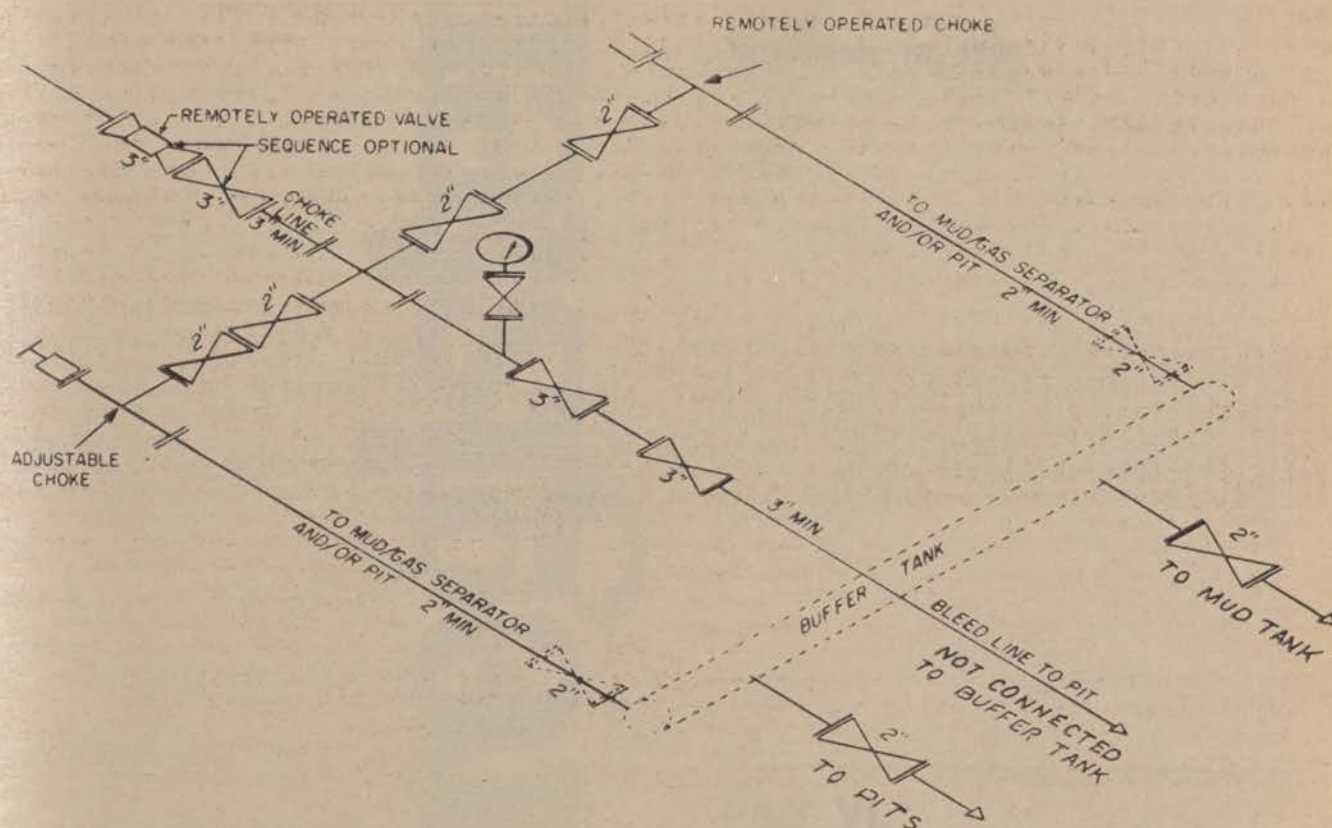
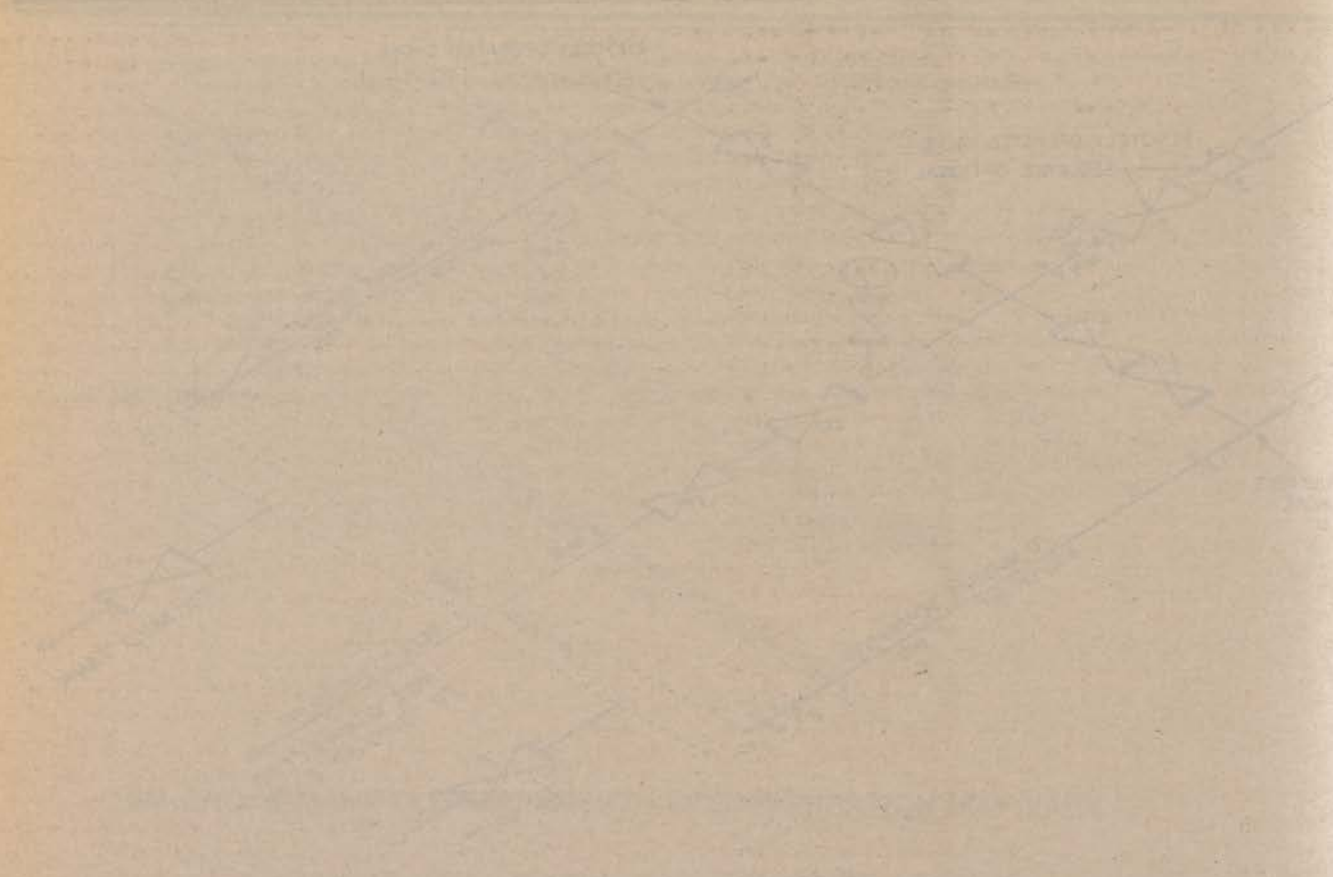




5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, or 15M drawings, it would also be applicable to those situations.



SECTION 1 - GENERAL REQUIREMENTS

1.1. The Contractor shall provide all materials, labor, and equipment necessary for the completion of the work. The Contractor shall be responsible for obtaining all necessary permits and licenses. The Contractor shall maintain a clean and safe work area at all times. The Contractor shall provide a detailed schedule of work and progress to the Owner. The Contractor shall be responsible for the quality of the work and shall provide a warranty for the work. The Contractor shall be responsible for the safety of the work and shall provide a safety plan. The Contractor shall be responsible for the cost of the work and shall provide a cost estimate. The Contractor shall be responsible for the completion of the work and shall provide a completion date. The Contractor shall be responsible for the maintenance of the work and shall provide a maintenance plan. The Contractor shall be responsible for the repair of the work and shall provide a repair plan. The Contractor shall be responsible for the replacement of the work and shall provide a replacement plan. The Contractor shall be responsible for the removal of the work and shall provide a removal plan. The Contractor shall be responsible for the disposal of the work and shall provide a disposal plan. The Contractor shall be responsible for the storage of the work and shall provide a storage plan. The Contractor shall be responsible for the transportation of the work and shall provide a transportation plan. The Contractor shall be responsible for the installation of the work and shall provide an installation plan. The Contractor shall be responsible for the operation of the work and shall provide an operation plan. The Contractor shall be responsible for the maintenance of the work and shall provide a maintenance plan. The Contractor shall be responsible for the repair of the work and shall provide a repair plan. The Contractor shall be responsible for the replacement of the work and shall provide a replacement plan. The Contractor shall be responsible for the removal of the work and shall provide a removal plan. The Contractor shall be responsible for the disposal of the work and shall provide a disposal plan. The Contractor shall be responsible for the storage of the work and shall provide a storage plan. The Contractor shall be responsible for the transportation of the work and shall provide a transportation plan. The Contractor shall be responsible for the installation of the work and shall provide an installation plan. The Contractor shall be responsible for the operation of the work and shall provide an operation plan.

Environmental Protection Agency

Friday
November 18, 1988

Part VI

Environmental Protection Agency

Intent To Cancel Certain Pesticide
Registrations; Notice

ENVIRONMENTAL PROTECTION AGENCY

[OPP-64010; FRL-3479-1]

Intent To Cancel Certain Pesticide Registrations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of intent to cancel.

SUMMARY: EPA is issuing a notice of intent to cancel certain pesticide registrations under section 6(b) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and 40 CFR 152.122. The registrations which the Agency intends to cancel are held by registrants whom the Agency, after a good faith effort, has been unable to contact. Persons adversely affected by this notice may request a hearing in accordance with the provisions of 40 CFR Part 164. An adversely affected person may avoid a hearing and maintain his registration in effect by supplying a correct and current address within the applicable 30 day period.

DATES: All registrations will be cancelled at the end of 30 days from the date of publication or receipt of this notice by registrants, unless the Agency is provided with a correct and current address of an affected registrant.

A request for a hearing by an affected registrant or the registrant's correct and current address must be received by the Agency on or before December 19, 1988, or 30 days after receipt by mail by the affected registrant of this notice, whichever is the later date.

A request for a hearing submitted by any other adversely affected persons must be received on or before December 19, 1988.

ADDRESS: Hearing requests must be submitted to: Hearing Clerk (A-110), Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT:

By mail: Sherada Hobgood, Registration Support Branch, Registration Division (TS-767C), Office of Pesticide Programs, Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

Office location and telephone number: Room 724A, Crystal Mall Building #2, 1921 Jefferson Davis Highway, Arlington, VA (703-557-7700).

SUPPLEMENTARY INFORMATION: Over the years, EPA has been unable to contact certain pesticide registrants at the addresses on file at the Agency or appearing on current pesticide product labels. EPA's inability to communicate with these registrants impairs the Agency's ability to discharge its

statutory mandate to regulate pesticide products and their impact on the environment. Furthermore, it creates an undesirable situation because some registrants may unknowingly be in violation of the Act and escape burdens assumed by other registrants in compliance with the Act.

Section 6(b) of FIFRA allows the Administrator to issue a notice of intent to cancel a pesticide's registration if that " * * * pesticide or its labeling or other material required to be submitted does not comply with the provisions of this Act * * *."

Section 3(c)(1)(A) of FIFRA make it a condition of registration that a registrant's address be filed with the Agency and appear on the label of the registrant's pesticide product. 40 CFR 152.122 requires that a registrant must keep the Agency informed of his current name and address of record. If the Agency's good faith attempts to contact the registrant are not successful, the Agency will issue in the **Federal Register** a notice of intent to cancel all products of the registrant under FIFRA Sec. 6(b). The registrant must respond within 30 days requesting that the registration be maintained in effect, and providing his name and address of record. If no response is received, the cancellations will become effective at the end of the 30 days without further notice to the registrant.

Persons adversely affected by this notice may request a hearing in accordance with the provisions of 40 CFR Part 164. An adversely affected person may avoid a hearing and maintain his registration in effect by supplying a correct and current address within the applicable 30 day period.

The impact of these cancellations on the agricultural economy is difficult to determine. It is believed that some or all of the pesticide products subject to this cancellation action are no longer on the market. Some of the pesticide products have no agricultural uses. At worst, the impact on the agricultural economy is expected to be slight.

Pursuant to section 6(b), the Secretary of Agriculture has reviewed this notice and has no comments. The Science Advisory Panel has waived its right (under section 25(d)) to review this notice.

Registrations Subject to Cancellation

The following registrations are subject to cancellation under this notice.

Registrant: Bradford MFG Company
Address: 149 Rosedale, Jackson, TN 38301

Registration Nos.: 58-10

Registrant: Red Devil Corporation

Address: 1609 17 N 14th St., St. Louis, MO 63106

Registration Nos.: 111-1

Registrant: Trager MFG Company Inc.
Address: 1200 Wheeler Avenue, Scranton, PA 18510

Registration Nos.: 274-30-31-34

Registrant: Nash & Kinsella Laboratories

Address: 9216 Clayton Rd., St. Louis, MO 63124

Registration Nos.: 427-22-48

Registrant: State Chemical Company
Address: Box 310, Amarillo, TX 79105

Registration Nos.: 438-7-15-28-29-31-32-52-55-57-60-64 thru 67-69

Registrant: Amsco Division Union Oil Company of California
Address: 825 SE. Thornton, Minneapolis, MN 55414

Registration Nos.: 528-51

Registrant: Carbola Chemical Co. Inc.
Address: 1877 State St., Watertown, NY 13601

Registration Nos.: 607-38-39-43-44

Registrant: Syracuse Pharmacal Company Inc.

Address: C/O Leager Labs Inc., 4161 Beck Ave., St. Louis, MO 63116

Registration Nos.: 832-1

Registrant: Theodore Meyer Inc.
Address: 922 Callowhill St., Philadelphia, PA 19123

Registration Nos.: 854-6-10-12-16

Registrant: Chemical Service
Address: 11250 W. Addison St., Franklin Park, IL 60131

Registration Nos.: 900-6-24-27-51-52-63-67-74 thru 79, 86-92-93-95-97 thru 99, 101-102-104-105-107

Registrant: UDDO Products
Address: P.O. Box 29048, New Orleans, LA 70189

Registration Nos.: 1123-3-4-6

Registrant: Central Chemical Company Inc.

Address: 358 Walnut St., Memphis, TN 38102

Registration Nos.: 1140-2

Registrant: Industrial Sanitation Company

Address: P.O. Box 471, East Chicago, IN 46312

Registration Nos.: 1174-1

Registrant: Janitors Supply House Inc.
Address: 617-619 W. Pratt St., Baltimore, MD 21208

Registration Nos.: 1487-6-13

Registrant: Duraclean Company
Address: 839 Waukegan Road, Deerfield, IL 60015

Registration Nos.: 1550-4

Registrant: Rogers Insect Powder Company

- Address: P.O. Box 6447, Mobile, AL 33606
 Registration Nos.: 1591-1
 Registrant: Trio Chemical Works Inc.
 Address: 8321 Commonwealth Blvd., Bellerose, NY 11426
 Registration Nos.: 1783-1 thru 3, 7 thru 9, 17-19-23-26-31-38-39-43-56-61-63-64-65-66-69-70-72-73-75
 Registrant: Sanitary Products Company
 Address: 5106 E. 27th St., Kansas City, MO 64127
 Registration Nos.: 1795-3
 Registrant: Pittsburgh Chemical Lab
 Address: Century Bldg., Pittsburgh, PA 15222
 Registration Nos.: 2037-5
 Registrant: Nykon Chem. Corp.
 Address: 15 Macquesten Pky S., Mt. Vernon, NY 10550
 Registration Nos.: 2361-5
 Registrant: Atlanta Chemical Company Inc.
 Address: P.O. Box 237, Jamestown, NC 27282
 Registration Nos.: 2443-1
 Registrant: Michel & Pelton Co.
 Address: 111 Broadway, Suite 206, New York, NY 10006
 Registration Nos.: 2617-1-9-13-14-20-24-27-29-35-37-38
 Registrant: MACO Laboratories
 Address: 558 James Ave. SE., Grand Rapids, MI 49500
 Registration Nos.: 2741-2
 Registrant: Carter Insec & Chemical Company Inc.
 Address: P.O. Box 127, Teachey, NC 28464
 Registration Nos.: 2917-2-8-11-25-28-29-31-37-55-68-69
 Registrant: The Bushnell Company
 Address: 1760 Eleanor Ave., St. Paul, MN 55116
 Registration Nos.: 2984-1 thru 3
 Registrant: R.R. Brand, Inc.
 Address: 638 Papworth Avenue, Metairie, LA 70005
 Registration Nos.: 3336-1
 Registrant: Consumers Oil Company
 Address: P.O. Box 548, 2713 River Ave., Rosemead, CA 91771
 Registration Nos.: 3528-2-4
 Registrant: Arlenge Laboratories
 Address: 175 Pearl St., Brooklyn, NY 11201
 Registration Nos.: 3735-4-5-8-19-22-23-33
 Registrant: Southern Agricultural Chemicals Inc.
 Address: Rt. 1, Cades, SC 29518
 Registration Nos.: 3743-153-182 thru 184, 188-189-192-220-254-255-262-263-275-280-281-287-292-299-321-322-323-326-330-331-335 thru 337
 Registrant: Economy Products
 Address: P.O. Box 427, Shenandoah, IA 51601
 Registration Nos.: 3770-219
 Registrant: Chevron Oil Company
 Address: P.O. Box 1446, Louisville, KY 40201
 Registration Nos.: 3775-1-2
 Registrant: American Firestone Corporation
 Address: 825 Third Avenue, New York, NY 10022
 Registration Nos.: 3840-5
 Registrant: Clarke John & Company Inc.
 Address: 420 Lexington Avenue, New York, NY 10017
 Registration Nos.: 4085-2-3
 Registrant: Noxal Products Company
 Address: 633 C W Valencia Dr., Fullerton, CA 92632
 Registration Nos.: 4162-1
 Registrant: Eddington Laboratories Inc.
 Address: P.O. Box 86, Cornwell Heights, PA 19020
 Registration Nos.: 4302-2
 Registrant: Zenith Chemical Corp.
 Address: 175 Mt. Pleasant Ave., Newark, NJ 07104 Attn: Rose
 Registration Nos.: 4328-11 thru 14, 20-23-26-27-30-33-36
 Registrant: Falleck Chemical Corporation
 Address: 460 Park Ave., New York, NY 10022
 Registration Nos.: 4343-3
 Registrant: Nock RJ
 Address: New Orleans, LA 70140
 Registration Nos.: 4489-2
 Registrant: Clean Home Products
 Address: 2805 Locust St., St. Louis, MO 63100
 Registration Nos.: 4600-4-6-8-9
 Registrant: Melvin E. Wyant
 Address: Johnny Cake Ridge, Mentor, OH 44060
 Registration Nos.: 4636-4
 Registrant: Lustray Labs, Inc.
 Address: 964 Franklin Ave., Brooklyn, NY 11225
 Registration Nos.: 4646-1
 Registrant: California Vet Supply Company
 Address: 10621 Burbank Blvd., N. Hollywood, CA 91601
 Registration Nos.: 4902-1
 Registrant: Southeastern Chemical Corporation
 Address: P.O. Box 1026, Orangeburg, SC 29115
 Registration Nos.: 4977-107
 Registrant: Conway Soap Products Company
 Address: 255 W. 79th Street, Chicago, IL 60620
 Registration Nos.: 5366-2-3-7
 Registrant: Farmingdale Garden Labs
 Address: 136 Verdi St., Farmingdale, NY 11735
 Registration Nos.: 5605-176-190-191-1594
 Registrant: Plant Marvel Labs
 Address: 624 W. 119th St., Chicago, IL 60628
 Registration Nos.: 5617-1-2
 Registrant: Custom Laboratories Inc.
 Address: Box 2132, Spokane, WA 99210
 Registration Nos.: 5913-2
 Registrant: De Corporation
 Address: 940 Meadow Oaks Dr., Arlington, TX 76010
 Registration Nos.: 6189-1
 Registrant: Sanico
 Address: 13143 Saticoy St., N. Hollywood, CA 91605
 Registration Nos.: 6190-2 thru 4, -6-7-9-10-14-16-17-18-26-27
 Registrant: RO DI Chemical Company Incorporation
 Address: 1460 W. Montrose, Chicago, IL 60640
 Registration Nos.: 6339-10-12
 Registrant: Life O Fabric Chem. Company
 Address: 2010 Balboa, Dallas, TX 75224
 Registration Nos.: 6551-3-4
 Registrant: Batesville Chemical Company
 Address: 205 Pamela St., Batesville, MS 38606
 Registration Nos.: 6607-4
 Registrant: Central Exterminating & Chem Co.
 Address: 365 Central Park Ave., Yonkers, NY 10704
 Registration Nos.: 6614-3 thru 5
 Registrant: Clover Products
 Address: 146 University Ave., Rochester, NY 14605
 Registration Nos.: 6646-4
 Registrant: Griffin Chem. Company
 Address: 1326 South Seventh Street, Louisville, KY 40208
 Registration Nos.: 6799-6
 Registrant: Dawson Chemical Company Inc.
 Address: 1525 N. Post Oak Road, Houston, TX 77055
 Registration Nos.: 6874-2-5-6
 Registrant: Dill J J Company
 Address: Box 788, Kalamazoo, MI 49005
 Registration Nos.: 6900-1-2-4 thru 6, -8-9-12-16-18-25-26-29-36 thru 39, 42-43-46-53 thru 55, 58-59-65-75-82-84-85-88-94-103-107-109-110-113-120 thru 122, -130-132 thru 134, -136-148
 Registrant: Naftone Inc.
 Address: 425 Park Ave., New York, NY 10022
 Registration Nos.: 6948-10
 Registrant: National Allied Products Co.
 Address: P.O. Box 7348, Omaha, NE 68107
 Registration Nos.: 6971-1-9

Registrant: Laurence & CO E F
Address: 42 Whitney St., Northboro, MA
01532

Registration Nos.: 7184-1

Registrant: Bangels Herold Company
Inc.

Address: Key Hwy & Boyle St.,
Baltimore, MD 21230

Registration Nos.: 7263-1

Registrant: Intree Corporation
Address: 1212 Washington, Muscatine,
IA 52761

Registration Nos.: 7452-1

Registrant: Kem Labs Incorporated
Address: 1 Graham Lane, Lodi, NJ 07644

Registration Nos.: 7506-112

Registrant: Modern Pool Products Inc.
Address: 177 Greenwich Ave., Stamford,
CT 06902

Registration Nos.: 7531-2-3-5-7-9

Registrant: New System Ext. Inc.
Address: Box 8422, Santurce, PR 00910

Registration Nos.: 7612-1

Registrant: Marval Chem. Company
Address: 929 Broadway, Lorain, OH
44052

Registration Nos.: 7614-2

Registrant: Chem-O-Craft Specialties
Address: Box 208, Argo, IL 60501

Registration Nos.: 7818-1

Registrant: Calahan Inc. H A
Address: 138 Water St., Box 448,
S Norwalk, CT 06856

Registration Nos.: 7854-1-2

Registrant: Eagle Exterm. Serv.
Address: 1007 N 46th St., Philadelphia,
PA 19100

Registration Nos.: 7978-2

Registrant: SCP Company
Address: 12 Quincy St., Nashua, NH
03104

Registration Nos.: 8055-1

Registrant: Laboratory Essentials Inc.
Address: P.O. Box 91, W. Islip, NY 11795

Registration Nos.: 8109-1-6

Registrant: Aero-Dyne Manufacturing
Corporation
Address: 3505 W. Main, Emmetsburg, IA
50536

Registration Nos.: 8111-3-5

Registrant: Aggie Chemical Industry
Address: P.O. 8335, San Antonio, TX
78208

Registration Nos.: 8127-22

Registrant: Scott Laboratory
Address: 1595 Tarrytown St., San Mateo,
CA 04402

Registration Nos.: 8128-1

Registrant: Reliance Chem. Corp.
Address: 120 11th St., Charlottesville,
VA 22903

Registration Nos.: 8245-2

Registrant: T C Products Company
Address: P.O. Box 2132, Madison, WI
53705

Registration Nos.: 8487-7 thru 11

Registrant: Pro-Specialties, Inc.
Address: 7754 W. Harwood Avenue,
Wauwatosa, WI 53213

Registration Nos.: 8550-1-4-6 thru 23,-
28-32

Registrant: Zewel Corp.
Address: P.O. Box 112, La Mirada, CA
90637

Registration Nos.: 8684-2

Registrant: Wallace Chem. Company
Address: 24600 S. Main St., Carson, CA
90749

Registration Nos.: 8703-1-3 thru 5

Registrant: Montrose Chem. Corp. of CA
Address: P.O. Box E. 2401 Morris Ave.,
Union, NJ 07083

Registration Nos.: 8775-2 thru 4

Registrant: Clover Farm Stores Corp.
Address: 2135 Columbus Road,
Cleveland, OH 44113

Registration Nos.: 8813-4

Registrant: Syrodelto Chem. Inc.
Address: 501 W. Fayette St., Syracuse,
NY 13204

Registration Nos.: 8931-3

Registrant: The Broadway Supply
Company
Address: 7525 Bessemer Ave.,
Cleveland, OH 44127

Registration Nos.: 8955-8

Registrant: Brown Incorporated E L
Address: 267 E. Valley Blvd., Rialto, CA
92376

Registration Nos.: 9093-2

Registrant: Moraine Ind. Inc.
Address: 1212 W. Second St.,
Oconomowoc, WI 53066

Registration Nos.: 9239-5

Registrant: Duke Laboratories
Address: 10801 Linn Station Road,
Louisville, KY 40223

Registration Nos.: 9294-1

Registrant: Industrial Chemical & Supply
Company
Address: Box 4706, Tampa, FL 33607

Registration Nos.: 9356-1 thru 3

Registrant: World Wide Labs Inc.
Address: P.O. Box 22144, Tampa, FL
33622

Registration Nos.: 9372-5-6-10

Registrant: Atlas Paint & Varnish
Company
Address: 32-50 Buffington Ave.,
Irvington, NJ 07111

Registration Nos.: 9430-2

Registrant: Dri-Cide Inc.
Address: 6608 San Fernando Road,
Glendale, CA 91201

Registration Nos.: 9435-1

Registrant: Elgene Chemicals Inc.
Address: 327 Northrup Ave.,
Mamaroneck, NY 10543

Registration Nos.: 9494-1 thru 4

Registrant: Belleren Research Corp.

Address: 354 Main St., Saugerties, NY
12477

Registration Nos.: 9575-2

Registrant: Douglas Chemical Division
Address: Deico Inc., 1 Lexington Ave.,
Beth Page, NY 10714

Registration Nos.: 9587-4

Registrant: MacNair L E
Address: 15 Franklin St., Houlton, ME
04730

Registration Nos.: 9592-3

Registrant: Bio. Scientific Company
Address: Box 1155, Rancho Santa Fe, CA
92067

Registration Nos.: 9611-1 thru 3

Registrant: Smith William Armstrong
Company
Address: Box 868, East Point, GA 30044

Registration Nos.: 9624-2-4-5

Registrant: Glenn LW Termite & Pest
Control
Address: 3305 24th St., W. Bradenton, FL
33505

Registration Nos.: 9625-1

Registrant: Ramrod Chemicals
Address: P.O. Box 2640, Dallas, TX
75221

Registration Nos.: 9681-5 thru 7

Registrant: Arsan Research Inc.
Address: 8715 Hidden Lake Dr., Howell,
MI 48843

Registration Nos.: 9682-1

Registrant: All American Swimming
Pool Manufacturing Company
Address: 8606 Blue Ash Rd., Cincinnati,
OH 45242

Registration Nos.: 9705-1

Registrant: Veterinary Division
Address: Pharmaceutical Research
Corp., North Miami, FL 33161

Registration Nos.: 9734-4

Registrant: Sanitation Services
Address: 194 Sterling Ave., Yonkers, NY
10704

Registration Nos.: 9761-1

Registrant: Keystone Veterinary Supply
Company
Address: 8508 Widener Road,
Philadelphia, PA 19118

Registration Nos.: 9766-1-2

Registrant: W-B Chemical Company
Inc.
Address: 15 Macquesten Pkwy S., Mount
Vernon, NY 10550

Registration Nos.: 9771-1

Registrant: Kendall Company Textile
Division
Address: Box 1828, Charlotte, NC 28201

Registration Nos.: 9778-1

Registrant: Carman Conley Inc.
Address: 4321 W. 32nd St., Chicago, IL
60623

Registration Nos.: 9834-1

Registrant: International Raticide
Company

- Address: 617 Willow Glen Road, Santa Barbara, CA 93105
 Registration Nos.: 9940-1
 Registrant: Joseph E R Company Inc.
 Address: P.O. Box 189, Norristown, PA 19404
 Registration Nos.: 10044-1
 Registrant: Ortho Industries Inc.
 Address: 49 Lawton St., New Rochelle, NY 10801
 Registration Nos.: 10046-1
 Registrant: Valley Mills
 Address: Box 1099, Vicksburg, MS 39180
 Registration Nos.: 10181-1
 Registrant: Community Pest Control
 Address: 3219 N. 30th St., Omaha, NE 68111
 Registration Nos.: 10281-1
 Registrant: Rodoon Company
 Address: 1668 E. Sunshine, Springfield, MO 65804
 Registration Nos.: 10288-1
 Registrant: Professional Chemical Company Inc.
 Address: P.O. Box 94071, 4517 Yale St., Houston, TX 77018
 Registration Nos.: 10290-12-17
 Registrant: The Desachem Company, Inc.
 Address: 29 Riverside Ave., Bldg. No. 17, Newark, NJ 07104
 Registration Nos.: 10321-1-2
 Registrant: Multa Chem. Inc.
 Address: 11026 Endicott, Houston, TX 77035
 Registration Nos.: 10439-1
 Registrant: Mor-Par Company
 Address: 7019 Coleshire Dr., Dallas, TX 75232
 Registration Nos.: 10489-1
 Registrant: Vamco Products Inc.
 Address: 438 Springfield Pike, Cincinnati, OH 45317
 Registration Nos.: 10545-1
 Registrant: Extermin-All
 Address: 4226 Ebbtide, Houston, TX 77045
 Registration Nos.: 10548-2
 Registrant: Rheyman-National
 Address: 2828 Stonebrook St., Irving, TX 75060
 Registration Nos.: 10627-1
 Registrant: Ecology Products Corp.
 Address: P.O. Box 3349, Brownsville, TX 78520
 Registration Nos.: 10636-2
 Registrant: L & M Mineral Company
 Address: P.O. Box 756, Brownwood, TX 76801
 Registration Nos.: 10640-1
 Registrant: W & B Div. of W W B Co.
 Address: 21732 Kaneohe Lane, Huntington Beach, CA 92646
 Registration Nos.: 10658-1
 Registrant: Morehead Ind Inc.
 Address: 273 Hayden Rowe, Hopkinton, MA 01748
 Registration Nos.: 10692-4-5
 Registrant: Lawn-A-Mat Chem & Equip Corp.
 Address: 54 Kinkel St., Westbury, NY 11590
 Registration Nos.: 10711-4-6
 Registrant: Prinova Co., Inc.
 Address: 982 Terminal Way, San Carlos, CA 94070
 Registration Nos.: 10742-3 thru 9, 10-16-17
 Registrant: Engineering
 Address: Box 2497, Inverness, FL 32651
 Registration Nos.:
 Registrant: Rush-Hampton Ind.
 Address: 3000 Industrial Park, Longwood, FL 32750
 Registration Nos.: 10824-5
 Registrant: Antical Chemical Inc.
 Address: 770 Exchange St., Rochester, NY 14608
 Registration Nos.: 10833-2-4
 Registrant: Unichem Corp.
 Address: 7 Regal Dr., Huntington, NY 11743
 Registration Nos.: 10859-1
 Registrant: March Chem Company Inc.
 Address: 1464 Sierra Vista Dr., Baton Rouge, LA 70815
 Registration Nos.: 10880-1-3-4
 Registrant: Houston Tack Room Products Inc.
 Address: 2817 West, T.C. Jester, Houston, TX 77018
 Registration Nos.: 11294-1
 Registrant: Three O One Exterminating Service Company
 Address: 211 Lillian Rd., Wilson, NC 27893
 Registration Nos.: 11322-3 thru 5
 Registrant: Patel Inc.
 Address: 205 Westport Road, Kansas City, Mo 64111
 Registration Nos.: 11331-1
 Registrant: Advance Packaging Inc.
 Address: 6410 Mayfair, Houston, TX 77017
 Registration Nos.: 11454-2
 Registrant: Care-Free Swimming Pool Supply Company
 Address: 4170 Grand Ave., Gurnee, IL 60031
 Registration Nos.: 11481-2
 Registrant: Shalco Chemical Corporation
 Address: 1125 Brown Ave., P.O. Box 3443, Toledo, OH 43607
 Registration Nos.: 11511-5-6-19-23
 Registrant: Armstrong Chemical Company
 Address: P.O. Box 669, Hugo, OK 74743
 Registration Nos.: 11528-1-2
 Registrant: Filters International Inc.
 Address: Box 33, Lake Zurich, IL 60047
 Registration Nos.: 11601-2-3
 Registrant: Index Chemical Inc.
 Address: Rd #3, Carranza Rd., Vincentown, NJ 08088
 Registration Nos.: 11672-2
 Registrant: Perma Kill Mfg. Co.
 Address: P.O. Box 665, Sallisaw, OK 74955
 Registration Nos.: 11704-2
 Registrant: Cain Chemical Company
 Address: 1204 Heights, Pasadena, TX 77503
 Registration Nos.: 11716-4
 Registrant: Plas Chem Corp.
 Address: 6300 Bartmer Industrial Drive, St. Louis, MO 63130
 Registration Nos.: 11717-1
 Registrant: Cobis Products Company Inc.
 Address: P.O. Box 4358, Atlanta, GA 30302
 Registration Nos.: 11737-1
 Registrant: Salem Laboratories
 Address: 8325 Chubb Rd., North Vale, MI 48167
 Registration Nos.: 12010-1 thru 5
 Registrant: Robinette, Inc.
 Address: 975 Lake Rd., Media, OH 44256
 Registration Nos.: 12015-1-2-14-15-16
 Registrant: Colony Corporation of America
 Address: 1399 East 98th Street, Chicago, IL 60628
 Registration Nos.: 12146-1
 Registrant: Corbin Chemical Corp.
 Address: 1400-04 Coney Island Ave., Brooklyn, NY 11230
 Registration Nos.: 12325-2-3
 Registrant: Kleenco Products
 Address: 13233 NE., 16th Street, Bellevue, WA 98005
 Registration Nos.: 12388-1 thru 5
 Registrant: Springbok Chemical Company Inc.
 Address: P.O. Box 398, Pendleton, OR 97801
 Registration Nos.: 12434-3
 Registrant: Aqua Power Inc.
 Address: 2973 Riverland Rd., Fort Lauderdale, FL 33312
 Registration Nos.: 12467-1-2
 Registrant: Dixie Compound Works
 Address: 434 Aberdeen Avenue, Dayton OH 45419
 Registration Nos.: 12475-1
 Registrant: Parks Enterprises Inc ME
 Address: P.O. Box 966, Temecula, CA 92390
 Registration Nos.: 13765-1 thru 3
 Registrant: Dianol Inc.
 Address: P.O. Box 10636, St. Petersburg, FL 33733
 Registration Nos.: 13794-2
 Registrant: Wayne County Pest Control Inc
 Address: 18269 Wyoming Ave., Detroit, MI 48221

Registration Nos.: 13811-2

Registrant: Form-A-Chem, Inc.
Address: 2505 Metro Blvd., Maryland Heights, MO 63043

Registration Nos.: 13881-3 thru 5

Registrant: Acrocem Inc.
Address: Box 388, Livingston, TX 77351

Registration Nos.: 13892-1

Registrant: Clear Pool Maintenance Inc.
Address: Box 9586, Riviera Beach, FL 33404

Registration Nos.: 14639-1

Registrant: Chem Con
Address: 1126 McGavock, Nashville, TN 37217

Registration Nos.: 14648-3-5

Registrant: Dyna Chem Corporation
Address: 58 Lincoln Hwy., Pennel, PA 19047

Registration Nos.: 14799-3

Registrant: The McKerson Corp
Address: 1500 South 5th Street, Minneapolis, MN 55408

Registration Nos.: 14895-1

Registrant: Corporated Brands Sales Inc.
Address: P.O. Box 42653, Evergreen Park, IL 60642

Registration Nos.: 14943-5

Registrant: Mother's Root Destroyer
Address: P.O. Box 47622, Dallas, TX 75247

Registration Nos.: 15015-1

Registrant: Key Chem Products Inc.
Address: 433 Government St., Baton Rouge, LA 70802

Registration Nos.: 15442-1-2

Registrant: Southland Agricultural Chemical Company
Address: P.O. Box 6207, Montgomery, AL 36106

Registration Nos.: 15575-11-17

Registrant: Davis Supply Company
Address: 2134 S. Saginaw, Flint, MI 48503

Registration Nos.: 16151-1

Registrant: Midich Prod Sales Company
Address: 3940 Dereimer Ave., Bronx, NY 10466

Registration Nos.: 18187-1

Registrant: Nationwide Chemical Corp.
Address: 146 Midland Avenue, Kearny, NJ 07032

Registration Nos.: 18684-2

Registrant: Emac Corporation
Address: 1187 Milldale Rd., Cheshire, CT 06410

Registration Nos.: 19223-1-2

Registrant: National Cosmetic Labs Inc.
Address: 7712 Densmore Ave., Van Nuys, CA 91406

Registration Nos.: 19762-1-2

Registrant: Old Hickory Medicine Co. Inc.
Address: P.O. Box 33, 5813 Lee Highway, Chattanooga, TN 37421

Registration Nos.: 21337-2

Registrant: C & H Chemical Company
Address: 475 N. Cleveland Ave., St. Paul, MN 55107

Registration Nos.: 21737-1-2

Registrant: Lucas Products Company
Address: State and Jackson Sts, Bedford, LA 50833

Registration Nos.: 23562-1

Registrant: Interstate Paint Corporation
Address: P.O. Box 1038, Brunswick, GA 31520

Registration Nos.: 24739-1

Registrant: Amform Company
Address: 4952 Sequoi Rd., Memphis, TN 38117

Registration Nos.: 25877-1

Registrant: McKenzie & Rogers
Address: Seattle, WA 98111

Registration Nos.: 26153-1

Registrant: Copper State Chemical Company
Address: Box 1110, Tucson, AZ 85702

Registration Nos.: 26494-1

Registrant: Preferred Products Company
Address: 620 Ave. O, Winter Haven, FL 33880

Registration Nos.: 26876-1

Registrant: Colt Chemical Corporation
Address: 2212 Hawkins Street, Charlotte, NC 28203

Registration Nos.: 27036-1-4-5

Registrant: Ani-Sheid Inc.
Address: 5401 Pamela Drive, Louisville, KY 40219

Registration Nos.: 30320-1

Registrant: Woods Paul Company Inc.
Address: 21 Highland Ave, Needham, MA 02192

Registration Nos.: 30600-2

Registrant: Bionomical Chemicals & Services Inc.
Address: 1003 Pineville Rd., Chattanooga, TN 37405

Registration Nos.: 30948-4-6-8 thru 12, 29-32-33-34

Registrant: Oil Chem International
Address: PO Box 627, Gonzales, LA 70737

Registration Nos.: 30955-4

Registrant: Graham Service Corp.
Address: 401 N.E. 62nd St., Miami, FL 33138

Registration Nos.: 31183-1

Registrant: VO-Toys Inc.
Address: Bronx, NY 10451

Registration Nos.: 31445-2-5-6-9

Registrant: Sunshine Products Company
Address: 2310 SO. 27th St., Milwaukee, WI 53218

Registration Nos.: 31867-1

Registrant: Swimming Pool Doctor
Address: 1322 N. Mill Street, Orlando, FL 32803

Registration Nos.: 32043-1

Registrant: ABR Enterprises
Address: 7812 Chestnut Way, Pleasanton, CA 94566

Registration Nos.: 32172-1

Registrant: Water Science Inc.
Address: 6267 North Blackstone Ave., Fresno, CA 93710

Registration Nos.: 32799-1

Registrant: Commander Chemical & Supply Co. Inc.
Address: 443 South Central Ave., Phoenix, AZ 85004

Registration Nos.: 33016-2

Registrant: Chemik Labs Inc.
Address: P.O. Box 24884, 1608 Day Star Drive, Dallas TX 75224

Registration Nos.: 33428-1

Registrant: Hawthorne Chemical Co.
Address: P.O. Box 11555, St. Louis, MO 63105

Registration Nos.: 33442-813

Registrant: Power Clean Products Inc.
Address: 200 Sherwood Drive, Wood Dale, IL 60191

Registration Nos.: 33494-1

Registrant: Agri Future Company
Address: 15708 Loop Road, Burnsville, MN 55337

Registration Nos.: 33861-1

Registrant: S & S Pools & Hockey
Address: 1176 Union Road, West Seneca, NY 14224

Registration Nos.: 34088-1

Registrant: Ecological & Specialty Prod. Co.
Address: 1188 Tice Place, Westfield, NJ 07090

Registration Nos.: 34538-1

Registrant: Supreme Chemicals Inc.
Address: 989 Montague Expressway, Milpitas, CA 95035

Registration Nos.: 34632-1

Registrant: Foresight of Omaha, Inc.
Address: 2900 F. St., Omaha, NE 68111

Registration Nos.: 34722-1

Registrant: Puff Industries
Address: Brooklyn, NY 11223

Registration Nos.: 34737-1

Registrant: Bio-Dyne Industries
Address: 24201 Frampton Avenue, Harbor City, CA 90710

Registration Nos.: 34850-3

Registrant: 50th State Cockroach Killer
Address: P.O. Box 8006, Honolulu, HI 96815

Registration Nos.: 34853-1

Registrant: Roberts Proprieties Inc.
Address: 575 Madison Avenue, New York, NY 10022

Registration Nos.: 34882-2-3

- Registrant:** MG Scientific Gas
Address: Div of Burdett Oxygen, One Schukkill Ave, Norristown, PA 19404
Registration Nos.: 35084-1
- Registrant:** Winco Chemical Company
Address: P.O. Box 10692, Jackson, MS 39209
Registration Nos.: 35138-2-3-5-9, 11 thru 24, 26-29-30-31-33-34, 36 thru 42, 45-46-48-51-52-53-55-59
- Registrant:** Leisure Aid
Address: P.O. Box 7348, Omaha, NE 68107
Registration Nos.: 35284-1-2
- Registrant:** Gable-Tite Products Co., Inc.
Address: 3790 NW., 7 Box 470096, Miami, FL 33147
Registration Nos.: 35302-2
- Registrant:** International Trade Service Inc.
Address: 337 High St., Burlington, NJ 08016
Registration Nos.: 35314-1
- Registrant:** Arizona Sulphur Company
Address: 5340 West Bethany Home Road, Box 863, Glendale, AZ 85311
Registration Nos.: 35377-1-2
- Registrant:** E Z Bleach Corporation
Address: 2 Washburn Street, New Bedford, MA 02742
Registration Nos.: 35483-20002
- Registrant:** The America Company
Address: P.O. Box 846, Milton, FL 32570
Registration Nos.: 35904-1
- Registrant:** Water Equipment Manufacturers, Inc.
Address: 701 W. Tropical Way, Broward City-Plantation, FL 33312
Registration Nos.: 35920-1
- Registrant:** Irwin Associates, Inc.
Address: P.O. Box 20636, St. Petersburg, FL 33742
Registration Nos.: 35959-4-5
- Registrant:** Aerosol West
Address: 2595 Katherine Ave., Ventura, CA 93001
Registration Nos.: 35988-1
- Registrant:** Crown Chemical Company
Address: 5280 Merrick Road, Massapequa, L.I., NY 11758
Registration Nos.: 36534-1 thru 3
- Registrant:** Bay Chemical Company
Address: 571 Airport Rd., 3 No., Naples, FL 33940
Registration Nos.: 36829-1
- Registrant:** Union Pool Marts, Inc.
Address: 2154 Eureka Rd., Wyandotte, MI 48192
Registration Nos.: 36919-2
- Registrant:** Hudson's Pest Control Products
Address: 1754 Meldrum Street, Detroit, MI 48207
Registration Nos.: 37103-1
- Registrant:** Transbas
Address: 1525 Lockwood Road, Billings, MT 59101
Registration Nos.: 37507-1
- Registrant:** OMTAR Chemicals Ltd
Address: 555 13th Street, NW., Washington, DC 20004
Registration Nos.: 37585-1
- Registrant:** Harrell Swimming Pool Service
Address: 597 W. Hickpochee Ave., La Belle, FL 33935
Registration Nos.: 37656-1-3
- Registrant:** Waters Chemicals
Address: 729 Beach Place, Mundelein, IL 60060
Registration Nos.: 37753-1
- Registrant:** Aqua Clear Pools Inc.
Address: 13377 W. Dixie Hwy, N. Miami, FL 33161
Registration Nos.: 37791-1
- Registrant:** Preferred Pool Services
Address: 201 SE 2nd Avenue, Delray Beach, FL 33444
Registration Nos.: 37898-1
- Registrant:** Ed. Carter Swimming Pool Serv.
Address: 1544 NE., 109th St., Miami, FL 33161
Registration Nos.: 37924-1
- Registrant:** International Water Systems
Address: P.O. Box 3371, St. Augustine, FL 32084
Registration Nos.: 38055-1-2
- Registrant:** Pace Limited
Address: P.O. Box 48, Taylor, TX 76574
Registration Nos.: 38174-1-2-4-7-8
- Registrant:** Perfect Pools of Fla. Inc., D/B/A Perfect Pools
Address: 1617 Middle River Dr., Ft. Lauderdale, FL 33305
Registration Nos.: 38221-3
- Registrant:** Ultra White Manufacturing Co.
Address: 329 Northrup Ave., Mamaroneck, NY 10543
Registration Nos.: 38346-1
- Registrant:** Sigma Chemical Corporation
Address: 1957 Temple, Signal Hill, CA 90804
Registration Nos.: 38682-2
- Registrant:** Michael G. Segina
Address: 1637 North Roosevelt Ave., Pasadena, CA 91104
Registration Nos.: 38758-1
- Registrant:** Uni-Lab Corporation
Address: 177 N. Church St., Suite 310, Box 5706, Tucson, AZ 85701
Registration Nos.: 38887-1-2
- Registrant:** Coventry Products
Address: 975 Lake Road, Medina, OH 44256
Registration Nos.: 38918-1 thru 3
- Registrant:** Holiday Industries
Address: 523 E. Rock Island, Grand Prairie, TX 75050
- Registration Nos.:** 39034-2
- Registrant:** Aquabiotics Corporation
Address: 701 Checker Drive, Buffalo Grove, IL 60090
Registration Nos.: 39096-1 thru 3
- Registrant:** Mundobello Chemical Services Co.
Address: 3907 Capitol, Houston, TX 77023
Registration Nos.: 39222-1
- Registrant:** Aqua Treat Chemicals, Inc.
Address: 1166 87th Street, Daly City, CA 94015
Registration Nos.: 39327-17-18
- Registrant:** Filtercold Corporation
Address: 2810 S. 24th Street, Phoenix, AZ 85034
Registration Nos.: 39446-3-4
- Registrant:** Pool Doctors
Address: 1400 Ellis St., Waukesha, WI 53186
Registration Nos.: 39662-2
- Registrant:** Supreme Distributors, Inc.
Address: 1509 E. Washington, Phoenix, AZ 85034
Registration Nos.: 39839-2
- Registrant:** Kratz Laboratories
Address: 1488 Page Industrial Court South, St. Louis, MO 63132
Registration Nos.: 39841-1-3 thru 11
- Registrant:** Chem-Ware Industrial Products, Inc.
Address: 7597 NW., 73rd Terrace, Tamarac, FL 33319
Registration Nos.: 39910-1 thru 12
- Registrant:** Alpha Pool & Marcite Co.
Address: Box 490252, Ft. Lauderdale, FL 33313
Registration Nos.: 39915-1
- Registrant:** Leading Trade Co.
Address: Box 476, Forest Hills, NY 11375
Registration Nos.: 40023-1
- Registrant:** Atlantic Pool Service, Inc.
Address: 3007 N. State Rd., #7, Hollywood, FL 33021
Registration Nos.: 40075-2
- Registrant:** Outdoor World Distributors, Inc.
Address: 329 SW. 14th Ave., Pompano Beach, FL 33060
Registration Nos.: 40080-2
- Registrant:** Leslies Swimming Pool Supplies
Address: 750 East McNab Rd., Pompano Beach, FL 33060
Registration Nos.: 40209-1
- Registrant:** Chemtex International, Ltd.
Address: P.O. Box 336, Prairieville, LA 70769
Registration Nos.: 40275-6 thru 27
- Registrant:** Equine Chemical Co., Inc.
Address: 529 North 43rd West Ave., Tulsa, OK 74127
Registration Nos.: 40322-1
- Registrant:** Admiral Pool Service

Address: 405 South Ridge Rd., Delray Beach, CA 33444
 Registration Nos.: 40352-2
 Registrant: Century Manufacturing Co.
 Address: 40 N. Jefferson St., P.O. Box 544, New Castle, PA 16103
 Registration Nos.: 40382-1
 Registrant: Allfield Chemicals, Inc.
 Address: PO Drawer AA, Lafayette, LA 70502
 Registration Nos.: 40956-1 thru 10
 Registrant: Chemical Solvent Co.
 Address: P.O. Box 487, Birmingham, AL 35201
 Registration Nos.: 40959-1 thru 10
 Registrant: Aqua-Tek Corp.
 Address: 3256 "F" St., San Diego, CA 92102
 Registration Nos.: 41041-1-2
 Registrant: Pro Kem
 Address: 1015 Wall Rd., El Paso, TX 79915
 Registration Nos.: 41067-1
 Registrant: International Chemicals Group
 Address: 5800 Fairfield Ave., Box 6354, Ft. Wayne, IN 46815
 Registration Nos.: 41167-1
 Registrant: Mitchell Gunite Co.
 Address: Box 8927, Jacksonville, FL 32211
 Registration Nos.: 41227-1
 Registrant: Dolphin Pool Service
 Division of Porpoise Pools
 Address: 18789 SW. 105th Pl., Miami, FL 33157
 Registration Nos.: 41379-1
 Registrant: Mister Chemicals
 Address: 160 NW. 24th Street, Boca Raton, FL 33432
 Registration Nos.: 41380-1
 Registrant: RPS Products Inc.
 Address: Box 243-4, N. Elmhurst Rd., Prospect Heights, IL 60070
 Registration Nos.: 41550-1
 Registrant: Atlantis Pool Service & Supply
 Address: Box 928, New Smyrna Beach, FL 32069
 Registration Nos.: 41617-2
 Registrant: Colony Pool Service Inc.
 Address: 3520 Philadelphia Pike, Claymont, DE 19703
 Registration Nos.: 41846-1
 Registrant: S. E. Abbott Maintenance & Repair
 Address: 6068 Chevy Chase St., West Palm Beach, FL 33406
 Registration Nos.: 41959-1
 Registrant: Crystal Clear Pools
 Address: P.O. Box 14417, North Palm Beach, FL 33408
 Registration Nos.: 41966-1
 Registrant: Pool Plaza Inc.
 Address: 20 Stone Road, Rochester, NY 14616

Registration Nos.: 51972-1
 Registrant: Ark Swimming Pool Service Inc.
 Address: 1220 NW. 23rd Ave., Fort Lauderdale, FL 33311
 Registration Nos.: 42006-1
 Registrant: Industrial Systems
 Address: Long Plain Road, Matapoissett, MA 02739
 Registration Nos.: 42087-110
 Registrant: Deta Pools Inc.,
 Address: 19 Jefferson Ave., Fairport, NY 14450
 Registration Nos.: 42108-1
 Registrant: Sure Chemical Corp.
 Address: Route 140, Box 140, Upton, MA 01568
 Registration Nos.: 42263-2-3
 Registrant: Sentinel Chemical Inc.
 Address: 545 Periwinkle Dr., Roswell, GA 30075
 Registration Nos.: 42268-2-3
 Registrant: Fast Supply
 Address: 455 10th St., San Francisco, CA 94103
 Registration Nos.: 42296-1
 Registrant: Allegheny Water Services Corp.
 Address: 2770 DS Harbor Blvd., Santa Ana, CA 92704
 Registration Nos.: 42322-1-2-4-5
 Registrant: Chemical Specifics, Inc.
 Address: 420 Centre St., Nutley, NJ 07110
 Registration Nos.: 42437-1 thru 5
 Registrant: Big A Pool Service
 Address: 533 N.E., 11th Ave., Ft. Lauderdale, FL 33301
 Registration Nos.: 42468-1
 Registrant: Washine Div.
 Address: 935 Allwood Road, Clinton, NJ 07012
 Registration Nos.: 42537-1
 Registrant: Environmental Safe Products Corp.
 Address: 20460 Gramercy Pl., Torrance, CA 90501
 Registration Nos.: 42565-1
 Registrant: Tasha Enterprises
 Address: Box 1232, Chickasha, OK 73018
 Registration Nos.: 42694-1
 Registrant: S & R Plumbing Corp.
 Address: 1075 NE. 79th St., Miami, FL 33138
 Registration Nos.: 42763-1
 Registrant: Custom Chemical Engineering
 Address: 59 Meander Pike, Chatham, IL 62629
 Registration Nos.: 42842-3-4
 Registrant: Masti-Kure Products Co. Inc.
 Address: One Wisconsin Ave., Norwich, CT 06360
 Registration Nos.: 42844-1
 Registrant: Mason Chemical Co.
 Address: 6135 Shirley St., Naples, FL 33942

Registration Nos.: 42959-1
 Registrant: Progressive Hydrology
 Address: Box 584, Lawson, MO 64062
 Registration Nos.: 43018-1-2
 Registrant: Pool World Inc.
 Address: 15326 North Nebraska, Tampa, FL 33612
 Registration Nos.: 43141-1
 Registrant: Pride Chemical
 Address: Box 5001 Sus, Fargo, ND 58105
 Registration Nos.: 43321-1
 Registrant: Dr. Gerald G. McCarthy
 Address: Rural Route, Bridgewater, IA 50837
 Registration Nos.: 43357-1
 Registrant: Texchem, Inc.
 Address: 112 Catalina Drive, Greenville, SC 29609
 Registration Nos.: 43508-1 thru 4
 Registrant: CPI Chemicals, Inc.
 Address: 2800 North Loop West, Suite 314, Houston, TX 77092
 Registration Nos.: 43592-1
 Registrant: Airwick Pool Products, Inc.
 Address: 4 Cermak Boulevard, St. Peters, MO 63376
 Registration Nos.: 43603-1
 Registrant: Nu-Coat Chemicals
 Address: Route, One, Four Oaks, NC 27524
 Registration Nos.: 43694-1
 Registrant: Eagle Laboratories
 Address: 1802 West Grant Rd, Tucson, AZ 85705
 Registration Nos.: 43717-27
 Registrant: Greenshield of Washington
 Address: Box 25784, Seattle, WA 98125
 Registration Nos.: 43740-1
 Registrant: Marco Pool Care, Inc.
 Address: P.O. Box 784, Marco Island, FL 33937
 Registration Nos.: 43753-1-2
 Registrant: Bayside Industries, Inc.
 Address: 109 Millers Lane Box 1927, Harrisburg, PA 17105
 Registration Nos.: 43783-3
 Registrant: Total Cost Systems
 Address: 5186 126th Ave. N., Clearwater, FL 33520
 Registration Nos.: 43872-1
 Registrant: Stewart Sanitary Supply Co., Ltd.
 Address: P.O. Box 15061 St. Louis, MO 63110
 Registration Nos.: 43954-1-2-4-5-7-9-11-13-14-17-18-19-20-21-25-26-31-32-33-35-36-38-41-42-43-44-45-46-47-50-52-55-58-60
 Registrant: G. Tex Chemical Internat'l
 Address: 7900 Westheimer, No. 340, Houston, TX 77062
 Registration Nos.: 43982-1
 Registrant: Espar Chemical Corp.
 Address: 1233 South Circle, Forest Park, IL 60130

- Registration Nos.: 43985-1
Registrant: Manufactured Products, Inc.
Address: 317 11th St., Beach Haven, NJ 08008
- Registration Nos.: 43988-1
Registrant: Riverblue Pools Contractor, Inc.
Address: 10527 S.W. 40th St., Miami, FL 33165
- Registration Nos.: 44174-1
Registrant: Marzone, Inc.
Address: P.O. Box 1949, Tifton, GA 31794
- Registration Nos.: 44317-1 thru 5-8-11 thru 16-18-19-21 thru 26-30-32 thru 36-38 thru 44-46
Registrant: Atlantic Pool Of Palm Beach, Inc.
Address: 2708 N. Federal Hwy., Delray Beach, FL 33444
- Registration Nos.: 44371-1
Registrant: Pleasure Makers
Address: 381 S. Tamiami Drive, N.W., Charlotte, FL 33952
- Registration Nos.: 44388-1
Registrant: California Cleaning Products, Inc.
Address: 8763 Lankershim Blvd., Sun Valley, CA 91352
- Registration Nos.: 44389-1-4
Registrant: Votex Pool Service
Address: 1467 N.E. 57th Place, FT. Lauderdale, FL 33334
- Registration Nos.: 44410-1
Registrant: Doyle Services, Inc.
Address: P.O. Box 8211, Indian River Shores, FL 32960
- Registration Nos.: 44418-1
Registrant: Pet Rx
Address: 8801 N. Crescent Drive, Miramar, FL 33025
- Registration Nos.: 44455-2
Registrant: Chou Chen Chemicals, Inc.
Address: 901 South 15th St., Louisville, KY 40210
- Registration Nos.: 44639-1
Registrant: CMC, Inc.
Address: 327 Locust St., New Castle, PA 16103
- Registration Nos.: 44648-1
Registrant: P.S. Products Co.
Address: 1968 Cummings Dr., Los Angeles, CA 90027
- Registration Nos.: 44661-1
Registrant: Simadon
Address: Box 511, San Pedro, CA 90733
- Registration Nos.: 44848-1
Registrant: Color Your Yard Inc.
Address: 515 Lee Road, Rochester, NY 14606
- Registration Nos.: 44873-1
Registrant: Custom Pools & Spas
Address: 2092 17th St., Sarasota, FL 33580
- Registration Nos.: 44898-1
Registrant: P & S Laboratories
Address: Box 55271, Riverside, CA 92517
- Registration Nos.: 44971-1
Registrant: Omni Products
Address: 3049 Rigel Ave., Las Vegas, NV 89102
- Registration Nos.: 45037-1
Registrant: Pool Boy Inc.
Address: 1207 W. Broward Blvd., Ft. Lauderdale, FL 33311
- Registration Nos.: 45051-1
Registrant: Stanley Hartman Manufacturing, Inc.
Address: 4351 South Country Club Rd., Tucson, AZ 85714
- Registration Nos.: 45117-1
Registrant: Patterson Products Co.
Address: 2950 S. Eighth St., Ste F-1, Beaumont, TX 77701
- Registration Nos.: 45162-1
Registrant: Pacific Swimming Pool Corp.
Address: 9533 SW. 40th St., Miami, FL 33165
- Registration Nos.: 45258-1
Registrant: Refinement Technology Labs Inc.
Address: 1407 North Providence Rd., Columbia, MO 65201
- Registration Nos.: 45262-1
Registrant: Sunrise Soap Company, Inc.
Address: 620 W. Center Street, #6, N. Salt Lake, UT 84054
- Registration Nos.: 45302-1 thru 10
Registrant: Pool Care Inc.
Address: #36 West Lake St., Tarpon Springs, FL 33589
- Registration Nos.: 45322-1
Registrant: D M Labs Corp.
Address: 23007 Mobile Ave., Canoga Park, CA 91307
- Registration Nos.: 45345-1
Registrant: Rivera Pool Co.
Address: 2265 Dundee Rd., Winter Haven, FL 33880
- Registration Nos.: 45404-1
Registrant: M.S. Pool Service
Address: 3001 Pioneer Trail #57, New Smyrna Beach, FL 32069
- Registration Nos.: 45448-1
Registrant: BIO AG Enterprises
Address: P.O. Box 42815-38, Houston, TX 77042
- Registration Nos.: 45459-3
Registrant: Energy Support Corp.
Address: Box 87, Westwego, LA 70094
- Registration Nos.: 45693-1-2
Registrant: Capitol Sanitizing Systems
Address: 2300 Pimmit Dr., Falls Church, VA 22043
- Registration Nos.: 45725-2-5
Registrant: Northeast Packaging Inc.
Address: 25 Connair Rd., Orange, CT 06477
- Registration Nos.: 45746-2-4-5-6-7-8-11-12
Registrant: San Juan Pools of Hillsborough County, Inc.
Address: 4109 W. Buffalo Ave., Tampa, FL 33614
- Registration Nos.: 45752-1
Registrant: All Chemical Supply & Equipment Co.
Address: 4801 Pembroke Rd., Hollywood, FL 33021
- Registration Nos.: 45898-1 thru 21
Registrant: The James-Scott Company
Address: 336 Hillcrest Street, El Segundo, CA 90245
- Registration Nos.: 45984-2
Registrant: Andy's Independent Pest Control
Address: P.O. Box 3251, 4401 S.I. 35-Town & Country Mall, Temple, TX 76501
- Registration Nos.: 45997-1
Registrant: Ecco Chemical Co., Inc.
Address: 2651 Sterling Acre Dr., Tucker, GA 30084
- Registration Nos.: 46013-1-2-3
Registrant: Anchemco Inc.
Address: 2566-A McMuller-Booth Rd., Clearwater, FL 33519
- Registration Nos.: 46053-1
Registrant: Halifax Aquatech Pools
Address: 140 East Mason Ave., Daytona Beach, FL 32014
- Registration Nos.: 46131-1
Registrant: Atlantic Pool Store
Address: 3007 North State Rd. H7, Hollywood, FL 33021
- Registration Nos.: 46159-1
Registrant: Engineering Services & Products Co.
Address: 214 Old Main St., Rocky Hill, CT 06067
- Registration Nos.: 46200-1
Registrant: Valley & Universal Supply, Inc.
Address: P.O. Box 4084, Bethlehem, PA 18018
- Registration Nos.: 4625-1
Registrant: A-Best Chemicals & Supply
Address: 1621 N. Magnolia, Ocala, FL 32670
- Registration Nos.: 46575-1
Registrant: Cassco Inc.
Address: 38 N. West Jersey Ave., Woodbury Heights, NJ 08097
- Registration Nos.: 46692-1
Registrant: Crystalene, Inc.
Address: Box 7787, Columbus, GA 31908
- Registration Nos.: 46694-2-3-4
Registrant: Carolina Chem Services Inc.
Address: P.O. Box 40, North, SC 29112
- Registration Nos.: 46728-1-2-3-4-5-6-8-9
Registrant: F.G. Products
Address: 3310 Reynolds Rd., Lakeland, FL 33801
- Registration Nos.: 46784-1
Registrant: Pitcher Hill Pool Supply

Address: SO. Bay & Taft Roads, N.
Syracuse, NY 13212
Registration Nos.: 46860-1
Registrant: Admiral Pools
Address: 4015 Kathryn St., Sarasota, FL
33583
Registration Nos.: 46863-1
Registrant: Hackett and Gaskin
Address: 651 63rd St., Oakland, CA
94609
Registration Nos.: 46931-1
Registrant: The Agriculture & Nutrition
Co.
Address: 5220 Speaker Rd., Kansas City,
KS 66106
Registration Nos.: 46946-19-60-170-171-
194-238-243-245
Registrant: McGrayel Co.
Address: 3386 S. Maple Ave., Box 12362,
Fresno, CA 93777
Registration Nos.: 46978-1-2-3
Registrant: Southern Water Services
Address: 4421 Oakdale Rd., Smyrna, GA
30080
Registration Nos.: 47076-1
Registrant: Eastern Equine Enterprises
Address: 592 County Rd #1302, P.O. Box
392, Ashland, OH 44805
Registration Nos.: 47088-1
Registrant: Evrkleen Corp.
Address: 7827 NW. 15th St., Miami, FL
33126
Registration Nos.: 47113-1
Registrant: Care-Free Pool Supply
Address: Box 3456, Apollo Beach, FL
33570
Registration Nos.: 47120-1
Registrant: National Research Co.
Address: 4730 Noyes St. H218, San
Diego, CA 92109
Registration Nos.: 47155-1
Registrant: Crown Services
Address: 2725 Via Casa Loma, San
Clemente, CA 92672
Registration Nos.: 47278-1 thru 5
Registrant: Buccaneer Pool Supply &
Service
Address: 3648 A. Henderson Blvd.,
Tampa, FL 33609
Registration Nos.: 47318-1
Registrant: Richard D. Stanton
Address: 5253 N. Dixie Highway,
Pompano Beach, FL 33064
Registration Nos.: 47476-1
Registrant: Perochem Inc.
Address: 3451 Torrance Blvd., Torrance,
CA 90503
Registration Nos.: 47525-1 thru 9
Registrant: Caf-Fey Chemical &
Pesticide
Address: 2640 Woodland Ave.,
Louisville, KY 40211
Registration Nos.: 47663-1-2
Registrant: Luli Pools Inc.
Address: 5285 W. 20th Ave., Haileah, FL
33012

Registration Nos.: 47673-1
Registrant: Woody Riggs Co.
Address: 5027 SE. 107th St., Bellview, FL
32670
Registration Nos.: 47867-1-2
Registrant: Wiz Chemical Corp.
Address: Box 687, Bala Cynwyd, PA
19004
Registration Nos.: 47923-2-3-4
Registrant: Tristate Chemical Corp.
Address: 101 Elsedon Bldg., 7710 Tanner
Land, Florence, KY 41042
Registration Nos.: 48004-1-2
Registrant: Atlantic Pool and Patio
Address: 201 E. Granada Blvd., Ormond,
Beach, FL 32074
Registration Nos.: 48057-1
Registrant: Metro Products
Address: 2912 Kings Rd., A214, Dallas,
TX 75219
Registration Nos.: 48114-1
Registrant: Serat Inc.
Address: 8403 Rednock Lane, Miami
Lakes, FL 48139
Registration Nos.: 48139-1-3-4-5
Registrant: Sun City Pool Supply
Address: 1897 Highland Ave. S., Largo,
FL 33516
Registration Nos.: 48170-1-2
Registrant: Bayside Chemical
Address: P.O. Box 4932, Corpus Christi,
TX 78405
Registration Nos.: 48216-1
Registrant: Argo-K Corporation
Address: 5750 Main St. NE.,
Minneapolis, MN 55432
Registration Nos.: 48222-1 thru 4
Registrant: United Scientific Inc.
Address: 723 The Parkway, Richland,
WA 99352
Registration Nos.: 48366-1
Registrant: Roach Vanish
Address: Box 6739, New York, NY 10128
Registration Nos.: 48369-1
Registrant: Trichem
Address: 306 S. Harrington St., Raleigh,
NC 27603
Registration Nos.: 48455-1 thru 5
Registrant: Charles F. Hudson, Jr. D/B/
A/ Chuck Hudson
Address: 8 Clear Way, Ocala, FL 32672
Registration Nos.: 48665-1-2
Registrant: Pools of Distinction
Address: 1400 St., Rd 44, E. Unit 4,
Pineview Plaza, Crystal River, FL
32629
Registration Nos.: 48703-1
Registrant: Bernelco Inc.
Address: 8009 Standley St., Fort Worth,
TX 76118
Registration Nos.: 49109-1
Registrant: AB Tri-State Termite & Pest
Control
Address: 1955 W. Fayetteville, AR 72701
Registration Nos.: 49209-1

Registrant: Intergrated Pest
Management Systems
Address: 3601 Magic Drive #904, San
Antonio, TX 78229
Registration Nos.: 49315-2 thru 4
Registrant: Klatt Chemical Co.
Address: 1317 Oak Ave., Evanston, IL
60201
Registration Nos.: 49549-1
Registrant: Pep-Kote Products, Inc.
Address: Box 23747, Pleasant Hill, CA
94523
Registration Nos.: 49596-1
Registrant: Conceptus Investment Corp.
Address: 74-990 Joni Dr., Bldg 3-A, Palm
Desert, CA 92260
Registration Nos.: 49774-1
Registrant: Brower's Watercare Service,
Inc.
Address: 328 N. Broomville, Springfield,
MO 65806
Registration Nos.: 50083-1-2-3
Registrant: ACS Inc.
Address: 515 S. 21st Ave., Hollywood,
FL 33020
Registration Nos.: 50172-1
Registrant: Complete Chemical Services,
Inc.
Address: Box 1860, Hollywood, FL 33020
Registration Nos.: 50173-1
Registrant: Aqua Guard, Inc.
Address: RT. 15, Box 588, Tyler, TX
75707
Registration Nos.: 50402-1 thru 6
Registrant: Water Watcher
Address: Box 1513, Liberty, TX 77575
Registration Nos.: 50417-1-2
Registrant: Compuchem Corp.
Address: 2371 Belmont Ave., Bronx, NY
10458
Registration Nos.: 50418-1
Registrant: Pac-Tec, Inc.
Address: 555 Boston Post Rd., Milford
CT, 06460
Registration Nos.: 50429-1 thru 11
Registrant: The Pool Specialist of Ft.
Pierce
Address: 1717 SO. U.S. #1-Royal Palm
Shoppes, Ft. Pierce, FL 33450
Registration Nos.: 50499-1
Registrant: Radd Chemical Co.
Address: Merion Mills Business Center,
Conshohocken, PA 19428
Registration Nos.: 50560-1-2-3
Registrant: Berg Chemical Co.
Address: 920 East 132 St., Bronx, NY
10454
Registration Nos.: 50728-1-2
Registrant: Zenco
Address: 3667 Blake St. Denver, CO
80205
Registration Nos.: 50742-1 thru 3
Registrant: Town Square Patio Shop
Address: 1821 West Brandon Blvd.,
Brandon, FL 33511

Registration Nos.: 50768-1
 Registrant: Pro Chem Labs
 Address: Box 2463, Conroe, TX 77305
 Registration Nos.: 50787-2
 Registrant: Stop-A-Bug, Inc.
 Address: 61-15 96th St., Rego Park-Queens, NY 11374
 Registration Nos.: 50908-1
 Registrant: John H. Forsythe
 Address: Box 896, Riverview, FL 33569
 Registration Nos.: 51024-1
 Registrant: Smittys Pool Equipment, Inc.
 Address: 1018 NE. 44th St., Fort Lauderdale, FL 33334
 Registration Nos.: 51104-1
 Registrant: Pool N' Patio World of Brandon
 Address: 919 Lithia Rd., Brandon, FL 33511
 Registration Nos.: 51146-1
 Registrant: Howard's Hardware
 Address: 7041 Taft St., Hollywood, FL 33023
 Registration Nos.: 51191-1
 Registrant: BRJ Industries, Inc.
 Address: 152 Messner Dr., Box 970F, Wheeling, IL 60090
 Registration Nos.: 51414-1-2
 Registrant: LaCrosse Pool Center
 Address: 319 Lang Dr., LaCrosse, WI 54603
 Registration Nos.: 51455-1
 Registrant: Astro Water Engineers
 Address: Box 182, Western Springs, IL 60558
 Registration Nos.: 51515-1 thru 3
 Registrant: J&C Products
 Address: 911 Pine St., Fern Park, FL 32730
 Registration Nos.: 51559-1
 Registrant: E & G Industries, Inc.
 Address: 3535 Waldorf Drive, Toledo, OH 43611
 Registration Nos.: 51679-1
 Registrant: Pacific Research Associates
 Address: 2816 E. Coast Hwy. Suite 2, Corona Del Mar, CA 92625

Registration Nos.: 52253-1 thru 3
 Registrant: Precision Coating Systems Inc.
 Address: P.O. Box 36, Farmingdale, NJ 07727
 Registration Nos.: 52367-1-2
 Registrant: Cardoy Corporation
 Address: 2246 Camino Ramon, Box 5025, San Ramon, CA 94583
 Registration Nos.: 52427-1
 Registrant: Interiors By Marie
 Address: 6601 Norwood Ave., Jacksonville, FL 32208
 Registration Nos.: 52500-1
 Registrant: New Blends, Inc.
 Address: 458 Whitney St., San Leandro, CA 94577
 Registration Nos.: 52501-1
 Registrant: Church Soap & Chemical Co.
 Address: 7205 S. Chicago, Chicago, IL 60619
 Registration Nos.: 52557-1
 Registrant: Drug-A-Bug Company
 Address: Box 355 C, Rt. #3, Leeds, AL 35094
 Registration Nos.: 52606-1
 Registrant: Lion Chemical Co.
 Address: Box 1900, Claremore, OK 74018
 Registration Nos.: 52747-2
 Registrant: American Industrial Chemical Corp., Inc.
 Address: 1111 N. Westshore Blvd. Suite 602, Tampa, FL 33607
 Registration Nos.: 52787-1-2
 Registrant: CMY Industries, Inc.
 Address: 660 W. Lake St., Chicago, IL 60606
 Registration Nos.: 52980-1 thru 6
 Registrant: Germ-X Corp.
 Address: 8625 Biscayne Blvd., Miami, FL 33138
 Registration Nos.: 53389-1
 Registrant: DARTH Products
 Address: Box 727, Eagle, ID 83616
 Registration Nos.: 53571-1
 Registrant: International Pesticide Label Exchange

Address: 7210 SW. Fifth Ave., Miami, FL 33143
 Registration Nos.: 53975-1
 Registrant: The Chemist Co.
 Address: 3621 Edgefield Dr., Memphis, TN 38128
 Registration Nos.: 54034-1-2
 Registrant: Bak-Mar Products
 Address: 824 Wilkerson, Mesquite, TX 75149
 Registration Nos.: 54070-20205
 Registrant: Environmental Resources Corp.
 Address: 215 Liberty Square, Norwalk, CT 06852
 Registration Nos.: 54280-1 thru 4
 Registrant: Ashley A. Ansari DVM PHD
 Address: 104 Fyfe Ct., Cary, NC 27551
 Registration Nos.: 54456-3 thru 9
 Registrant: Trenton Sales, Inc.
 Address: 801 W. 13th Street, Houston, TX 77008
 Registration Nos.: 54774-1
 Registrant: Triad Laboratories, Inc.
 Address: Box 8027, Greensboro, NC 27419
 Registration Nos.: 56151-1-2-3
 Registrant: Chem Designs
 Address: Box 1420, Candler, NC 28715
 Registration Nos.: 56210-1-2-3-4-5-9-10-11
 Registrant: Midwest Equipment Co.
 Address: Box 640159, Kenner, LA 70064
 Registration Nos.: 56338-16
 Registrant: Summit Laboratories, Inc.
 Address: 9042 Marshall Court, Westminster, CO 80030
 Registration Nos.: 56843-1
 Registrant: Yucan, Inc.
 Address: Box 573, Yuma, AZ 85364
 Registration Nos.: 57036-1
 Dated: November 4, 1988.
 Edwin F. Tinsworth,
 Acting Director, Registration Division, Office of Pesticide Programs.
 [FR Doc. 88-26725 Filed 11-17-88; 8:45 am]
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Federal Register

Friday
November 18, 1988

Part VII

Consumer Product Safety Commission

16 CFR Parts 1306 and 1500
Ban of Lawn Darts; Final Rule

CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Parts 1306 and 1500

Ban of Lawn Darts

AGENCY: Consumer Product Safety Commission.

ACTION: Final rule.

SUMMARY: Lawn darts are devices with elongated tips that are used in an outdoor game by being thrown upward and striking the ground tip first. In this notice, the Commission bans lawn darts because they present a risk of puncture wounds, including skull punctures.¹

A regulation, issued in 1970 by the Food and Drug Administration under the Federal Hazardous Substances Act ("FHSA") and now administered by the Commission, currently bans lawn darts, except for those intended for adult use that (1) are labeled to warn against use by children, (2) include instructions for safe use, and (3) are not sold by toy stores or by store departments dealing predominantly in toys or other children's articles. Despite these restrictions, which are intended to ensure that lawn darts are sold only for use as a game of skill by adults, children have continued to suffer serious injuries and deaths while playing with lawn darts. Accordingly, the Commission proposed to prohibit the sale of lawn darts that are intended to stick in the ground, on the basis that these darts present a risk of skull punctures.

After considering the comments received on the proposal and other information, the Commission concluded that whether a lawn dart is intended to stick in the ground is an inadequate criterion for whether a dart presents a significant risk of skull puncture injury. In addition, the Commission is unable to determine that any devices with elongated tips that can perform as lawn darts would not present this risk. Accordingly, the Commission is banning all lawn darts.

This action also satisfies a recent congressional directive, signed into law by the President on November 5, 1988, that the Commission revoke the FHSA exemption that allows the sale of lawn darts, under certain restrictions, unless the Commission finds that such products do not have the potential for causing puncture wound injury. Since the

Commission is unable to find that any lawn dart would not have the potential to cause puncture wound injuries, no lawn darts are exempted from this ban.

DATE: The ban is effective December 19, 1988, as to products in the chain of distribution on or after that date.

FOR FURTHER INFORMATION CONTACT: Christine Nelson, Division of Regulatory Management, Consumer Product Safety Commission, Washington, DC 20207, telephone (301) 492-6400.

SUPPLEMENTARY INFORMATION:

A. Background

The Consumer Product Safety Commission was created in May of 1973. Prior to that time, the Federal Hazardous Substances Act ("FHSA"), 15 U.S.C. 1261-1276, was administered by the Food and Drug Administration ("FDA"). Section 2(Q)(1)(A) of the FHSA, 15 U.S.C. 1261(Q)(1)(A), provides that the term "banned hazardous substance" includes "any toy, or other article intended for use by children, which is a hazardous substance." The Child Protection and Toy Safety Act of 1969 (83 Stat. 187-190) amended the FHSA to provide that any toy or other article intended for use by children may be classified as a hazardous substance if it is determined that the article presents an electrical, mechanical, or thermal hazard 15 U.S.C. 1261(F)(1)(D). Pursuant to this authority, the FDA, on November 17, 1970, proposed, among other things, to declare that lawn darts are banned toys because they present a mechanical hazard and an unreasonable risk of injury. 35 FR 17664.

The FDA received only one comment concerning the proposal to determine that lawn darts present a mechanical hazard. That comment stated that the large, outdoor-type darts are intended for use by adults as an outdoor sport or game. The comment contended that suitable labeling could be devised to inform parents or other adults of the necessity of carefully supervising children if they are to be permitted to play the game and to give other information relating to the safety of all nonplayers in the immediate area.

After considering this comment, the FDA determined in its final rule, published December 19, 1970, that "lawn darts and other similar sharp-pointed toys usually intended for outdoor use and having the potential for causing puncture wound injury, or other injury" presented a mechanical hazard within the meaning of the FHSA. 35 FR 19266. However, the final rule (as summarized below) also provided that the following types of lawn darts will not be included within the term "banned hazardous

substance": Lawn darts and similar sharp-pointed articles not intended for toy use and marketed solely as a game of skill for adults, provided such articles:

(i) Bear the following statement on the front of the panel of the carton and on any accompanying literature:

Warning: Not a toy for use by children. May cause serious or fatal injury. Read instructions carefully. Keep out of the reach of children.

Such statement shall be printed in a sharply contrasting color within a borderline and in letters at [least] one-quarter inch high on the main panel of the container and at least one-eighth inch high on all accompanying literature.

(ii) Include in the instructions and rules clear and adequate directions and warnings for safe use including a warning against use when any person or animal is in the vicinity of the intended play or target area.

(iii) Are not sold by toy stores or store departments dealing predominantly in toys and other children's articles. 35 FR 19266, 19267.

A petition for judicial review of this regulation was filed by a lawn dart manufacturer, and the regulation was upheld. *R.B. Jarts, Inc. v. Richardson*, 438 F.2d 846 (2d Cir. 1971).

Since May of 1973, when the responsibility for administering the FHSA was transferred to the Commission, the Commission has periodically inspected samples of lawn dart labeling and instructions and surveyed marketing practices for lawn darts to determine whether the manufacturers, importers, and sellers of lawn darts are complying with the Commission's regulations under the FHSA.

The ban of lawn darts is codified in section 1500.18(a)(4) of Title 16 of the Code of Federal Regulations ("CFR"). The exemption quoted above for those lawn darts that have the specified labeling and instructions and that are not marketed in toy stores or in store departments dealing predominantly in children's articles is codified at 16 CFR 1500.86(a)(3).

In 1984, the Commission received reports that lawn darts were being sold in certain toy stores. As a result, the Commission's staff inspected at least 77 retail stores and found seven stores that were selling lawn darts in violation of the ban and exemption. Of the seven violative retail stores, six were toy stores, and three of these were part of the same nationwide chain. Products of four lawn dart importers had labeling violations. The retail sales and labeling violations discovered by these

¹ All three Commissioners (Chairman Terrence Scanlon, Commissioner Anne Graham, and Commissioner Carol Dawson) voted to approve this Federal Register notice. Chairman Scanlon and Commissioner Graham filed statements concerning their votes that are available from the Commission's Office of the Secretary.

inspections were corrected, and the Commission issued a consumer safety alert in July 1985 warning of the hazards of letting children play with lawn darts.

In June 1987, the Commission's staff examined the labeling on lawn darts marketed by 14 firms, and products from all 14 firms were found to have labeling violations. Products of eight of the firms were considered to have serious labeling violations, *i.e.*, no required warning statement on the front panel of the package. Other labeling violations included one or more of the following: the type size of the required warning statement was smaller than that specified in the exemption, the warning statement was absent from the instructions or was not printed within a borderline as required, and the instructions lacked clear and adequate directions and warnings for safe use.

In addition, Commission field investigators visited 122 retail stores around the country. Included in the 122 stores were 36 toy stores, 60 variety or department stores, and 26 sporting goods stores. Fifty-three of the stores were selling lawn darts, and 18 of these were displaying the product with or in close proximity to toys or sporting goods intended primarily for children.

As a result, the Commission's compliance staff met on July 17, 1987, with importers and manufacturers of lawn darts; a representative from the Sporting Goods Manufacturers Association also attended that meeting. At the meeting, the staff discussed five voluntary actions that could be taken by the firms to help assure compliance with the exemption from the ban and to increase consumer awareness of the hazards associated with lawn darts in the hands of children. These actions were:

1. The front panel warning label should be modified to make it more conspicuous and readable.
2. Place a warning label on one fin of each lawn dart in a color that contrasts with the fin. (The industry attendees at the July 17, 1987, meeting indicated that they would achieve contrast by means other than color, such as by contrasting texture.)
3. Change the design of lawn darts to prevent modification, or include a warning against modification with the instructions.
4. Include information on how to display lawn darts with each shipment of lawn darts to retailers.
5. Stop packaging lawn darts in combination sets with other games. Additional information on these recommended actions is given in the proposal. 53 FR 28657.

After the meeting on July 17, 1987, the staff wrote to all known lawn dart importers and to the known domestic manufacturer and the company that distributes its products. These letters went both to those that attended the meeting and to those that did not attend. The letters described the five voluntary actions and asked the firms to state in writing whether they were willing to take the actions requested. A total of 20 firms received letters, including additional importers of lawn darts that were identified between July and September.

Nineteen of the firms responded in writing or by telephone. Seven firms stated that they would carry out the five requests (except for the contrasting color on lawn dart fins); several of these firms requested additional slight and modifications of the terms.

Two major firms stated in writing that they would carry out only the first four requests. One of these firms also stated that it was in favor of the Commission making mandatory all of the voluntary actions which were requested.

Two firms stated general support for the voluntary actions the compliance staff had requested, but did not address the specific requests. Eight firms stated that they intended to stop importing lawn darts.

On July 30, 1987, the Commission issued a news release about lawn dart injuries and deaths. In the release, the Commission provides details on the existing ban, the exemption, and the hazard and resulting injuries. The release urges consumers to keep lawn darts away from children and asks consumers to report violations of the ban or exemption to the Commission.

On October 1, 1987, the Commission met to consider what actions would be appropriate to address the continuing injuries and deaths to children that occur when children play with lawn darts. By a unanimous vote, the Commission decided at its October 1, 1987, meeting to issue an ANPR indicating that the Commission might, among other actions, either require the five actions requested of industry at the July 17, 1987, meeting with the staff or ban all lawn darts and similar pointed objects usually intended for outdoor use and having the capacity for causing puncture wound injuries.

The Commission indicated that whatever action ultimately would be taken would take into account the results of a surveillance program to be conducted by the Commission's staff three months after publication of the ANPR; the object of the surveillance was to determine if the industry is in substantial compliance with the existing

regulations and with the actions requested at the July 17, 1987, meeting described above. The Commission stated further that its final action would also depend upon an evaluation of whether such voluntary or mandatory standards, if enforced, could be expected to protect consumers from unreasonable risk of injuries. The staff was further directed to vigorously enforce the current FHSA provisions on lawn darts and to issue a consumer alert annually.

The ANPR was published on October 20, 1987. 52 FR 38935.

The Commission brought two cases in U.S. District Courts against major retail chains for lawn dart violations. In these cases, the defendants signed consent decrees to settle the Commission's concerns about the distribution of noncomplying lawn darts. In one of these cases, the Commission recently sought a contempt of court citation against the defendant for a subsequent violation of the consent decree, but the court declined to order this relief, stating that the defendant was nevertheless in substantial compliance with the consent decree.

In addition, the Commission requested the U.S. Customs Service to consider including lawn darts in the Operation Toyland program. This will enable CPSC and the Customs Service to examine incoming shipments of lawn darts.

Pursuant to the Commission's direction at the October 1, 1987, meeting, the Commission staff visited 112 retail stores to determine compliance with the current restrictions on the sale of lawn darts. Of these 112 stores, only 31 were selling lawn darts. Twenty-nine of the 31 were variety or department stores, one was a toy store, and one was a sporting goods store. Of the 31 stores selling lawn darts, 14 were in violation of lawn dart requirements. Violations consisted of displaying lawn darts for sale in a toy store or toy department (8 stores) or offering lawn darts for sale that violated labeling requirements (8 stores). Two stores were committing both types of violations.

The staff also identified 18 importers or manufacturers of lawn darts. Of these, 17 firms were distributing, or had recently distributed, lawn darts with labeling violations. Ten of these firms indicated that they do not intend to import, manufacture, or sell lawn darts in the future. Seven firms are known to intend to continue to import lawn darts.

With regard to whether the firms were willing to implement voluntarily the five actions requested at the July 17, 1987, meeting, one firm indicated that it would not comply voluntarily with the

requests. Except for one firm that was undecided about whether it would sell lawn darts in combination sets with other games, the companies indicated that they would comply with the five requests on various, and sometimes indefinite, schedules.

The Commission received 11 comments on the ANPR that was published on October 20, 1987. After considering these comments and other available information, the Commission concluded that there was no feasible standard that could adequately reduce the risk of skull puncture injuries from lawn darts and that actions of the type that had been discussed with the industry previously will not be effective. Accordingly, the Commission proposed to ban any lawn dart that has a rigid elongated tip and that is intended to be used outdoors and thrown into the air so that it will stick in the ground, as well as similar products for outdoor use that are thrown in the same manner and are capable of sticking in the ground. The proposal was phrased in this manner because it was believed that any lawn dart that was capable of sticking in the ground would also present a risk of skull puncture injury. The express inclusion of both darts intended to stick in the ground and darts capable of sticking in the ground was intended to preclude arguments about subjective or unexpressed intentions. 53 FR 28657 (July 29, 1988).

Shortly before the Commission's scheduled meeting to consider whether to issue a final rule banning hazardous lawn darts, the Congress passed H.R. 5552, which provides:

That notwithstanding any other provision of law, not later than 60 days after the date of enactment of this Act, the Consumer Product Safety Commission shall amend its regulations to revoke [the] exemption regarding lawn darts and other similar sharp-pointed toys contained in section 1500.86(a)(3) of title 16, Code of Federal Regulations, unless the Commission finds that such products do not have the potential for causing puncture wound injury.

On November 5, 1988, shortly after the Commission voted to ban lawn darts, this legislation was signed by the President. The action that the Commission is independently taking in this notice will fulfill the congressional directive. Furthermore, as discussed more fully below, the Commission is not aware of any lawn darts for which it can make the finding that the darts do not have the potential for causing puncture wound injury. The relationship between the Commission's action and H.R. 5552 is discussed in more detail in Section I of this notice.

B. The Product and the Scope of the Rule

Lawn darts are devices with elongated tips that are intended to be used outdoors and that are designed so that when they are thrown into the air they will contact the ground tip first. Often, lawn darts are used in a game where the darts are thrown at a target or other feature on the ground. The type of lawn darts that have generally been available in the past and that have demonstrated their ability to cause skull puncture injuries typically have a metal or weighted plastic body, on the front of which is an elongated metal shaft about 1/4 inch in diameter. These darts have a shaft on the rear of the body to which plastic fins are attached. These darts are about a foot in length and weigh about one quarter to one half pound. These darts are intended to stick in the ground when thrown.

Prior to the proposal, the Commission was aware of two additional types of games using devices that did not appear to present the risk of skull puncture injuries presented by the darts described above. One of these types uses a soft, usually plastic, body with an approximately hemispherical mushroom- or tulip-shaped head of relatively large diameter that is weighted so that the large end impacts the ground. This device is not considered to be lawn dart, and the Commission concluded that this type does not present a significant risk of skull puncture injuries.

Another type of lawn dart thought before the proposal, on the basis of the manufacturers description and allegation that the dart would not penetrate kraft paper, not to present the same risk of skull puncture injuries as do other elongated-tipped darts. This dart resembles the shape of the older type of lawn darts, but is lighter and the tip is made of a relatively soft and flexible material of about the consistency of a pencil eraser. Furthermore, the tip was described by the manufacturer as being mounted in a flexible base, so that the tip as a whole could also flex. These darts are designed to be used with a target that will entrap a dart that falls on the target.

Because the two types of devices described above were thought to not present the risk of skull puncture injuries presented by metal and rigid-plastic tipped darts, the preamble of the proposal stated that these tulip-shaped and extremely-flexible-tipped darts were not included within the scope of the proposed ban. However, subsequent tests by the Commission's staff of a sample of what was supposed to be the

flexible-tipped dart described above showed that it could puncture a laminate that had been developed by the staff in an attempt to create a test target that could indicate when a dart presented a risk of puncturing a child's skull. (This laminate is discussed more fully in Section E(1)(j) of this notice.) Furthermore, this dart could easily puncture kraft paper, contrary to the manufacturer's previous representation. In addition, the dart is capable of sticking in the ground under conditions that could often exist when the darts are being used, and the dart would thus actually have been covered by the proposed ban.

Because the manufacturer's statements that the dart would not stick in the ground nor puncture kraft paper were not borne out by the staff's examination of the sample dart that was submitted, and because the dart penetrates the target laminate described above, the Commission is not able to find that this dart does not present a risk of skull puncture injury and should be excluded from the final ban. Accordingly, this dart is banned also.

As a result of comments on the proposed ban, the Commission became aware of other, prototype darts that visually resemble the older, rigid-tipped darts but that are lighter and have tips of plastic that are much more flexible than the metal-tipped darts that have caused skull puncture injuries and the rigid-plastic tipped darts that the Commission staff believes also present a risk of skull puncture injuries. Under some conditions, these darts are capable of sticking in the ground and were included within the scope of the proposed ban. After examining these prototype darts, the Commission's staff found that these darts also penetrated the laminate described above, thus raising the possibility that these darts present a risk of skull penetration injuries. The manufacturer of these darts has submitted no data that would show that these darts are incapable of such injuries, and the Commission finds that there are no differences in the functional or risk characteristics of these darts and darts that are known to have caused skull puncture injuries that would warrant not banning these darts. Therefore, these darts are also included in the ban.

The ban is not intended to include such items as arrows, horseshoes, javelins, penknives, and the like, nor is it intended to apply to indoor dart games that use a vertically-placed target, such as "English darts" or "American darts." The Commission intends for the ban to be severable as to

different types of lawn darts. Thus, if the ban is held to be invalid as to any subcategory of lawn darts, the Commission intends that the ban will remain in effect as to the remaining types.

C. Risk of Injury

The risk that the Commission is addressing in this proceeding is that of puncture of the skulls of children caused by lawn darts being used by children. Since all lawn darts are being banned, the rule will also address all puncture wounds and other types of injuries caused by lawn darts.

As mentioned above, the potential for these devices to cause skull puncture injuries is not necessarily obvious to parents or other adults who might buy these items or allow their children to play with them, much less to the children themselves. This is because the tips do not appear sharp enough to present an obvious danger of puncture. The combined factors of weight, the narrow elongated shaft, the speed that the dart is traveling at the time of impact, and the thickness of the child's skull at the point of impact create the risk.

The Commission has predicted the potential for skull puncture injury by applying a mathematical model originally developed for bullets to estimate the probability of penetration of the skull by lawn darts with metal tips. The model estimates these penetration probabilities for various lawn darts parameters, such as tip diameter, dart weight, drop height, and skull thickness. From this model, a typical lawn dart weighing approximately 1/4 lb., with a metal tip with a diameter of 0.5 cm (0.2"), and dropping from a height of 12 feet was estimated to have a probability of penetration of 37 percent for the average skull thickness of male and female children 3 years of age. It is reasonable to expect that a lawn dart will reach a height of twelve feet above a child's head during normal use. The probability of penetration increased to 92 percent for the minimum skull thickness of a three-year-old.

As noted above, the elimination of lawn darts that present an unreasonable risk of a skull puncture injuries will also eliminate the punctures of other parts of the body, as well as the lacerations, fractures, and other injuries, that have been associated with lawn darts in the past. This also carries out the will of Congress expressed in H.R. 5552, which is discussed in Section I of this notice.

The Commission estimates that about 6,700 injuries from lawn darts were treated in U.S. hospital emergency

rooms between January 1978 and December 1987. This represents an average of 670 injuries per year treated in emergency rooms. Approximately 57 percent of the injuries involved the head, face, eye, or ear. Just under 40 percent of the injuries were diagnosed as puncture wounds. Approximately 4 percent of the injured victims were hospitalized (on the average, approximately 25 per year), including all of the victims sustaining injuries reported as fractures. Over 75 percent of the victims were under age 15; about 50 percent of the victims were under age 10. In addition, Commission records dating back to 1970 show that at least three children have been killed by injuries associated with lawn darts. These children were 4, 7, and 13 years old.

In the 25 lawn dart injury reports for which information about the user of the lawn darts was available, the reports indicated that children were playing with the lawn darts, despite the ban and exemption which were developed to keep the product out of the hands of children.

D. Statutory Authorities

If lawn darts as a class are deemed to be articles intended for use by children, the darts would be regulated under the provisions of the FHSA for mechanical hazards of children's products. Section 2(f)(1)(D) of the FHSA, 15 U.S.C. 1261(f)(1)(D); section 30(d) of the Consumer Product Safety Act ("CPSA"), 15 U.S.C. 2079(d). If at least some lawn darts were deemed to be children's products, while other lawn darts might not be children's products, a regulatory proceeding to address all lawn darts could be conducted either under both the CPSA and the FHSA or under the CPSA alone, after a finding that it is in the public interest to do so as provided in Section 30(D) of the CPSA.

An article intended for use by children which has been declared by rule to be a hazardous substance is banned under section 2(q)(1)(A) of the FHSA, 15 U.S.C. 1261(q)(1)(A), unless exempted. To effect a ban of lawn darts under the FHSA, the Commission is revoking the exemption at 16 CFR 1500.86(a)(3) and making the necessary changes in the terms of the general ban at 16 CFR 1500.18(a)(4).

The Commission is authorized, under section 7 of the CPSA, to promulgate a mandatory consumer product safety standard which sets forth certain performance requirements for a consumer product or which sets forth certain requirements that a product be marked or accompanied by clear and adequate warnings or instructions. 15

U.S.C. 2056. A performance, warning, or instruction standard must be reasonably necessary to prevent or reduce an unreasonable risk of injury. In addition, if the Commission finds that no feasible consumer product standard under section 7 would adequately protect consumers from an unreasonable risk of injury associated with lawn darts, the Commission may promulgate a rule under section 8 of the CPSA declaring some or all lawn darts to be banned products. 15 U.S.C. 2057.

The procedures and requisite findings to accomplish any of the mandatory regulatory alternatives under consideration under either or both acts are essentially the same; both acts use a three-stage rulemaking procedure. At each stage of the rulemaking, the Commission is required to consider certain topics and make specified findings, particularly about the status of voluntary standards and about the costs and benefits of the contemplated rule.

The requirements for promulgating a mandatory rule are set out in section 9 of the CPSA, 15 U.S.C. 2058, and section 3(f) of the FHSA, 15 U.S.C. 1262(f). An advance notice of proposed rulemaking ("ANPR") is the first step of a regulatory proceeding that could lead to a safety rule. The second step of the rulemaking procedure is the issuance of a proposed rule, which is followed by public comment on the proposal. As described above, the first two steps have already taken place. The third step, which is accomplished by this notice, is the issuance of a final rule.

As explained above, the ban being issued in this notice with respect to any lawn darts not "a toy, or other article intended for use by children" is being issued under Sections 8 and 9 of the CPSA. As to the products covered by that ban, the Commission concludes there is at this time no feasible consumer product safety standard that would adequately reduce or eliminate the risk of skull puncture injury.

Section 9(d)(1) of the Consumer Product Safety Act provides that the Commission shall either promulgate a consumer product safety rule or withdraw the proposed rule within 60 days after publication of the proposal, unless the Commission extends the 60-day period for good cause and publishes its reasons therefor in the *Federal Register*. In the case of the final ban of lawn darts, a 30-day period was provided for the submission of public comments on the proposal. Due to the need to consider the public comments, particularly the issue of whether any flexible-tipped darts should be exempted from the ban, and due to the

time required to prepare the staff's briefing materials and to prepare and revise the *Federal Register* notice to issue the ban, the rulemaking could not be concluded within the remaining 30 days of the 60-day period provided in section 9(d)(1) of the CPSA.

Accordingly, for the reasons discussed above, the Commission extends the time for either promulgating the final ban or withdrawing the proposal until November 18, 1988.

In addition, on November 5, 1988, the President signed legislation directing certain action by the Commission with respect to lawn darts. This legislation is discussed in Section I of this notice.

E. Responses to the Proposal

The Commission received 13 written comments on the proposal. Comments opposed to the proposed ban were received from three firms which manufacture or distribute lawn darts, one former dart distributor, and the Sporting Goods Manufacturers Association. Comments in favor of the proposed ban were received from the Consumer Federation of America, the New York State Consumer Protection Board, the Puerto Rico Department of Consumer Affairs, the Michelle Snow Foundation (named after a child killed by a lawn dart injury), the Minnesota Attorney General, the town of Babylon, New York, an attorney who has represented a child injured by a lawn dart, and the mother of a child injured by a lawn dart.

In addition to written comments on the proposal, the Commission provided an opportunity for the oral presentation of comments, as required by section 9(d)(2) of the CPSA for consumer product safety rules, which was held on August 9, 1988. Two persons made presentations to the Commissioners at that time. One was the Vice President of Sales and Marketing for the domestic manufacturer of lawn darts, and the other was President of a company that markets those darts.

The significant issues raised by the comments, and the Commission's views on those issues, are explained below.

1. Comments opposed to the ban.

a. *Lawn darts are not unsafe compared to other products.* Several comments contended that it was unreasonable to ban lawn darts when other products that are not being considered for a ban injure more people. Examples given by the commenters of unregulated, but nonetheless dangerous, products included alcohol, tobacco, firearms, arrows, knives, javelins, English or American darts, sharp-pointed projectiles in general, horseshoes, bicycles, baseballs, bats,

scooters, roller skates, skateboards, surfboards, "Saturday night specials," and drunk drivers.

In considering the substance of these comments, it is important to keep in mind that the Commission has no statutory authority to regulate risks associated with alcoholic beverages, tobacco, firearms or their use, or motor vehicles or their use. Thus, any consideration of the reasonableness of regulating those risks is outside the Commission's statutory mandate.

As to the other products mentioned by the commenters as more dangerous than lawn darts, but not banned, the Commission notes that these products each present a unique combination of factors relevant to the decision of whether regulatory action is warranted. Among the factors the Commission is required to consider in determining whether to issue a performance standard or ban applicable to a product are: the number of deaths that will be prevented by the action; the number and severity of the injuries that will be prevented; the cost of the regulation for industry and consumers; and the need of the public for the consumer product subject to the rule, and the probable effect of the rule upon the utility, cost, or availability of such product to meet such need.

From the partial list given above of factors the Commission must consider in deciding to ban, or take other action with respect to, a product, it is clear that lawn darts differ markedly from the other products mentioned by these commenters with respect to the need and desire of the public for the product. There appears to be no strong attachment of the public to the game of lawn darts. Not one commenter wrote in to protest the proposed ban in his or her capacity as a recreational user of lawn darts. Thus, unlike most of the other games mentioned by these commenters, there is relatively little public desire for lawn darts that cannot be satisfied in other ways. Furthermore, there are numerous other lawn games that do not represent a risk of puncture injuries, including skull punctures, that could supply equivalent recreational value.

The stronger desire of the public for the other products listed by the commenters and the lack of equivalent substitutes for them are factors the Commission is required by statute to consider in determining whether such products should also be banned. In effect, the desire of the public for a product is a factor that could completely or partially offset, from a public policy standpoint, the deaths and injuries caused by the product. Therefore, the mere fact that other, more desired,

products that produce more deaths and injuries are not banned does not lead to the conclusion that it is unreasonable or illogical to ban lawn darts.

b. *Low injury rate.* Commenters also argued that lawn darts should not be banned because the rate of three deaths in 17 years and 670 injuries treated annually in emergency rooms is quite low, especially considering that perhaps 1.5 million sets of darts are sold each year. The Commission agrees that this is a relatively low figure for deaths and injuries as recreational activities go. Nevertheless, the benefits of banning this product, even considering the desire of the public for it, bear a reasonable relationship to the costs of doing so. While the Commission does not take the idea of banning any product lightly, the availability of similar but non-lethal forms of recreation makes the continuation of these tragic injuries an unacceptable alternative.

c. *Darts not subject to current regulations.* A commenter noted that the earliest of the known deaths occurred before the currently required warnings and instructions were widely adopted. However, the later death and injuries show that these warnings and instructions are not completely effective in keeping these darts out of the hands of unsupervised children, and the early deaths still show the potential of the darts to cause death when used by children. Furthermore, even if the early deaths had not occurred, the costs and benefits of the ban would still bear a reasonable relationship to each other.

Commenters also noted that the latest known death from a lawn dart was caused by a dart that had been modified by removing the plastic fins from their original shaft at the rear of the weighted body of the dart and attaching the fins to the larger diameter shaft originally intended to serve as the tip. This modification results in the dart impacting on the original fin shaft, which is smaller in diameter than the original tip. The information available to the Commission's staff conflicts with the assertions of some commenters that the dart involved in this incident had been sharpened in some way.

The Commission's Engineering staff estimated that this modification would increase the chance of skull penetration or other serious injury by a factor of 1.6, based on the difference in diameters between the modified dart's tip and the intended tip. The Commission is unable to conclude whether this difference would have been sufficient to prevent the death in question had the dart not been modified. However, even if the dart had not been modified, there would

have been considerable potential for death or serious injury in this incident, and the fact that the dart was modified does not make the Commission conclude that a ban is unnecessary.

d. *User's responsibility.* Commenters pointed out that if the manufacturer's directions are followed, there will not be any injuries of children caused by other children using lawn darts. A commenter characterized the circumstances surrounding lawn dart injuries as a "total violation of common sense as well as explicit directions."

The deaths and injuries that continue to occur have made it clear that the present warnings and marketing restrictions have been insufficient to keep these products out of the hands of children, who will find them attractive and wish to play with them at least occasionally. The Commission staff's analysis of consumer attitudes and behavior (discussed in paragraph (e) and Section F, below) has indicated that further measures to market lawn darts only for adults would not prevent use by children. Particularly since the hazard of skull puncture is not necessarily apparent from a casual examination of the darts, the Commission does not believe that parental responsibility alone will prevent the injuries and deaths that would result from the continued sale of this product.

It is also unrealistic to hold children to standards of behavior and responsibility that would be appropriate for adults. Children cannot always be expected to exercise "common sense" when playing with a potentially dangerous object, especially when the danger is not necessarily obvious.

Thus, the Commission does not find these objections to the ban persuasive.

e. *Additional labeling and marketing restrictions.* Commenters argued that the additional five steps described in Section A of this notice will adequately reduce the risk. One commenter stated his belief that industry would voluntarily cease marketing lawn darts in combination sets with other games.

In order to determine whether these types of actions would be an adequate way to deal with the risk to children, the Commission's staff analyzed available information on consumer attitudes and behavior. This analysis is discussed in Section G of this notice under "Alternatives to the rule." After considering the staff analysis, the Commission concluded that efforts to market lawn darts for adult use only cannot be expected to preclude significant use by children. Accordingly, the Commission concludes that the actions under consideration previously will not adequately deal with this risk.

f. *Freedom of choice.* Commenters argued that a ban would violate the concept of "freedom of choice" that is an important part of living in a free society. While it is true that any ban, and many other regulatory actions, involve a restriction on choices available to various groups, the Commission has a responsibility to see that the marketing of products does not disregard the public interest in product safety. After considering the desire of the public for lawn darts in conjunction with the other costs and benefits of the proposed ban, the Commission concludes that the ban is warranted, for the reasons discussed above in the responses to other comments on the proposal.

g. *Inventory.* In the proposal, the Commission predicted that a ban that became effective in November would involve relatively few sets of lawn darts that were in the chain of distribution at that time. A manufacturer, however, commented that it had raw materials for about 50,000 sets, and a distributor commented that it had about 53,000 sets in inventory, which would involve a loss of over \$100,000.

These adverse effects are within the range of effects that had been predicted by the Commission staff at the time of the proposal. In view of the need to curtail the deaths and injuries from lawn darts as soon as possible, and considering the vulnerable population involved, the Commission concludes that the adverse economic effects described by these commenters are insufficient to warrant abandoning or delaying the prohibition of hazardous lawn darts. See the discussion below concerning effective date.

h. *Effective date.* A commenter urged that the effective date be set so that wholesalers and retailers could exhaust their inventories before the prohibition becomes effective. This, according to the commenter, would involve an effective date of January 31, 1989, for wholesalers and an effective date of August 31, 1989, for retailers. The commenter contended that short-term demand for the product has been killed by adverse publicity and that therefore the only persons who would buy the darts during the extended period of the effective date would be persons who are specifically interested in having lawn darts.

As discussed in previous section (g), and in section G of this notice under "Costs," the Commission has concluded that the costs to manufacturers, wholesalers, and retailers of an effective date that is 30 days after publication of this notice are warranted in view of the need to restrict the number of sets of lawn darts going into the hands of

consumers, some of which could be expected to cause further injuries or deaths to children who ultimately would be exposed to the darts in these sets. The commenter's argument that only persons interested in lawn darts will buy them if the effective date is extended is speculative, and, in any event, there is no reason to conclude that such darts will not end up being accessible to children. Accordingly, the Commission has decided not to extend the effective date for the purpose of allowing the exhaustion of inventory.

i. *One-time use.* A commenter expressed his belief that lawn darts are bought for special one-time occasions and are discarded after that use. This view conflicts with what the Commission staff has found in in-depth investigations of lawn dart incidents. Furthermore, even if this were true, the deaths and injuries that have occurred would have occurred in spite of that fact. Therefore, the Commission concludes that this argument contains no reason why a prohibition of lawn darts should not be implemented.

j. *Flexible tips.* In the proposal, the Commission noted that a type of lawn dart with a tip that was about as flexible as a pencil eraser, which the manufacturer stated was not intended to stick in the ground and would not pierce kraft paper, was not capable of sticking in the ground. This statement was based on the manufacturer's representation. In addition, during the comment period, two other types of darts were mentioned as possibly presenting less of a skull puncture hazard than the metal- or rigid-plastic-tipped darts that have been generally marketed in the past.

One of these darts was a nylon-tipped dart that the manufacturer contends is lighter and more resilient than the metal-tipped darts. According to the commenter, no customer complaint or insurance claim has been made with respect to this type of dart during the 8 years the commenter has marketed the product. The lack of complaints or insurance claims notwithstanding, the Commission's staff examined an example of that dart and concluded that its tip was sufficiently rigid and that it was sufficiently heavy that it presented a risk of injury similar to that of metal-tipped darts. Accordingly, the Commission concludes that it would not be appropriate to exclude this nylon-tipped dart from the category of prohibited lawn darts.

The other type of dart that was presented to the Commission as being less hazardous was one that had been developed by a commenter. The commenter, however, provided no data

by which the Commission could evaluate the potential for skull puncture presented by this dart. The dart in question had a tip that the Commission staff believes is made of polyethylene and that is much more flexible than the nylon tip discussed in the preceding paragraph.

The first sample of this flexible-tipped dart obtained by the Commission's staff was dropped onto a laminate intended to simulate the puncture resistance of a child's skull. The dart was dropped from 25 feet and did not penetrate the upper layer of the laminate. However, that particular dart had been manipulated by numerous persons at the Commission, who had manually bent its tip to see how stiff it felt, before the dart was tested by the drop test. This handling may have bent the dart's tip or made it more flexible. Other, supposedly identical, samples of this dart failed the drop test. In addition, some darts will pass the test on some attempts and fail it on others, thus raising a question about the reproducibility of the test. These differing results may be due to slight differences in the angle at which the dart hits the target when dropped or to other, unknown factors. Although the Commission ultimately decided not to promulgate the drop test as part of the regulation, the results obtained were sufficient to indicate that these flexible-tipped darts may have the potential for skull puncture injury and for other puncture wound injury.

For the reasons stated above, the Commission is unable at this time to find that there are differences in the functional or risk characteristics between these flexible-tip darts and rigid-tip darts that would warrant excluding flexible-tip darts from the ban issued below.

k. Homemade darts. One commenter stated that if lawn darts were not sold, consumers would make their own versions that could be more dangerous than the ones now on the market. This comment appears to be entirely speculative.

l. Repurchase and returns. The proposal stated the rule "does not require the repurchase of prohibited lawn darts by manufacturers, marketers, or retailers who have sold the darts to the next entity in the chain of distribution or to consumers." The Sporting Goods Manufacturers Association asked for clarification of this statement. Further discussion of this statement is given below.

The quoted statement was included in the proposal to make it clear that the rule does not require any manufacturer, marketer, or retailer to repurchase lawn darts sold before the effective date of

the ban. Therefore, the only real obligation these parties would have to repurchase such lawn darts would depend on the contractual or other obligations between the seller and the purchaser arising under state or local law.

Of course, this interpretation is not intended to limit in any way the Commission's authority to seek relief against noncomplying products, or products with particular defects, under section 15 of the CPSA, 15 U.S.C. 2064, or Section 15 of the FHSA, 15 U.S.C. 1274. Relief under these sections could include repair, replacement, or refunds, if a substantial product hazard is proven. Nor is it intended to restrict in any way a manufacturer, distributor, or retailer that might wish to voluntarily issue a refund to its customers.

2. Comments supporting the ban. As noted above, 8 of the 13 comments received on the proposal supported prohibiting the sale of hazardous lawn darts. Among the reasons stated were: that because of lack of supervision or education, the product finds itself in the hands of very young consumers; that warnings have not been effective; and that selling only in stores other than toy stores does not convey the message that lawn darts are for adult use only. The mother of an 8-year-old boy who was permanently injured while throwing a lawn dart explained the seriousness of the injury to the boy's eye, noted that the medical expenses already exceeded \$20,000, and stated that the dart involved did not belong to the boy or his family.

Some comments pointed out particular violations of the Commission's current regulations, and that, in some cases pointed out by the Minnesota Attorney General, the companies involved had agreed to stop selling lawn darts.

Some comments urged the Commission to recall darts now in the hands of consumers, in addition to banning future sales. The Commission has the authority to order refund, replacement, or repair of certain hazardous products under specified circumstances under section 15 of the CPSA and section 15 of the FHSA, 15 U.S.C. 1274, 2064. However, the Commission does not believe that recall would be appropriate or effective in the case of lawn darts, for the following reasons.

The lawn darts now in the hands of consumers were legally sold pursuant to a specific exemption provided in the FDA regulation subsequently administered by the Commission and republished as 16 CFR 1500.86(a)(3). After administering a regulation that specifically allowed the sale of these

products, the Commission does not consider it appropriate to seek a recall unless such action is clearly warranted. However, as explained in the following paragraph, it is not at all clear that a recall would result in a substantial number of refunds for the consumer or that the benefits of such action would warrant such a potentially expensive remedy.

The experience of the Commission's staff in examining used lawn darts is that it is usually impossible to determine the identity of the manufacturer or importer of the dart. This is because of the similar design of the darts and the lack of permanent labeling identifying the manufacturer or importer. Without the ability to determine which manufacturer or importer is associated with a particular dart, the remedy of a recall is not likely to be effective or in the public interest.

Furthermore, lawn darts are relatively inexpensive and can be discarded by consumers who no longer desire them. The Commission is unable to find at this time that the substantial costs that would be incurred by manufacturers or importers to give refunds and administer a refund program would be warranted.

A commenter urged that the Commission institute an information campaign using "wanted posters" showing lawn darts. The Commission intends to continue its information efforts about lawn darts that are already in the hands of consumers, and the Commission staff will consider whether the commenter's idea can be used for lawn darts or other products, as appropriate. Since this issue is separate from the question of whether to issue a ban of lawn darts, it need not be fully resolved at this time.

A commenter urged that the prohibition of lawn darts be put into effect as soon as possible, in order that products in inventory not be dumped on the market before the effective date. The Commission believes that the 30-day effective date provided in the rule issued below will accomplish the result desired by this commenter.

F. Regulatory Analysis

Introduction

The Commission has determined that even lawn darts that arguably are intended for the use of adults are likely to be used by children at various times. Accordingly, the Commission is taking action under both the FHSA and the CPSA, so as to reach all lawn darts, which have been determined to present a risk of skull puncture injuries and other puncture wounds to children, and

to eliminate potential arguments about whether any lawn darts can be considered to be intended for use by adults.

Under Section 3(i)(1) of the Federal Hazardous Substances Act ("FHSA") and Section 9(f)(2) of the Consumer Product Safety Act ("CPSA"), the Commission is required to publish with the regulation a final regulatory analysis containing

(A) A description of the potential benefits and potential costs of the regulation, including any benefits or costs that cannot be quantified in monetary terms, and an identification of those likely to receive the benefits and bear the costs.

(B) A description of any reasonable alternatives to the final regulation which were considered by the Commission, together with a summary description of their potential costs and benefits and a brief explanation of the reasons why these alternatives were not chosen.

(C) A summary of any significant issues raised by the comments submitted during the public comment period in response to the preliminary regulatory analysis, and a summary of the assessment by the Commission of such issues.

15 U.S.C. 1262(i)(1), 2058(f)(2).

In addition, for proposed rules, section 9(c) of the CPSA and section 3(h) of the FHSA provide that the Commission shall publish a regulatory analysis containing:

(1) a preliminary description of the potential benefits and potential costs of the proposed regulation, including any benefits or costs that cannot be quantified in monetary terms, and an identification of those likely to receive the benefits or bear the costs

(2) a discussion of the reasons any standard or portion submitted to the Commission * * * was not published by the Commission as the proposed regulation or part of the proposed regulation;

(3) a discussion of the reasons for the Commission's preliminary determination that efforts proposed [to develop voluntary standards] * * * would not, within a reasonable period of time, be likely to result in the development of a voluntary standard that would eliminate or adequately reduce the risk of injury * * *

(4) a description of any reasonable alternatives to the proposed regulation, together with a summary description of their potential costs and benefits, and a brief explanation of why such alternatives should not be published as a proposed regulation.

15 U.S.C. 1262(h), 2058(c).

While the requirements under the FHSA and the CPSA are similar, Section 9 of the CPSA requires further that, for rules issued under the CPSA, the Commission shall make economic findings with respect to:

(A) the degree and nature of the risk of injury the rule is designed to eliminate or reduce;

(B) the approximate number of consumer products, or types or classes thereof, subject to such rule;

(C) the need of the public for the consumer products subject to such rule, and the probable effect of such rule on the utility, cost, or availability of such products to meet such need; and

(D) any means of achieving the objective of the order while minimizing adverse effects on competition or disruption or dislocation of manufacturing and other commercial practices consistent with the public health and safety.

15 U.S.C. 2058(f)(1).

The following discussion serves as the final regulatory analysis for the ban that is issued below. The discussion addresses requirements under both the FHSA and CPSA, except where noted.

Benefits

The benefits of the rule will accrue through a decrease in the deaths and injuries associated with lawn darts. While the rule was originally intended to address the risk of skull puncture injuries to children, all lawn darts are found to present this risk, and their elimination will also eliminate the punctures of other parts of the body, as well as the lacerations, fractures, and other injuries, that have been associated with lawn darts in the past. This also fulfills the will of Congress expressed in H.R. 5552, which is discussed in Section I of this notice.

An analysis by the Commission's Directorate for Epidemiology indicates that about 670 lawn-dart-related injuries have occurred annually over the last ten years. Economic studies indicate that the average cost of these injuries was about \$7,500 per occurrence. The estimated total yearly cost of injuries associated with lawn darts is about \$5 million.

The Commission is aware of 3 deaths associated with lawn darts over the period 1970-1987. If it is assumed that other variables, such as exposure and use characteristics, have remained constant and that the Commission is aware of all such deaths, the darts may present a 17 percent risk of one death in a given year. If a statistical valuation of \$2 million for loss of life were assigned, lawn darts would have additional expected losses of about \$300,000 per year.

Therefore, the estimated total yearly costs of death and injury associated with lawn darts are about \$5.4 million. A reduction of these injuries and of the risk of death will make up the benefits accruing from the rule. Since the average useful life of a lawn dart is estimated to be ten years, and since it should take about 20 years to phase out the lawn darts that are currently in consumers'

hands, a portion of the benefits of the rule will phase in each year, until, after about 20 years, the full benefit of the rule will accrue each year and will continue as long as the rule is in effect.

The benefits derived will be further affected by the choice of substitute activities. For example, if consumers chose a risk-free lawn game as a substitute, the reduction in injury would be completely realized after the existing stocks of elongated-tipped lawn darts in consumers' hands have become worn out, been misplaced, or otherwise passed from use. However, if consumers choose a substitute with a similar or higher risk of death or injury, the expected benefits of this action will be offset.

The benefits will be to purchasing consumers and their families and friends, but will accrue disproportionately to those 15 years old or younger, since over 75 percent of injuries and 100 percent of the deaths have occurred to this age group. Both the costs and benefits associated with a prohibition on the sale of elongated-tipped lawn darts are expected to be relatively small.

Costs

The costs of the rule to marketers of elongated-tipped lawn darts are the loss of future sales of a product with a demonstrated steady demand. Annual sales of these lawn darts are estimated at 1-1.5 million units, holding relatively stable in recent years. The typical retail price of a set of four lawn darts is about \$5; thus, the total loss of sales will be about \$5-7.5 million annually at the retail level. The intermediate and final markups of these products have been estimated at more than 50 percent of the retail price; thus, industry revenues from the sale of elongated-tipped lawn darts likely exceed \$2.5 million annually. These revenues will be eliminated. However, the loss of these revenues could be largely recouped by sales of substitute products that will occupy the display and storage space previously allotted to lawn darts.

The vast majority of lawn darts sold in the U.S. are imported. However, the value of these imports is so small as to be negligible compared to total U.S. imports. There are no known U.S. exports of lawn darts. Thus, the rule is expected to have no effect on U.S. trade.

The one known domestic manufacturer will bear costs associated with the disposal of molds and production processes associated with the manufacture of these lawn darts as well as foregone profit on future sales. The manufacturer could produce lawn

darts for export, but this is considered unlikely since the firm does not now export lawn darts and is unlikely to develop overseas markets rapidly. If production machinery is adaptable to the manufacture of another product for which there is a demand, the cost effect may be minimized. If molds and machinery are scrapped, and no available substitute is produced to offset lost sales, the domestic manufacturer may incur significant economic costs. Also, this manufacturer has indicated that it will have raw materials for about 50,000 sets of lawn darts. If other uses for these materials cannot be found, the cost of acquiring these materials will not be recouped.

The impact of lost sales of lawn darts will be the loss of net profit associated with production and marketing of these products, less any profit derived from other products marketed in their stead.

The distributional effect on marketers will depend on their share of the market and on what share they may take of the sale of substitute products. Importers and retailers will similarly be affected by the extent of the relative volumes they sell of these goods.

Costs borne by consumers will take two forms. Consumers will be unable to purchase a game which has a proven popularity and will be induced to purchase alternate games to fill that demand. There are ready substitutes available, at approximately the same price; however, it is not clear whether these substitutes provide a similar level of utility (enjoyment) as the products they would replace. If consumers are compelled to purchase more costly games in order to receive the same utility as that provided by prohibited lawn darts, the rule may result in increased costs to consumers. Further, there may be a loss in consumer surplus associated with the unavailability of lawn darts if consumers were willing to pay more than they now pay at retail for the game in order to acquire it, thus indicating that they value the product in excess of the retail price. The extent of any lost consumer surplus is unknown, but is expected to be small.

The Commission has anecdotal information indicating that elderly persons may play lawn darts more than other typical adults do. The Commission has no information to indicate the extent to which handicapped persons may play lawn darts. Either of these groups, however, should be able to find suitable recreational substitutes for lawn darts.

The domestic manufacturer and certain marketers and retailers may be considered small businesses. The overall effect of the rule on the domestic manufacturer may be substantial, but

other small businesses are not expected to experience significant adverse effects associated with the rule. This issue is discussed further in Section G of this notice.

It is likely that the marketing firms (wholesalers and private labelers) will initially bear the costs associated with the rule. The costs, including those of retrieval and disposal of unsaleable inventories and foregone profits, will begin on the effective date, which, as discussed below, is December 19, 1988, and applies to all products in the chain of distribution at that time.

Since the commission is making the rule banning elongated-tipped lawn darts effective 30 days after the publication of the final rule, and since the rule applies to all such lawn darts in the chain of distribution on the effective date, the potential for injuries from darts distributed before the effective date will be minimized. Also, the Commission believes that at this time of year there will be fewer sets of lawn darts at the retail level or elsewhere in the chain of distribution. Furthermore, the industry will have had the opportunity not to enter into contracts for new goods pending a Commission decision, thus further reducing any inventory in the chain of distribution and other economic consequences of the rule. Therefore, the Commission believes that costs caused by inventory being held on the effective date of the rule will not be substantial.

The Commission also does not expect that the cost to retailers due to foregone profits from the sale of lawn darts will be substantial, since other products could be promoted in the retail space vacated by the prohibited products.

Comparison of Costs and Benefits

As explained above, the quantifiable benefits of the rule are based on an estimated saving of the \$5.4 million annual cost of deaths and injuries once lawn darts are no longer in use. This figure could be offset to the extent that consumers choose to engage in activities that involve risk during the time they would otherwise be playing lawn darts.

The quantifiable costs will consist basically of lost industry revenues, which are estimated at somewhat more than \$2.5 million per year. However, the loss of these revenues can be largely recouped by the manufacture and sale of substitute items. Unquantifiable costs, discussed above, include consumers' loss of enjoyment of lawn darts.

After considering the costs and benefits of the rule, the Commission concludes that the benefits of the rule will bear a reasonable relationship to its costs.

Alternatives to the Rule

The Commission has determined that the rule is needed because industry actions of the types discussed in Section A to address the potential hazard presented by lawn darts would not be adequate. The five actions previously under consideration are: modifications to package labels, labeling one fin of each lawn dart, inclusion of a consumer warning against modification of the lawn darts, notice to retailers on the proper display of the games, and elimination of lawn dart sales in combination sets. The cost of implementing the five steps has been estimated at \$150,000 the first year, decreasing to about \$100,000 thereafter. If the five voluntary steps were to be about 2 percent effective in reducing injuries, the benefits derived through injury reduction would exceed the costs associated with compliance. However, the Commission believes that these voluntary steps may not be adhered to by all marketers and that, in any event, as discussed below, this approach would not be effective in adequately reducing the risk of injury presented by these products.

In order to determine whether attempts to ensure that lawn darts will be marketed for adults could be an effective way to deal with this risk, the Commission's staff analyzed information on consumer attitudes and behavior. The staff concluded that efforts to market lawn darts only for adult use may not prevent use by children, for the following reasons:

1. Selling lawn darts in stores other than toy stores, such as sporting goods departments, does not convey the message that lawn darts are for adult use only.
2. Consumers may recognize that lawn darts require motor and strategic skills similar to those required for other sports equipment designed for and/or used by children and, therefore, conclude that they are appropriate for children who have these skills.
3. Labeling lawn darts for adult use only may not convince parents that lawn darts are inappropriate for children. Parents may not consider the game particularly hazardous, especially in comparison to other products used by children.
4. It may be difficult for parents to prevent children from using lawn darts, as they are often used at large, casual gatherings with little or no supervision provided.
5. Parents sometimes have no knowledge that children are using lawn darts.

After considering this analysis of consumer attitudes and behaviors, the Commission concluded that efforts to market lawn darts for adult use only cannot be expected to preclude substantial use by children. Specifically, the marketing and labeling provisions in the current regulations, either by themselves or supplemented by the five actions requested of industry by CPSC, cannot be expected to accomplish the intended purpose. Furthermore, lawn darts do not require complex skills that preclude use by children. Therefore, the Commission believes children will continue to be attracted to and play with lawn darts, even if the product is marketed only as a game of skill for adults. Accordingly, the Commission concludes that no effort to develop a voluntary standard based on these types of requirements will adequately reduce the risk associated with lawn darts.

The Commission could also promulgate the voluntary actions as a mandatory rule. The expected costs and benefits of a mandatory rule would be similar to the cost of voluntary action, assuming 100 percent compliance. This action would have the additional effect of ensuring compliance by existing marketers as well as any future entrants. However, the Commission's concerns over effectiveness, described in the preceding paragraph, would remain.

As discussed previously in this notice, the Commission investigated a performance test to see if it could be determined that certain flexible-tipped lawn darts do not present an unreasonable risk of skull puncture injury. For the reasons given in Section E(1)(j) of this notice, the Commission concluded that there was insufficient information to determine that flexible-tipped darts do not also present a risk of skull puncture injuries.

Effective Date

The time allowed after promulgation for the final rule to go into effect, and the point in the chain of distribution to which the rule will be applied, affect the extent to which the industry will experience adverse economic effects from the rule. These adverse effects could be minimized by setting an effective date that facilitates an orderly elimination of affected products from the marketplace. Such an effective date would allow for exhausting wholesale and retail inventories to reduce the number of products that would require shipment to an alternate market or that would have to be discarded. Absent sufficient lead times, manufacturers estimate the cost of compliance with the rule may be substantial. However, as

discussed below, the effect of lead time may depend on the time of the year the regulation goes into effect.

Even though a long lead time may reduce the cost of the rule for manufacturers, the longer it is before the rule becomes effective, the more lawn darts could be sold and the greater the number of injuries or deaths which otherwise would have been prevented by an earlier effective date. In view of the need to reduce the injuries and deaths associated with this product as soon as possible, the Commission concludes that the early effective date, 30 days after promulgation of the rule, is reasonably necessary to eliminate or reduce the unreasonable risk of skull puncture injury associated with lawn darts.

As noted above, this rule is effective December 19, 1988. Having the rule effective at this time of year could cause firms to bear significantly increased costs because of contractual obligations to manufacturers, unless marketers took some anticipatory action. Winter and early spring historically are the periods of seasonal reorder and inventory buildup for seasonal sales of lawn darts.

The Commission has considered the potential effects of other effective dates on the industry and on possible future injuries. If the rule were to affect only products manufactured (or imported) after the effective date, the most acute impact to marketers would occur if the effective date were during the winter and early spring period of reorder. However, in view of the advance notice to the industry of the probability that the Commission could take final action on the proposal in the fall of this year, it seems likely that marketers will have delayed placing such orders pending a Commission decision on the final rule.

If the rule were based on first entry into commerce (first sale), marketers would be most adversely affected during the period of inventory buildup, which is early spring to midsummer. Again, marketers may have curtailed or delayed inventory buildup in anticipation of the possibility that a final rule would apply to products in their inventory on the effective date.

Comments on the Proposal

A summary of the significant issues raised by the comments submitted during the public comment period in response to the preliminary regulatory analysis, and a summary of the assessment by the Commission of such issues, are included in section E of this notice.

G. Regulatory Flexibility Analysis

Introduction

The Regulatory Flexibility Act ("RFA"), 5 U.S.C. 601-612, requires that whenever an agency conducts a rulemaking proceeding under 5 U.S.C. 553 and is required by that section or any other law to publish a general notice of proposed rulemaking, the agency shall prepare a preliminary regulatory flexibility analysis at the time of the proposal and a final regulatory flexibility analysis when the rule is issued. These analyses are required if the rule may have a significant impact on a substantial number of small businesses, small organizations, and small government jurisdictions. The agency is required to publish the preliminary regulatory flexibility analysis or a summary in the **Federal Register** and to make copies of the final regulatory flexibility analysis available to members of the public. The Commission's final regulatory analysis on the ban of lawn darts is given below. Copies may be obtained from the Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207.

The rule will affect all firms manufacturing, importing, or retailing lawn darts and may have a minor impact on some firms in the outdoor game industry that market lawn darts. Lawn darts represent about 5 percent of the total value of production of affected firms on the average, but individual firms indicate that these products represent as little as 1 percent and as much as 50 percent of gross revenue.

Statement of the Need for the Rule

Lawn darts intended for use by children are banned under the Federal Hazardous Substances Act, FHSA, at 16 CFR 1500.18(a)(4) and 1500.86(a)(3), but sale has been allowed under an exemption provision if certain warning labeling and retail display requirements are met. The Commission is concerned that, despite the regulation designed to discourage their use by children, lawn darts continue to be used by children. As a result, the products continue to present a risk of injury or death to children. Commission studies indicate that about 670 lawn-dart-related injuries were treated in hospital emergency rooms yearly from 1978 forward; three deaths have been reported over a 17-year period.

Objective of the Rule

The objective of the rule is to eliminate the risk of injury or death to children posed by skull punctures

caused by lawn darts. All lawn darts have been found to present a risk of skull puncture, so the rule will also serve to eliminate the other types of wounds, including other puncture wounds, caused by lawn darts. The rule prohibits the sale of lawn darts in combination sets with other outdoor lawn games, as well as in sets of darts only. This action also carries out the will of Congress as expressed in H.R. 5552, which is discussed in section I of this notice.

Comments on the Initial Regulatory Flexibility Analysis

The Commission received no comments that were identified specifically as being in response to the initial regulatory flexibility analysis. However, the Commission's responses to comments that address issues that were mentioned in the initial regulatory flexibility analysis are included in section E of this notice dealing with comments on the proposal.

Alternatives to the Rule

The Commission also could take other regulatory actions, including mandatory requirements for increased package labeling, a warning label on one fin of each lawn dart, notice to consumers warning against modification, informing retailers of their responsibilities under current law, and prohibiting the sale of lawn darts in combination sets. Such actions would notify adults of the danger presented by lawn darts if used by children, and would remove these games from combination sets since consumers otherwise may infer that all games in the sets are appropriate for general family use. This alternative would result in a minimal adverse effect in the year of introduction, with little cost effect thereafter. The Commission believes that this alternative will not be effective in reducing skull puncture injuries to children, given the easy access that children normally have to the game after it is purchased and the skill and judgment required to play the game safely. Similar effects would be expected if these actions were voluntarily adopted by the industry.

The Commission could also use a different effective date. The effects of different effective dates, and the reasons they were not adopted by the Commission, are discussed in section G of this notice.

The Commission also investigated whether a performance test could be developed to determine which lawn darts present a risk of skull puncture injuries, but, as explained in section E(1)(j), such a test is not believed to be feasible at this time.

The Commission has investigated ways of reducing the potential impact on small firms and concludes that no less burdensome alternative would adequately address the risk of injury to children.

H. Environmental Impact

Pursuant to The National Environmental Policy Act, and in accordance with Council on Environmental Quality regulations and CPSC procedures for environmental review, the Commission has prepared an assessment of the environmental impact associated with the rule issued below and of the proposed penetration criteria. The assessment addresses the potential environmental effects of the prohibition of the sale of lawn darts.

The rule will make preexisting packaging materials unusable for their intended purpose and, absent a residual use, would necessitate destruction of these materials. The Commission anticipates that less than 10 percent of preprinted packaging will remain after the imposition of the effective date; thus, less than about 150,000 boxes and printed instructions will be destroyed. The rule will also affect existing molds for fabricating lawn darts, because the existing molds likely will be destroyed. There is one existing domestic manufacturer of lawn darts subject to the rule. The number of individual molds involved is not believed to be substantial.

Since it appears that existing inventories of noncomplying lawn darts are low, the ban is not expected to cause a significant increase in discarded packaging material, other printed materials, or noncomplying sets.

In the industry, molds are periodically changed because of age or design modifications. Given the relatively small number of individual printing plates and molds affected, the Commission expects that the rule will cause no significant change in the disposal of used printing plate material or used molds.

The requirements of the rule are not expected to have a significant effect on the materials used in production or packaging of lawn darts or on the amount or types of materials discarded after the rule. Therefore, the Commission finds that the prohibition of hazardous lawn darts will cause no significant environmental effects.

I. H.R. 5552

Shortly before the Commission's scheduled meeting to consider whether to issue a final rule banning hazardous lawn darts, the Congress passed H.R. 5552, which provides:

That notwithstanding any other provision of law, not later than 60 days after the date of enactment of this Act, the Consumer Product Safety Commission shall amend its regulations to revoke [the] exemption regarding lawn darts and other similar sharp-pointed toys contained in section 1500.86(a)(3) of title 16, Code of Federal Regulations, unless the Commission finds that such products do not have the potential for causing puncture wound injury.

On November 5, 1988, this legislation was signed by the President. The following discussion explains how this legislation relates to the rule the Commission is issuing in this notice.

It is important to note that the rule that the Commission is issuing fully complies with the congressional directive. Based on the risk of skull puncture, the Commission is banning all lawn darts; part of the mechanism for implementing that ban is to revoke the exemption at § 1500.86(a)(3), as provided in the legislation.

The legislation allows the Commission to exclude from the scope of the revocation of the current exemption those products that the Commission finds "do not have the potential for causing puncture wound injury." However, as noted above, the Commission has considered this issue and is not aware of any lawn dart that does not present a risk of skull puncture injuries, much less of puncture wounds in general.

The legislation appears to change the requirements for evidence to support the Commission's rulemaking for this particular product from (1) having to amass substantial evidence to show that the product is unreasonably dangerous in order to ban it to (2) having to have substantial evidence to show the product does not present a risk of puncture wound injury in order to exclude it from being banned. This has no effect on the rule being issued, because the Commission has concluded that all lawn darts present an unreasonable risk of skull puncture injuries. The Commission has examined the question of whether there are any lawn darts that appear not to have the potential for causing puncture wound injury and cannot find that there are any lawn darts that do not have this potential. This reversal of the normal burden of proof would have significance for persons who wish to request that the Commission exempt particular products from the scope of the ban. Such persons will have to provide evidence that the product to be exempted does not have the potential for causing puncture wound injury. This is a higher burden than that which would normally be

required to obtain an exemption; namely, that the ban is not reasonably necessary to address an unreasonable risk of injury.

Thus, the Commission's action fully complies with the provisions of H.R. 5552, and that bill provides additional legal support for the Commission's ban. Furthermore, the Commission's ban will supplement the bill's provisions, because the Commission is issuing a ban of lawn darts under the CPSA in addition to revoking the exemption to the current ban under the FHSA. The significance of this action arises from the fact that mechanical hazards of products can be regulated under the FHSA only if the product is a "toy or other article intended for use by children." FHSA 2(f)(1)(D), 15 U.S.C. 1261(f)(1)(D). Issuing a companion ban under the CPSA will remove any argument that might be made in response to an action for violating a ban of lawn darts under the FHSA alone that the darts are not toys or articles intended for use by children. While the Commission believes that the intent of H.R. 5552 is to remove all lawn darts from the market, the Commission's issuance of a ban under the CPSA, in addition to the existing ban under the FHSA, will provide additional assurance that the congressional intent will be achieved. By the same token, the expression of congressional intent in H.R. 5552 will provide additional support for the Commission's ban under the CPSA.

J. Conclusion

For the reasons given above, the Commission concludes that lawn darts present an unreasonable risk of skull puncture injuries to children from the mechanical characteristics of the darts. Further, it appears that there is no feasible consumer product safety standard that would adequately reduce this risk, and the rule issued below is the least burdensome alternative that will adequately reduce the risk. Also, this action fulfills the congressional directive embodied in H.R. 5552.

List of Subjects in 16 CFR Parts 1306 and 1500

Consumer protection, Recreation, Voluntary standards.

Therefore, under the authority of the Federal Hazardous Substances Act and the Consumer Product Safety Act, the Commission amends Title 16 of the Code of Federal Regulations, chapter II as follows:

PART 1500—HAZARDOUS SUBSTANCES AND ARTICLES; ADMINISTRATION AND ENFORCEMENT REGULATIONS

1. The authority citation for Part 1500 continues to read as follows:

Authority: 15 U.S.C. 1261-1276.

§ 1500.86 [Removed and Reserved]

2. Section 1500.86(a)(3) is removed and reserved.

§ 1500.18 [Amended]

3. The parenthetical phrase at the end of § 1500.18(a)(4) is removed.

A new Part 1306 is added to read as follows:

PART 1306—BAN OF HAZARDOUS LAWN DARTS

Sec.

1306.1 Scope and application.

1306.2 Purpose.

1306.3 Banned hazardous products.

1306.4 Findings.

1306.5 Effective date.

Authority: 15 U.S.C. 2058-2060.

§ 1306.1 Scope and application.

(a) In this Part 1306, the Commission declares lawn darts, described in § 1306.3, to be banned hazardous products.

(b) Lawn darts and similar products that are articles intended for use by children are not covered by this ban, but are banned under the Federal Hazardous Substances Act at 16 CFR 1500.18(a)(4).

§ 1306.2 Purpose.

The purpose of this rule is to prohibit the sale of lawn darts, which have been found to present an unreasonable risk of skull puncture injuries to children.

§ 1306.3 Banned hazardous products.

Any lawn dart is a banned hazardous product.

§ 1306.4 Findings.

(a) The Commission has found that lawn darts are being distributed in commerce and present an unreasonable risk of injury.

(b) *The degree and nature of the risk of injury.* (1) The risk that the Commission intends to address in this proceeding is that of puncture of the skulls of children caused by lawn darts being used by children. The potential for these devices to cause these types of injuries is not necessarily obvious to parents or other adults who might buy these items or allow their children to play with them, much less to the children themselves. This is because the tips do not appear sharp enough to present an obvious danger of puncture.

The combined factors of weight, the narrow elongated shaft, the speed that the dart is traveling at the time of impact, and the thickness of the child's skull at the point of impact present the risk. The Commission has concluded that all lawn darts have the potential for skull puncture during reasonably foreseeable use or misuse.

(2) Because all lawn darts are being banned, the elimination of lawn darts that can cause skull puncture injuries will also eliminate the punctures of other parts of the body, as well as the lacerations, fractures, and other injuries that have been associated with lawn darts in the past. The Commission's staff estimates that about 670 injuries from lawn darts are treated in U.S. hospital emergency rooms per year. About 40 percent of these are puncture wounds. Approximately 57 percent of the injuries involved the head, face, eye, or ear. Approximately 4 percent of the injured victims were hospitalized (on the average, approximately 25 per year), including all of the injuries reported as fractures. Over 75 percent of the victims were under age 15; about 50 percent of the victims were under age 10. In addition, Commission records dating back to 1970 show that at least three children have been killed by injuries associated with lawn darts. These children were 4, 7, and 13 years old. In the 25 lawn dart injury reports for which information about the user of the lawn darts was available, the reports indicated that children were playing with the lawn darts, despite the ban and exemption which were developed to keep the product out of the hands of children.

(c) *Products subject to this ban.* (1) Lawn darts are devices with elongated tips that are intended to be used outdoors and that are designed so that when they are thrown into the air they will contact the ground tip first. Often, lawn darts are used in a game where the darts are thrown at a target or other feature on the ground. The types of lawn darts that have generally been available in the past and that have demonstrated their ability to cause skull puncture injuries typically have a metal or weighted plastic body, on the front of which is an elongated metal shaft about 1/4 inch in diameter. These darts have a shaft on the rear of the body containing plastic fins. These darts are about a foot in length and weigh about one quarter to one half pound. These darts are intended to stick in the ground when thrown. Prior to this rule, annual sales of these lawn darts were estimated at 1-1.5 million units.

(2) The definition for lawn darts in this rule is not intended to include arrows or horseshoes, nor is it intended to apply to indoor dart games that use a vertically-placed target, such as "English darts" or "American darts."

(d) *The need of the public for lawn darts, and the effects of the rule on their utility, cost, and availability.* The need of the public for lawn darts is for recreational enjoyment. Substitute recreational enjoyment can be obtained from other products. Lawn darts will not be available through commercial channels after the effective date of the ban.

(e) *Alternatives.* (1) The Commission considered various labeling requirements and limitations on the marketing of lawn darts that would be intended to discourage the marketing of the product to children and the use of the product by children. The Commission concluded, however, that these types of requirements would not preclude substantial use of the product by children and would not reduce adequately the risk of injury addressed by this rule.

(2) The Commission also considered the possibility of performance requirements for lawn darts to determine which lawn darts present an unreasonable risk of injury of skull penetration to children, but such requirements were determined not to be feasible.

(f) *Conclusion.* The Commission finds:

(1) That this rule, including its effective date, is reasonably necessary to eliminate or adequately reduce the unreasonable risk of skull puncture wounds to children associated with lawn darts and will also eliminate or reduce the other injuries, including puncture wounds, that have been associated with this product.

(2) That issuance of the rule is in the public interest.

(3) That no feasible consumer product safety standard would adequately protect the public from the unreasonable risk associated with lawn darts.

(4) That the benefits expected from this rule bear a reasonable relationship to its costs.

(5) That the rule imposes the least burdensome requirement which prevents or adequately reduces the risk of injury for which the rule is being promulgated.

§ 1306.5 Effective date.

This rule is effective December 19, 1988 and applies to all lawn darts in the chain of distribution on or after that date.

Dated: November 14, 1988.

Sheldon D. Butts,

Deputy Secretary, Consumer Product Safety Commission.

List of Relevant Documents

[This list will not be published in the Code of Federal Regulations.]

Letter from David Snow to Sen. Albert Gore, May 21, 1987.

Letter from David Snow, June 4, 1987.

Letter from David Schmeltzer, AED/CAL, to various persons associated with the lawn dart industry to invite them to a meeting on July 17, 1987; July 2, 1987.

Memorandum from Schmeltzer, D., AED/CA, to Noble, D., Director, OPMB, "Lawn Darts," dated July 15, 1987, with attachments.

Attachment A—Proposed Ban of Lawn Darts, Federal Register Vol. 35, No. 223, November 17, 1970.

—Final rule on Lawn Dart Ban and Exemption, Federal Register, Vol. 35, No. 246, December 19, 1970.

Attachment B—Memorandum from Karels, T.R., ECSS, to Nelson, C., CARM, "Lawn Darts—PSA #2804," dated June 22, 1987.

Attachment C—Memorandum from Kennedy, J., EPHF, to Nelson, C., CARM, "PSA 2826; Lawn darts in Combination Game Sets," July 13, 1987.

Memorandum of July 17, 1987, meeting.

Letter from David Snow to Chairman Terrence Scanlon, July 18, 1987.

Memorandum to CPSC Regional Centers from Robert G. Poth, CARM, "Request to Notify Retail Stores of Noncomplying and Questionable Lawn Dart Sales Practices," July 22, 1987.

Letter from David Snow to K-Mart International Headquarters, July 26, 1987.

Letter from David Schmeltzer, AEDCA, to persons invited to the July 17, 1987, meeting who did not attend; July 27, 1987.

Letter from David Schmeltzer, AED/CAL, to persons who attended the July 17, 1987, meeting, July 28, 1987.

CPSC News Release: "Lawn Darts Can Cause Serious or Fatal Head Injuries and Death," Released July 30, 1987.

Memorandum from Ray, D., and Bennett, L., ECPA, to Tyrrell, E., OPMB, "Lawn Dart Accident Costs," August 4, 1987.

Letter to David Snow from David Schmeltzer, AED Compliance and Administrative Litigation, August 6, 1987.

Letter from Marcella V. Ridenour, Dept. of Physical Education, Temple University, to John Preston, CPSC, transmitting the following material on lawn darts:

1. Patent 2,976,042 (March 21, 1961).
2. *First National Bank of Dwight v. Regent Sports Corp.*, 7th Cir. No. 85-2834 (October 22, 1986).
3. *Trial*, "Lawn darts: a dangerous game," February 1985.

Memorandum from John Preston, ESMT, to Chris Nelson, CARM, "Response to PSA Request No. 2837," August 11, 1987.

Memorandum from Warren A. Mathers, EPHF, to Christine Nelson, CARM, "PSA 2846; Lawn Darts—Develop Labeling Criteria," August 13, 1987.

Letter from David Snow to David Schmeltzer, AED/CAL, August 18, 1987.

Memorandum from Koeser, R., to Tyrrell, E.A., OPMB, "Lawn Dart Options Package," August 19, 1987.

Materials for June-July Compliance Status Briefing, August 20, 1987.

Memorandum from Ulsamer, A.G., to Tyrrell, E.A., EX-PB, "HS Recommendations on Lawn Darts," August 20, 1987.

Memorandum from Tinsworth, D., and Crigler, W., EPHA, to Tyrrell, E., EX-PB, "Lawn Dart Injury Data," August 21, 1987.

Memorandum from John D. Preston, ESMT, to Elaine A. Tyrrell, EX-PB, "ES Comments on Options Package for Lawn Darts," August 21, 1987.

Memorandum from Poth, B., CARM, to Tyrrell, E., OPMB, "Lawn Darts Options Package," August 27, 1987.

Memorandum from Dale R. Ray, ECPA, to Elaine Tyrrell, OPMB, "Lawn Darts," August 27, 1987.

Memorandum from Walton, W.W., ES, to Tyrrell, E., EXPM, "Lawn Darts—Option Package," August 28, 1987.

Memorandum from Bob Poth, CARM, to Elaine Tyrrell, OPM, "Lawn Darts Option Package," September 1, 1987.

Briefing package from Elaine Tyrrell, Project Manager, to the Commission, September 10, 1987, with attachments:

TAB A—Memorandum from D. Schmeltzer, AED/CA, to Noble, D., OPMB, "Lawn Darts," with attachments, July 15, 1987.

TAB B—Memorandum from Tinsworth, D., EPHA, to Tyrrell, E., EX-PB, "Lawn Dart Injury Data," August 21, 1987.

TAB C—Memorandum from Ray, D., and Bennett, L., ECPA, to Tyrrell, E., OPMB, "Lawn Dart Accident Costs," August 4, 1987.

TAB D—CPSC News Release, July 30, 1987.

TAB E—Memorandum from Poth, B., CARM, to Tyrrell, E., OPMB, "Lawn Darts Options Package," August 28, 1987.

TAB F—Memorandum from Ulsamer, A., to Tyrrell, E., EX-PB, "HS Recommendations on Lawn Darts," August 20, 1987.

—Memorandum from Koeser, R., to Tyrrell, E., OPMB, "Lawn Dart Options Package," August 19, 1987.

—Memorandum from Ray, D., ECPA, to Tyrrell, E., OPMB, "Lawn Darts," August 27, 1987.

Letter to John R. Fanone, Esq., from Robert G. Poth, CARM, September 11, 1987.

Commission vote sheet on lawn darts options, September 16, 1987.

CPSC staff memorandum from Douglas L. Noble, Acting AED for Compliance and Administrative Litigation, to the Commission, "Lawn Darts Options Package—Update of CPSC's Investigation and Industry's Response to Requested Voluntary Actions," with restricted attachment, September 16, 1987.

Memorandum from Paul H. Rubin, AED for Economic Analysis, to the Commission, "Lawn Darts Options Package," September 16, 1987.

Materials for lawn dart update briefing, September 17, 1987.

Transcript, Commission meeting of September 17, 1987 (43 pp.).

Petition from David A. Snow asking that the CPSC ban lawn darts (Petition HP 87-3).

received in the Office of the Secretary, September 23, 1987.

Memorandum from Robert G. Poth, CARM, to Elaine A. Tyrrell, Project Manager, "Enforcement Resources Associated with Options 1 & 2 of Lawn Darts Options Package of September 10, 1987," September 23, 1987.

Memorandum to Ross Koeser, Acting AEDFO, from Elizabeth Hendricks, FO, "Lawn Dart Surveillance by States," September 25, 1987.

Memorandum from OPMB, "Follow-Up Information Requested at the Briefing of September 17, 1987, dated September 28, 1987, with attachments.

Memorandum from Robert G. Poth, CARM, to Elaine Tyrrell, Project Manager, "Enforcement Resources Associated with Options 1 & 2 of Lawn Darts Options Package of September 10, 1987," September 23, 1987.

Memorandum from Dale R. Ray, ECPA, to Elaine Tyrrell, OPMB, "Project Resource Estimate," September 21, 1987.

Memorandum from Andrew G. Ulsamer, AED/HS, to Elaine Tyrrell, Project Manager, "Health Sciences Resources for Lawn Dart Options," September 21, 1987.

Minutes of Commission meeting, October 1, 1987.

Transcription of portion of October 1, 1987, Commission meeting (1 p.).

Statement of Commissioner Anne Graham on lawn dart decision, October 2, 1987.

Letter from James V. Lacy, General Counsel, to David Snow, October 6, 1987.

Log of telephone conversation between Douglas Noble, CPSC, and Milton Bush of the Sporting Goods Manufacturing Association, October 6, 1987.

Memo record from John Preston, ESMT, to Pat Fairall, ESMT, "Voluntary Standard for Lawn Darts," October 8, 1987.

Log of a conversation between Nick Marchica and Elaine Tyrrell, CPSC, and Milton Bush, SGMA, October 13, 1987.

Transcript of Commission meeting of October 15, 1987.

Federal Register notice, "Lawn Darts; Advance Notice of Proposed Rulemaking; Request for Comments and Data," 52 FR 38935 (October 20, 1987).

Letter from the Secretary of the Commission to David Snow, advising of the status of Petition HP 87-3, November 3, 1987.

Log of a telephone conversation between James V. Lacy, General Counsel, and Milton Bush of the Sporting Goods Manufacturers Association (SGMA), November 4, 1987.

Letter dated November 5, 1987, to James V. Lacy, General Counsel, from Milton Bush, SGMA.

Letter from James V. Lacy, General Counsel to Milton M. Bush, SGMA, November 13, 1987.

Memorandum from John Preston, ESMT, to Elaine Tyrrell, EX-PB, "ES Resources/Tasks Concerning Rulemaking on Lawn Darts," undated.

Memorandum from D. Schmeltzer, AEDCA, to Elaine Tyrrell, OPMB, "Lawn Darts," February 5, 1988.

Briefing package from Elaine Tyrrell, OPMB, to the Commission, "Lawn Darts: Follow-Up to Advance Notice of Proposed Rulemaking (ANPR)," February 8, 1988, with attachments:

TAB A—Copy of ANPR.

TAB B—Memorandum from Tinsworth, D., EPHA, to Tyrrell, EXPM, "Lawn Dart Injuries," January 20, 1988.

TAB C—Memorandum from Deppa, S.W., and White, S., EPHF, to Tyrrell, E.A., EX-PB, "Evaluation of Lawn Dart Provision Effectiveness," January 29, 1988.

TAB D—Memorandum from Karels, T.R., ECSS, to Tyrrell, E., EX-P, "Lawn Darts," January 20, 1988.

TAB E—Memorandum from Nelson, C., CARM, to Tyrrell, E., OPMB, "Lawn Dart Compliance Survey," January 20, 1988.

TAB F—Log of meeting held by the Sporting Goods Manufacturers Association (SGMA) with industry representatives on lawn darts, December 10, 1987.

TAB G—Public comments in response to the ANPR:

A. Letter from Bush, M., Esq., Sporting Goods Manufacturers Association, December 17, 1987.

B. Comments of Consumer Federation of America, submitted by M. Fise, December 21, 1987.

C. Letter to the Editor from C. Mesneck, September 29, 1987.

D. Letter from Heslin, M., Connecticut Department of Consumer Protection, December 8, 1987.

E. Letter from Vultaggio, S., Regent Sports Corp., to D. Schmeltzer, CPSC, November 10, 1987.

F. Letter from G. Hostetler, November 16, 1987.

G. Letter from S. Coberly, November 3, 1987.

H. Letter from R. Lamontagne, November 16, 1987.

I. Letter from P. Spaeth, New York State Department of Law, to Doug Noble, CPSC, October 8, 1987.

J. Letter from C. Bouris, December 1, 1987.

K. Letter from R. Archer, Kent Sporting Goods Co., Inc., to D. Schmeltzer, CPSC, November 9, 1987.

TAB H—Memorandum from D. Shifflet, OIPA, to Noble, D., OPMB, "Lawn Dart Consumer Alert," February 2, 1988.

Additional comments on lawn darts:

Commenter	Date
Carl Mesneck	Sept. 29, 1987.
N. Mease	Oct. 29, 1987.
H. Hatch	Oct. 5, 1987.
Rochester City Council	Jan. 20, 1988.
Consumer Federation of America	Mar. 7, 1988.
New York Department of Law	Mar. 24, 1988.

Commission vote sheet on lawn darts options, February 9, 1988.

Minutes of Commission meeting of March 2, 1988.

CPSC news release, "CPSC to Continue Its Formal Rulemaking Process on Lawn Darts," March 2, 1988.

Anne Graham, Commissioner, "Statement on Lawn Dart Decision," March 2, 1988.

Memorandum from Jack Kramer, EPHA, to Elaine Tyrrell, EXPM, "Lawn Darts: Head and Eye Injuries," March 30, 1988.

News from CPSC, "CPSC sues Sears to halt improper sale of lawn darts; Sears agrees to stop all sales," March 30, 1988.

Letter from D. Schmeltzer, AEDCA, to National Retail Merchants Association, April 19, 1988.

Commission ballot vote sheet, "Lawn Darts—Additional Option," April 21, 1988.

Memorandum from Douglas L. Noble, OPMB, to the Commission, "Lawn Darts," April 22, 1988, with attached memorandum from John Preston, ESMT, "A Test to Define the Scope of a Ban of Lawn Darts," April 21, 1988.

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Statement by Commissioner Anne Graham on decision to ban lawn darts, May 25, 1988.

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Opinion of Commissioner Carol G. Dawson regarding Commission action to ban lawn darts, May 25, 1988.

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Karels, T., "Preliminary Regulatory Analyses, Economic and Environmental Assessments—Proposed Mandatory Rules on Lawn Darts," June 1988.

Karels, T., "Initial Regulatory Flexibility Analysis of a Mandatory Rule for Lawn Darts," June 1988.

Letter from David Snow to Commissioner Carol Dawson, June 9, 1988.

Memorandum from Christine Nelson, CPSC/CARM, to Charles Demoret, CPSC/FOWR, "Lawn Darts Sold at Pay 'N Save," June 17, 1988.

Letter from David Schmeltzer, CPSC/AEDCA, to Stephen R. Vultaggio, Regent Sports Corporation, June 17, 1988.

Letter from David Schmeltzer, CPSC/AEDCA, to Mary Ellen R. Fise, Consumer Federation of America, June 22, 1988.

Memorandum from Christine Nelson, CARM to Carl Blechschmidt, OPMB, "Proposed Ban of Lawn Darts," June 28, 1988.

Memorandum from Christine Nelson, CPSC/CARM, to Don Dovel, CPSC/FOCR, "Superior Marketing Lawn Darts," June 29, 1988.

Vote sheet from Harleigh Ewell, OGC, to the Commission "Draft Federal Register

Notice to Propose a Prohibition of The Sale of Lawn Darts," June 30, 1988.

Memorandum to the Commission from Carl Blechschmidt, Program Manager, "Notice of Proposed Rulemaking for Lawn Darts," June 30, 1988, with attachments:

Tab A—Memorandum from Karels, T.R., ECSS, to Blechschmidt, C.W., EXPM, "Initial Regulatory Flexibility Analysis: Lawn Darts," June 28, 1988.—Memorandum from Karels, T.R., ECSS, to Blechschmidt, C.W., EXPM, "Preliminary Regulatory Analyses and Assessments—Lawn Darts," June 28, 1988.

Tab B—Draft Federal Register notice. Minutes of Commission meeting, July 13, 1988.

News from CPSC, "CPSC obtains consent decree to halt improper sale of lawn darts," July 18, 1988.

Memorandum CPSC Office of General Counsel, "Federal Register Notice for Lawn Darts Proposal," July 19, 1988.

Letter from CPSC Chairman Terrence Scanlon to David Snow, July 21, 1988.

Federal Register notice, "Lawn Darts: Notice of Proposed Rulemaking," 53 FR 28657 (July 29, 1988).

Transcript of oral presentation of comments, August 9, 1988.

Official comments on the notice of proposed rulemaking, #CC1-88-1 through CC1-88-13.

Memorandum from Cohn, M.S., HSHE, to Thome, D., EXPM, "Comparison of metal and plastic tipped lawn darts using the ballistic based model," October 17, 1988.

Memorandum from David W. Thome, Program Manager, to the Commission, "Final Rule for Lawn Darts," October 18, 1988.

Tab A—Draft Federal Register notice, "Ban of Hazardous Lawn Darts."

Tab B—(1) Memorandum from John Preston, CPSC/ES, to David W. Thome, CPSC/OPMB, "ES Response to Comments on Lawn Darts NPR," September 14, 1988.

(2) Memorandum from Murray S. Cohn, Ph.D., CPSC/HS, to David W. Thome, CPSC/OPMB, "Comparison of Metal and Plastic Tipped Lawn Darts Using the Ballistic-Based Model," October 17, 1988.

Vote Sheet, "Draft Federal Register Notice to Prohibit The Sale Of Hazardous Lawn Darts," October 18, 1988.

Memorandum from John Preston, CPSC/ESME, to CPSC's Acting Executive Director, "Test to Define Scope of Ban of Lawn Darts," October 25, 1988.

Memorandum from David W. Thome, CPSC/OPMB, to the Commission, "Lawn Darts: Revised Staff Recommendation," October 25, 1988.

Log of telephone conversation between Harleigh Ewell, CPSC/OGC, and the Office of Advocacy of SBA, October 27, 1988.

Memorandum from Charles Sitzlar and Mary Logan, Tennessee Dept. of Agriculture, Division of Quality and Standards, to George Rutherford, CPSC/EPHA, on Lawn Dart Investigation 881027CAA2035, October 27, 1988.

Tape recording of Commission meeting of October 28, 1988.

Statement by Anne Graham, Commissioner, on Final Vote to Ban Lawn Darts, October 28, 1988.

News from CPSC, "CPSC Votes Final Ban on Lawn Darts," October 28, 1988.

Memorandum from Harleigh Ewell, CPSC/OGC, "Revised Federal Register Notice to Ban Lawn Darts," Nov. 4, 1988.

Memorandum from Harleigh Ewell, CPSC/OGC, "Signing of H.R. 5552 (Lawn Darts)," November 7, 1988.

In-depth Investigation Reports:

760603BEP7002
760615BEP7009
760727BEP7009
790709BEP0033
790709BEP0034
790712BEP0007
790716BEP0002
790726BEP0038
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800809BEP0002
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840719CBC1263
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870824CAA0177
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880112CAA0097
880318CAA0245

880321CEN0740
880330BEP0002
880401CAA0278
880406WES4004
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880415CAA0302
880520BEP0002
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880606CAA0396
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880824BEP0006
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A21284
A33558
A43934
A43935
A43936
A43938

Reported Incident File:

B880020A1
C1A0102A1
C320025A1
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N0762792
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X491009A1
X890311A1
X961003A1
X784797A1

Investigation of lawndart injury, June 25, 1974.

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