lenses which demonstrates that an insignificant amount of the colors leaches from the lenses. The latter comment concludes, therefore, that a color additive in a tinted contact lens does not come in direct contact with the body for a significant period of time. Still another comment states that FDA had advised Congress that it did not intend to apply section 706 to a color additive used in or on a device if, even though the device comes in direct contact with the body for a significant period of time, there is a barrier impermeable to the color between the "colored" components of the device and the surface of the device that comes in direct contact with the body. The comment argues that the mechanism by which a colorant used to

tint a contact lens is prevented from having such contact with the body—whether by imprisonment within a polymeric matrix or by virtue of a barrier—should not give rise to different regulatory consequences.

FDA's statutory responsibility for regulating color additives used in or on devices, including tinted contact lenses, is discussed in paragraphs 43 through 50 of this document. FDA notes that none of the comments provide any evidence to support the contention that, as tinted contact lenses are currently fabricated, the color additives used to tint the lenses do not come in direct contact with the body (e.g., ocular tissues, tears, eyelids) for a significant period of time within the meaning of section 706(a) of the act. FDA advises, however, that even if a color additive does not migrate or elute from a contact lens in a "significant" amount, the color is nonetheless subject to section 706 of the act so long as the color additive comes in direct contact with the body for a significant period of time. In addition, the fact that a color additive is bound to a surface of a contact lens that comes in such direct contact does not mean that the color additive is not subject to the requirements of section 706 of the act. FDA has concluded that a color additive used to tint a contact lens is subject to the requirements of section 706 of the act unless there is a nontinted barrier impermeable to the color additive between the "colored" portion of the lens and ever surface of the lens that comes in direct contact with the body, or the color additive is otherwise imprisoned within the lens in such manner that all of the color additive is and remains below ever surface of the lens that comes in such contact. If a person submitting a PMA for a tinted contact lens demonstrates that such a barrier or other mechanism of imprisonment exists for the lens, the color additive is not subject to the requirements of section 706 of the act.

FDA advises that elution and migration studies may be used to support the safe use of a color additive in a tinted contact lens that contains no nontinted barrier impermeable to color or within which the color additive is not otherwise imprisoned and that is, therefore, subject to the requirements of section 706 of the act.

51b. One comment states that FDA should hold a public proceeding on the legal conclusion stated in the preamble to the proposed rule (47 FR 53405) that the color additive provisions of the act apply to tinted contact lenses.

FDA disagrees with the comment. The agency already has provided several opportunities for all interested persons to present their views concerning the application of sections 201(t) and 706(a) of the act to color additives used in or on contact lenses (see section I of this document), and in paragraphs 43 to 51a of this document, has summarized and responded to every significant comment received on tinted contact lenses.

K. Miscellaneous Matters

52. One comment suggests that contact lenses should be considered custom devices because lenses are ordered specifically for the patient named on the prescription. In addition, the lenses may need to be further modified by the practitioner to meet the individual needs of the patient and to perform to the satisfaction of the patient and practitioner.

Under section 520(b) of the act and § 812.3(b) of the regulations governing investigational use of devices, a custom device is a device that:

(1) Necessarily deviates from devices generally available or from an applicable performance standard or premarket approval requirement in order to comply with the order of an individual physician or dentist;

(2) Is not generally available to, or generally used by, physicians or dentists;

(3) Is not generally available in finished form for purchase or for dispensing upon prescription;

(4) Is not offered for commercial distribution through labeling or advertising; and

(5) Is intended for use by an individual patient named in the order of a physician or dentist, and is to be made in a specific form for that patient, or is intended to meet the special needs of the physician or dentist in the course of professional practice.

For contact lenses to meet the custom device exemption, they are required to satisfy each of these requirements. Contact lenses do not meet the definition of a custom device because they fail to satisfy four and possibly five of the five requirements.

First, contact lenses do not qualify for the custom device exemption because they do not "necessarily deviate" from an appropriate premarket approval requirement or from devices generally available in order to comply with the order of an individual physician. FDA interprets the necessary deviation requirement to require that a device be sufficiently unique that clinical investigations would be impracticable. Such investigations using contact lenses are anything but impracticable; scores of clinical investigations have been conducted by firms large and small, and FDA has approved dozens of contact lenses through the NDA and PMA processes.

Second, contact lenses are generally available to physicians.

Third, contact lenses are generally available in finished form for purchase or dispensing upon prescription.

Fourth, contact lenses are offered for commercial distribution through labeling or advertising.

Fifth, even so called "custom fitted" contact lenses, which are intended for use by an individual patient named in the order of a physician, and are to be made in a specific form for that patient, are merely variation within an approved range of powers and anterior and posterior surface contours and are to be fitted to a virtually unlimited number of patients in the course of professional practice.

For all these reasons, FDA has determined that contact lenses do not qualify for the custom device exemption. As explained in paragraph 20 of this document, however, nothing in the act or the regulations forbids optical laboratories from modifying approved lenses to meet the needs of specific patients so long as the specifications of the lenses, as modified, remain within the specifications of the PMA's for the approved lenses.

53. Three comments submitted data showing that product liability claims and losses against contact lens manufacturers have been minimal and argue that these data demonstrate the safety of contact lenses. The data include summaries of three surveys of contact lens manufacturers. One survey covers about 50 manufacturers over a 5-year period and the other two surveys appear to cover approximately 100 manufacturers for an indefinite period. The survey summaries indicate that total claims paid on behalf of the manufacturers surveyed were less than $20 thousand, over an indefinite period apparently spanning several years.

FDA believes that such information might suggest a history of apparent safety but does not constitute valid scientific evidence of the safety of rigid gas permeable lenses. The comments provide no information on the surveyed manufacturers' experience with any of the lenses proposed for reclassification or the number of the surveyed manufacturers' rigid gas permeable lenses in use; indeed, nothing in the comments reveals whether any experience with approved rigid gas permeable lenses is captured by the surveys.

FDA notes that the relatively small amount of money paid does not lead to the conclusion that contact lenses are

safe. There is no way of determining from the surveys what percentage of users who could have filed claims did or did not do so. The reasons for not filing claims may be many and varied including the short-term, reversible nature of the injury, ignorance of user rights, ignorance of the cause of the injury, ignorance of the identity of the responsible person, or the cost of filing or prosecuting a claim.

Contact lens related injuries do occur with some frequency. For example, the U.S. Consumer Product Safety Commission National Electronic Injury Surveillance System (NEISS) (Ref. 3) estimates that approximately 20,000 contact lens related injuries were treated in emergency care facilities in the United States in 1981. This estimate is projected from a statistically representative sampling of institutions with emergency treatment departments. The sample includes approximately 500 documented admissions to such facilities for contact lens related injuries.

For all these reasons, no definitive conclusions can be drawn from the surveys.

54. One comment states that FDA should have referred the proposed reclassification to the Ophthalmic Section of the Ophthalmic; Ear, Nose, and Throat; and Dental Devices Panel (the Section), an FDA advisory committee, for a recommendation respecting the proposed change in classification. The comment argues that the proposal should have been referred to the exercise of sound regulatory discretion as well as a matter of law under section 513(e) of the act. The comment further argues that section 513(e) permits a limited exception to the requirement of advisory committee review only in situations in which the committee has previously reviewed the classification and its report has been subject to publication and public comment.

FDA disagrees with this comment. Section 513(e) of the act provides that FDA "may secure from the panel to which the device was last referred pursuant to (section 513(c) of the act) a recommendation respecting the proposed change in the device's classification." The plain language of section 513(e) of the act thus authorizes, but does not require, the referral requested by the comment, and nothing in the act or its legislative history suggests that FDA's discretion in determining whether to seek a recommendation from any of its advisory committees is limited to situations in which the committee has made a previous recommendation concerning the classification of the device. In any event, as discussed in paragraphs 55 and 56 of this document, a petition to reclassify rigid gas permeable lenses from class III into class II was reviewed by the Section, which tentatively recommended that FDA reclassify the device into class II. Accordingly, no purpose would have been served by securing a recommendation from the Section respecting the proposed rule.

55. One comment states that FDA should include in the administrative record various documents and memoranda allegedly prepared by agency scientists following the tentative recommendation, on April 14, 1981, of the Section that contact lenses consisting principally of rigid plastic materials be reclassified from class III into class II, as requested by the Contact Lens Manufacturers Association (CLMA), in its reclassification petition dated March 2, 1981.

FDA advises that recognizing the potential public interest in any reclassification that might result from FDA's notice and comment rulemaking proceeding, CLMA's petition, amended petitions, supporting exhibits, the transcript of the Section meeting, FDA's analysis of the petitions, and comments received on the petitions following the Section meeting were placed on file under the docket number assigned to the November 24, 1981 notice of intent (Docket No. 81N–0352) in the Dockets Management Branch (HFA–305), Food and Drug Administration, Rm. 4–62, 5600 Fishers Lane, Rockville, MD 20857, and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday. As explained in paragraph 57 of this document, however, CLMA's petition was mooted by FDA's decision to initiate this rulemaking proceeding. Accordingly, even if they were relevant to this proceeding, neither the petition nor FDA's analysis of it would negate the conclusions, reached after full review of the evidence developed by the rulemaking, that rigid gas permeable lenses may not be reclassified. None of the other documents referred to in the comment is relevant to this proceeding.

56. One comment states that FDA should include in the administrative record a copy of the transcript of the April 14, 1981, open meeting of the Section at which it considered CLMA's petition to reclassify contact lenses consisting principally of rigid plastic materials from class III into class II. The comment argues that the deliberations of the Section, as reflected in the transcript of the meeting, are clearly relevant to the underlying questions of the safety and effectiveness of rigid gas permeable lenses and materials and, further, that the Section's tentative recommendation represents the unanimous and collective opinion of recognized experts that, as of April 1981: (a) Class III was not necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses meeting ANSI Z–80.6–1983; (b) there was no perceived need for mandated clinical testing for polymers falling within ANSI Z–80.6–1983; and (c) low priority was to be accorded to the development of any performance standard under section 514 of the act for these materials and, accordingly, they could be adequately regulated as class I devices.

As stated in paragraph 55 of this document, a copy of the transcript of the April 14, 1981, Section meeting has been filed in the docket file for the notice of intent to initiate this rulemaking proceeding. They agency notes, however, that this rulemaking proceeding was initiated by the agency on the basis of data it gathered, and that the agency chose not to exercise its authority under section 513(e) of the act to secure from the Section a recommendation respecting the proposed rule. FDA also notes that even if the Section's tentative recommendation and opinions referred to in the comment were relevant to this proceeding, the tentative recommendation would not have been legally binding on the agency, and the opinions could not have established the safety or effectiveness of the lenses in question because opinions that are not based on valid scientific evidence within the meaning of § 860.7 do not constitute such evidence. In any event, even if it had granted CLMA's petition, FDA would have been required to proceed by informal rulemaking to reclassify contact lenses consisting principally of rigid plastic materials, as requested by CLMA (see paragraph 57 of this document).

57. One comment disagrees with FDA's conclusion that CLMA's petition to reclassify contact lenses consisting principally of rigid plastic materials from class III into class II was mooted by the agency's decision to initiate this rulemaking proceeding.

If FDA had decided to grant CLMA's petition, the agency would have been required under § 860.130(d) to publish in the **Federal Register** an order announcing FDA's intent to initiate a change in the classification of the device. Subsequently, the agency would have been required to proceed by informal rulemaking in accordance with

section 513(e) of the act and § 860.130(c) as well as Part 10 of its administrative practices and procedures regulations (21 CFR Part 10). FDA did not initiate this reclassification proceeding on the basis of CLMA's petition because the petition did not contain sufficient information. FDA tentatively concluded, however, that there was adequate information outside the petition to justify initiating a reclassification proceeding. Because FDA issued on its own initiative the notice of intent that FDA would have been required to issue had CLMA's petition not been inadequate, the agency reaffirms its conclusion, stated in the November 24, 1981 notice of intent and in the preamble to the proposed rule (47 FR 53402), that the petition was moot.

58. A comment characterizes as unnecessarily and inappropriately inflexible the statement in the transitional notice (42 FR 63474) that "until a performance standard applicable to any (transitional) product listed above (including 'soft contact lenses') is established and becomes effective, that product will continue to be subject to premarket approval." The comment states that the rationale for the statement in the transitional notice is not clear and points out that section 513(e) of the act provides that a regulation issued under that section changing the classification of a device from class III into class II may provide that such reclassification not take effect until the effective date of a performance standard established under section 514 of the act for the device. The comment argues that the statement is not applicable to the proposed rule to reclassify rigid gas permeable lenses because the proposal would have reclassified these devices from class III into class I.

For the reasons explained in sections II and III of this document, FDA has concluded that premarket approval is still necessary to provide reasonable assurance of the safety and effectiveness of rigid gas permeable lenses, and that FDA may not reclassify them into either class I or class II. Accordingly, there is no need to reexamine the transitional notice in the context of this rulemaking proceeding. FDA agrees that section 513(e) of the act permits, but does not require, that a regulation issued under that section take effect on the effective date of a performance standard established for the device that is the subject of the regulation.

59. One comment states that FDA should have prepared a regulatory impact analysis under Executive Order 12291 for the proposed rule and must prepare one for any final rule that the agency might issue.

FDA disagrees with this comment. Under Executive Order 12291, an agency is required to prepare a preliminary regulatory impact analysis if a proposed rule is determined to be a "major rule" as defined in the Order. Section 1(b) of Executive Order 12291 defines a "major rule" as any regulation that is likely to result in:

(1) An annual effect on the economy of $100 million or more;

(2) A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or

(3) Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

As stated in the preamble to the proposed rule (47 FR 53410), reclassification of rigid gas permeable lenses would have resulted in increased competition, decreased costs, and an increase in employment and also would have allowed small contact lens firms to compete in the world market. Therefore, the agency concluded that the proposed rule would not be a major rule within the meaning of the Order and that a regulatory impact analysis was not required to be prepared. Because there is no final rule in this proceeding, the requirements of the Order do not apply.

IV. References

The following references have been placed on file in the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857, where they may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

1. Tanaka, U.S. Patent No. 4,139,692, "Copolymer for Contact Lens, Its Preparation and Contact Lens Made Thereof," February 13, 1979.

2. Lippman, Jay L. "Gas Permeable Contact Lenses: An Overview," *Contact Lens*, Vol. 7, Number 1, 15-25, January-March, 1981.

3. National Electronic Injury Surveillance System, U.S. Consumer Product Safety Commission, National Injury Information Clearinghouse: Product Code 1676—Contact lenses, not specified, 1981; Product Code 1675—Contact lenses, soft, 1981; Product Code 1674—Contact lenses, hard, 1981.

List of Subjects in 21 CFR Part 886

Medical devices, Ophthalmic devices.

PART 886—OPHTHALMIC DEVICES

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 513, 701(a), 52 Stat. 1055, 90 Stat. 540-546 (21 U.S.C. 360c, 371(a))) and under authority delegated to the Commissioner (21 CFR 5.10), the proposed rule on reclassification of daily wear spherical contact lenses consisting of rigid gas permeable plastic materials, which was published in the **Federal Register** of November 26, 1982 (47 FR 53402), is withdrawn and the rulemaking proceeding initiated by that proposal is terminated.

Dated: December 19, 1983.

Mark Novitch,

Acting Commissioner of Food and Drugs

[FR Doc. 83-34047 Filed 12-22-83 8:45 am]

BILLING CODE 4160-01-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Secretary

24 CFR Part 8

[Docket No. R-83-528; FR-1910]

Nondiscrimination Based on Handicap in Federally Assisted Programs and Activities of the Department of Housing and Urban Development

AGENCY: Office of the Secretary, HUD.

ACTION: Notice of availability of summary of public comments.

SUMMARY: HUD is making available to the public copies of a summary of the public comments it received in response to its proposed rule implementing Section 504 of the Rehabilitation Act of 1973.

Because the issues raised both in the proposed rule and the comments are complex and because there is a diversity of interests affected by this rule, the Department has decided to make the summary prepared for internal use available for the information of the public.

ADDRESS: Copies of the summary of public comments may be obtained free of charge by requesting a copy by letter, telephone or in person from the Rules Docket Clerk, Room 10278, Office of General Counsel, Department of Housing and Urban Development, 451 7th Street, SW., Washington, D.C. 20410. The telephone number for the Office of the Rules Docket Clerk is (202) 755-7084. A telecommunications device for deaf persons (TDD) is available at (202) 426-0015. These are not toll free numbers. The summary of public comments will