Monsanto

MONSANTO INDUSTRIAL CHEMICALS CO.
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166
Phone: (314) 694-1000

December 15, 1971

Dear Sir:

We are writing to advise you that, effective this date, Monsanto will no longer sell the Therminol® FR series of heat transfer fluids. This important decision by Monsanto's management has been carefully considered.

The Therminol® FR series of fluids contain polychlorinated biphenyls (PCBs). As we have previously advised you, studies indicate PCBs may be accumulating in the environment. In some instances, PCBs have been found in food or in the food chain. An article by Carl G. Gustafson of the Federal Water Quality Administration appearing in "Environmental Science & Technology" and dealing with this subject is attached for your information.

Because of Monsanto's concern over this problem, we have discontinued sales of PCBs where the usage was in so-called "open systems." We have discontinued sales of Therminol® FR materials where the usage would be in food processing applications. In addition, we have encouraged Therminol® FR fluid customers to switch to other materials.

As a result of these efforts, many of our heat transfer fluid customers have switched from Therminol® FR series fluids to other materials or systems.

Our action in discontinuing sales for use in heat transfer systems has been taken because of the problems which may arise should there occur accidental leakage of PCBs from such systems. We believe this action is in the best interest of all our customers who have continued using these materials in heat transfer applications.

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In order to help you accomplish a change-over from Therminol® FR to another heat transfer fluid with the least difficulty, Monsanto will offer you the following special services:

1) We have assembled a team of experienced engineers who will be available to visit your plant on request to consult with you on available alternatives. Of course, the decision is and will be yours as to how you elect to proceed. If you consider such a service would be of assistance to you, please telephone (314) 694-2514, or write directly to Dr. Cumming Paton, Monsanto Company, P. O. Box 14617, St. Louis, Missouri 63178.

2) We will pay freight costs incurred in returning the Therminol® FR to us and will properly dispose of the material (by high temperature incineration) at our cost. We will contact you concerning instructions about drainage, drumming and shipping of material to our facility in St. Louis.

3) We will accept return of any unopened drums of Therminol® FR series products which may be in your possession and credit you for this material at full purchase price if returned to us prior to March 1, 1972.

We sincerely regret any hardship that this decision may cause you, but feel you will agree Monsanto has made the correct decision.

Yours sincerely,

Howard Bergen

Howard Bergen, Director
Specialty Products Group
Monsanto Industrial Chemicals Company

Attachments

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feature

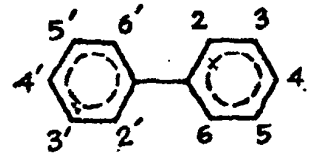
PCB's—prevalent and persistent

Intensified research is needed to minimize their dangers

Carl G. Gustafson, *Federal Water Quality Administration, Athens, Ga.*

During the past three years, a special class of compounds, called polychlorinated biphenyls (PCB's), has claimed the attention of ecologists and pesticide analysts in this country. These compounds were not discovered in the environment until 1966 in Sweden and 1967 in the U.S., despite the fact that they have been available commercially for 40 years. Interest in PCB's has arisen because they are frequently found in fish, bird, water, sediment, and other environmental samples when such samples are examined for chlorinated pesticide residues. That a wide variety of samples containing PCB's has been collected from England, Scandinavia, The Netherlands, Antarctica, Central America, and many different parts of the U.S. makes them truly *ubiquitous* pollutants.

Polychlorobiphenyls are made by substituting chlorine atoms for one or more of the hydrogen atoms at the numbered positions of the biphenyl structure.



In the process of replacing hydrogen atoms with chlorine atoms, a large number of substitution combinations arise. For example, three monochlorobiphenyl isomers are possible, 12 dichlorobiphenyl isomers, 21 trichlorobiphenyl isomers, and so on. Theoretically, 210 compounds can be prepared by this substitution process; a typical example would be 2,4,6,2'4'-pentachlorobiphenyl.

Whenever aromatic hydrocarbons such as biphenyls are chlorinated, the product is a mixture of compounds, including isomers. It is quite difficult to synthesize single, specific chlorobiphenyl compounds in the laboratory unless involved procedures are employed. Consequently few of the individual compounds have been prepared in the pure form for study.

In the commercial process for PCB manufacture, biphenyl is chlorinated with anhydrous chlorine in tall cylindrical towers with either iron filings or ferric chloride as the catalyst. The by-product is hydrogen chloride; the product is a mixture of several PCB's. The degree of chlorination is determined by measuring the specific gravity of the mixture or, when the product is more viscous, the ball-and-ring softening-point test is used. The whole process takes from 12 to 36 hours.

In the U.S., the sole manufacturer of PCB's is the Monsanto Co., which markets them under the trade name Aroclor. PCA's are also manufactured in Europe and Japan, under trade names such as Phenochlor and Clophen. The various Aroclors are differentiated by a four-digit number, with the last two digits indicating the percentage of chlorine in the mixture.

Properties

The three most important physical properties of the PCB's are low vapor pressures (they have high boiling points), low water solubility, and high dielectric constants. They are miscible with most organic solvents and compatible with many types of polymers. Although some individual polychlorobiphenyl compounds are crystalline, the Aroclor mixtures are either liquids or resins.

The chemical properties that make PCB's desirable industrial materials are their excellent thermal stability, their strong resistance to both acidic and basic hydrolysis, and their general inertness. They are quite resistant to oxidation. Monsanto reports, in a technical bulletin on PCB's, that they can be heated to 140° C. under 260 p.s.i. of oxygen pressure "without showing any evidence of oxidation as judged by development of acidity or formation of sludge."

The physiological properties of the PCB's make them potentially significant contaminants of the environment. For any pollutant, two factors are involved: acute toxicity, which is immediately evident because of a high death rate or other maiming effect; and chronic toxicity, which is the result of a slow accumulation of the poison in the body and is a sublethal effect. Whenever acute toxicity is high, a pollutant will be readily recognized and appropriate remedial actions will be introduced. If, on the other hand, acute toxicity is low,

The Monsanto Co. stated recently in a letter to Congressman William F. Ryan of New York that as of August 30, it would no longer sell PCB's to customers for use in general plasticizer operations where disposal of the end-products cannot be controlled. After some lag period—the time it takes to eventually dispose of the products made from PCB's and currently in processor's inventories—the quantity of PCB's getting into the environment may be substantially reduced. If Monsanto's former customers look for PCB substitutes, rather than purchasing PCB's from manufacturers in Japan and Europe, the projected decrease could become a reality.

Carl G. Gustafson

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the physiological effects will go unnoticed until the chronic effects make themselves evident. When this happens, the problem may have advanced beyond immediate or easy correction.

Acute toxicity

All studies of PCB's in animals indicate that acute toxicity is not a significant factor. Their acute toxicities are on the order of those of other chlorinated aromatic compounds. Monsanto has sponsored two investigations of the acute toxicities of Aroclor mixtures. In the first, at the Kettering Laboratory at the University of Cincinnati, Dr. J. F. Treon and his coworkers investigated the toxicity of Aroclor vapors for guinea pigs, mice, rabbits, and rats. All animals survived a 24-day exposure to 0.83 p.p.m. of Aroclor 1242 for 7 hours per day on 17 of those days. Even after more prolonged tests, there were no severe effects from Aroclor 1242. In the second investigation, still in process, three groups of beagles are fed Aroclor 1242, 1254, and 1260, respectively, at a rate of 100 p.p.m. in their diets. After three months no significant abnormalities have been noted.

Similar studies on fish have been performed in several laboratories. Dr. Richard Schoettger of the Sport Fisheries and Wildlife Fish-Pesticide Research Laboratory in Columbia, Mo., reports that 96 hour-TL_{50} toxicities of the Aroclors to trout range from 1.17 to 60 p.p.m. Compared to DDT, whose 96 hour-TL_{50} toxicity is 0.002 to 0.009 p p m. for trout, the PCB's have a relatively low acute toxicity. With the more sensitive bluegill, the 96 hour-TL_{50} for Aroclor 1248 is 0.278 p.p.m., while that of DDT is 0.008 p.p.m. Aroclor toxicities appear to be inversely proportional to the chlorine content of the mixture.

Shellfish, oysters, and shrimp are more sensitive to PCB's. Dr. Tom Duke, at the Bureau of Commercial Fisheries Pesticide Field Station, reports 100% mortality of juvenile pink shrimp exposed to 0.10 p.p.m. of Aroclor 1254 in water for 48 hours. This concentration of Aroclor 1254 will cause a 100% decrease in shell growth of oysters after 96 hours. To achieve the same effects with DDT in these experiments, only 0.0006 p.p.m. and 0.01 p.p.m., respectively, were required.

There is very little evidence that PCB's are toxic to insects. Studies to date show that they are less toxic than dieldrin or DDT. As with fish, their toxicity appears to be inversely proportional to the chlorine content of the mixture.

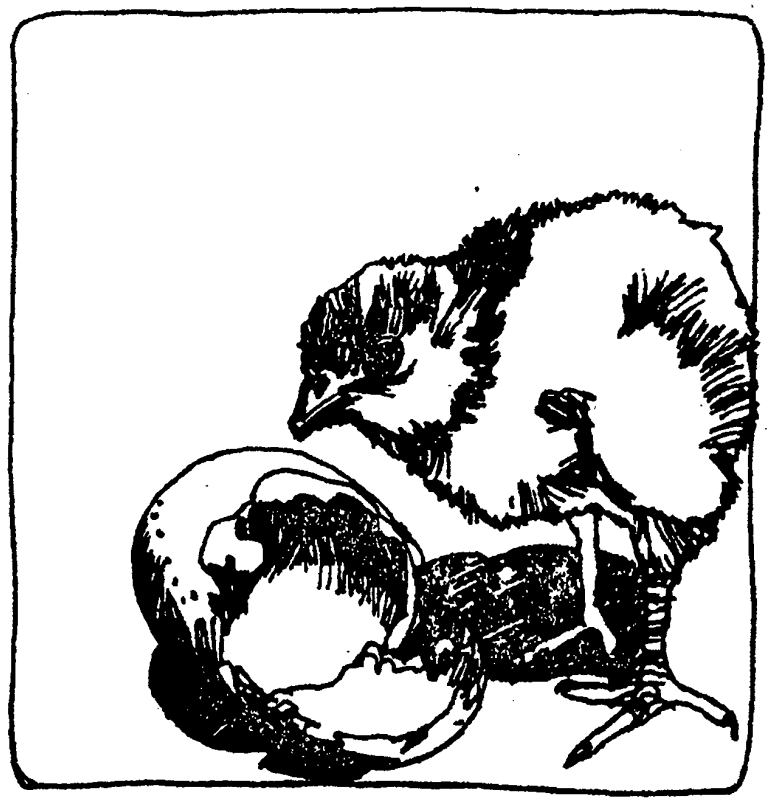
Based on the above data, it is understandable why the polychlorobiphenyls, commercially available for 40 years, have only recently attracted attention as toxic environmental contaminants.

Chronic toxicity

The chronic toxicities of PCB's present a more disturbing situation; several chronic effects have been observed. It was discovered, quite by accident, that PCB's have a toxic effect on chickens. Professor E. L. McCune and his coworkers at the University of Missouri found their chickens dying after they were placed in a feeding house, parts of which had been freshly painted with an epoxy paint. Careful investigation revealed that the toxic factor was Aroclor 1242, a binder in the paint. When Aroclor 1242 was fed to the chicks it produced the same characteristic effects as chick edema factor. McCune reported: "Gross pathology included hydropericardium, hydroperitonium, enlarged heart, liver, and kidneys, and hemorrhage of internal organs. Microscopically the kidneys showed marked tubular dilation and numerous casts."

Another chronic effect of PCB's is related in wildfowl. The accumulation of high concentrations of chlorinated hydrocarbons in birds resulted in disruption of normal breeding behavior and in the formation of thin-shelled eggs. A dramatic example of this effect has been observed in the case of the brown pelican. On the Anacapa Islands off the California coast, no young were hatched last year from 300 pairs of nesting birds. The shells of most eggs laid were so thin that a dent occurred when the egg was picked up.

There are two possible causes for the laying of thin-shelled eggs by wildfowl. One is a low calcium reserve in the bird; the other is the inability of the bird to deliver the needed calcium to its oviduct, where the eggshell is forming. The calcium level in the avian biosystem and the calcium reserve in the secondary bone structure or medullary bone, found only in female birds when they are breeding, are controlled by the hormone estrogen. A high estrogen level is associated with the formation of this calcium reserve. Chlorinated hydrocarbons, such as DDT,



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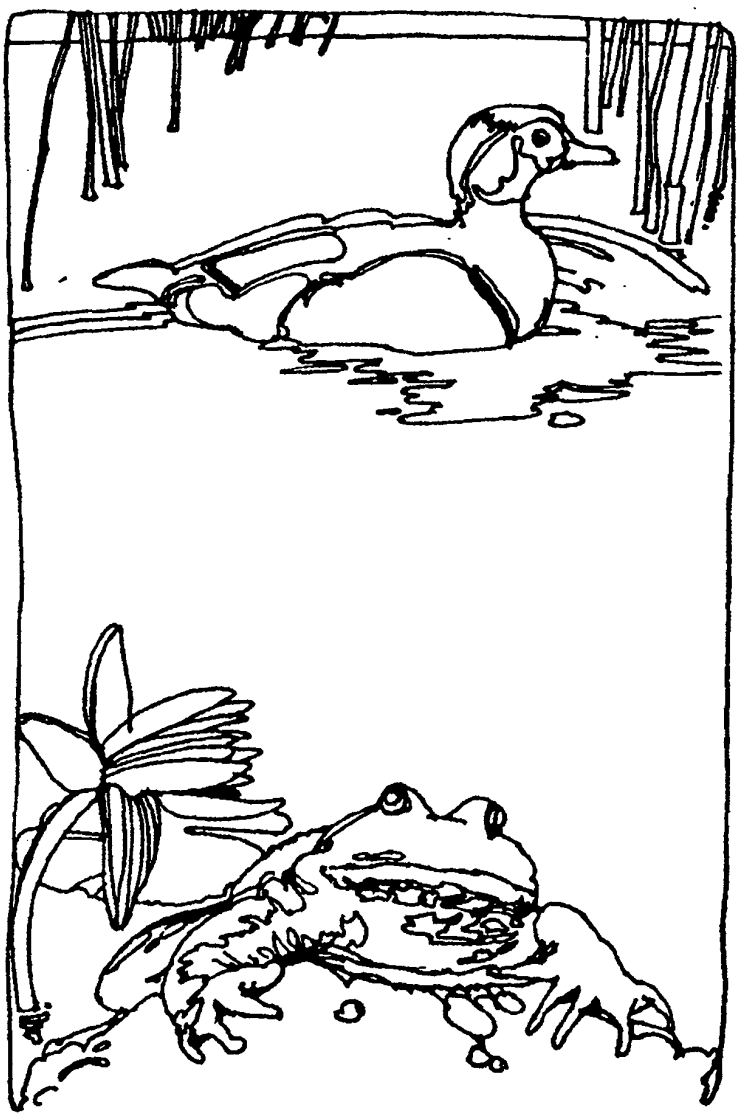
chlordane, dieldrin, and PCB's, activate enzymes in the liver which transform estrogen into a more water-soluble compound that is readily eliminated from the bird's body. This means that when estrogen levels are low, calcium reserves will also be low, and therefore very little calcium will be available for strong eggshell production. Dieldrin and PCB's are more effective than DDT in this type of enzyme-induction activity. Aroclor 1262 has an estradiol degrading potential four to five times that of *p,p'*-DDE or technical grade DDT.

The ability of the female bird to deliver calcium to her oviduct during the last 20 hours, when the eggshell is being formed, is related to the functioning of the enzyme carbonic anhydrase. When birds that have exhibited the ability to lay normal eggs are injected with a metabolite of DDT (DDE) just prior to the formation of the eggshell, they will lay thin-shelled eggs. This indicates that DDT also inhibits the activity of carbonic anhydrase, the enzyme that controls the flow of calcium from the blood stream of the bird into its oviduct.

Since dieldrin seems to have no effect on carbonic anhydrase, we may assume that neither do the PCB's. However, these compounds delay breeding time significantly. Many ornithologists feel that late breeding has a stronger influence on the reduction of bird populations than does the laying of thin-shelled eggs. If this is true, PCB's are a more potent threat than DDT to our declining bird populations, especially for predatory birds that accumulate fairly high levels of PCB's because they eat smaller animals that already have concentrated PCB's in their own tissues.

Other investigators have produced evidence to show that PCB's are similar to DDT in their activity. Dr. Joseph Street at Utah State University has shown that when PCB's accumulate in the liver, they induce microsomal enzyme activity by bringing about more rapid metabolism of drugs, insecticides, and other foreign compounds. He fed rats a diet containing 50 p.p.m. of Aroclor 1254 or Aroclor 1260. After 10 days on this diet, the test animals were administered hexobarbitol at a dose of 100 p.p.m. to induce sleep. In comparison with a control group, the sleeping time for these rats was reduced by 65 to 80%. Street also found that Aroclor, when fed at the same level, will reduce dieldrin storage in adipose tissue by 90 to 95%; increase aniline oxidation by 200 to 300%; and increase EPN detoxication by 430 to 470%. In addition, the PCB's cause activation of organothiophosphate compounds, which adversely affect the system. This latter effect counterbalances the detoxification of dieldrin.



Normally, when a substrate activates an enzyme, it is converted to a water-soluble form that will be eliminated from the system; however, this is not the case with PCB's. Because they remain in the system for prolonged periods of time, their enzyme induction activity is always present. In this way the normal concentration of important body chemicals may be lowered to the point of bringing about malfunctions in the system. For example, Street believes that the PCB's bring about steroid degradation, which can lead to altered endocrine relationships.

The chronic toxicity to man is as follows:

> Like the chlorinated naphthalenes, the chlorinated diphenyls have two distinct actions on the body, namely, a skin effect and a toxic action on the liver. The lesion produced in the liver is an acute yellow atrophy. This hepato-toxic action of the chlorinated diphenyls appears to be increased if there is exposure to carbon tetrachloride at the same time. The higher the chlorine content of the diphenyl compound, the more toxic it is liable to be. Oxides of chlorinated diphenyls are more

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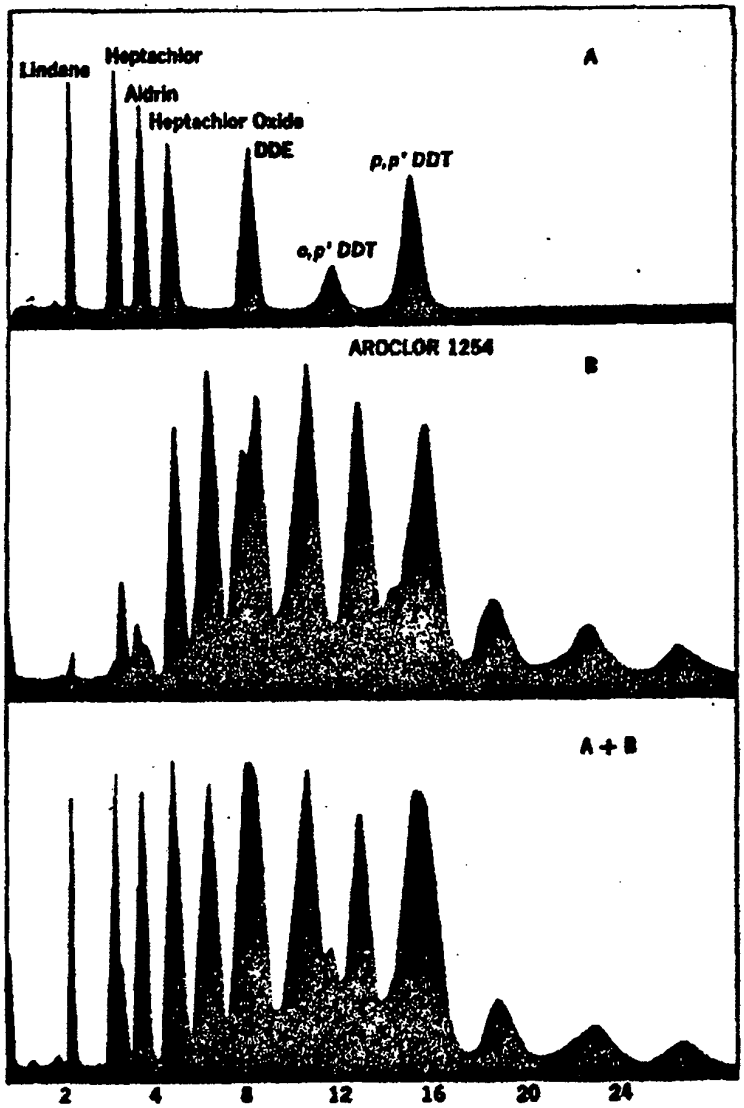
toxic than the unoxidized materials.

> The skin lesion is known as chloracne, and consists of small pimples and dark pigmentation of the exposed areas, initially. Later, comedones and pustules develop. In persons who have suffered systemic intoxication, the usual signs and symptoms are nausea, vomiting, loss of weight, jaundice, edema, and abdominal pain. Where the liver damage has been severe, the patient may pass into coma and die.
>
> *Sax, N. Irving, "Dangerous Properties of Industrial Materials," 3rd ed., Van Nostrand-Reinhold, New York, 1968.*

The ubiquity of PCB's is related to the wide spectrum of applications that have been found for them. The largest single use of PCB's is related to their electrical properties—as coolant-insulation fluids in transformers. For this purpose the Aroclors are also sold under such trade names as Chlorextol (Allis-Chalmers Mfg. Co.), Dykanol (Federal Pacific Electric Co.), Inerteen (Westinghouse Electric Co.), Noflamol (Wagner Electric Co.), Pyranol (General Electric Co.), and Therminol (Monsanto Co.).

Other uses of PCB's include formulation into ballasts for fluorescent fixtures; impregnation of cotton and asbestos for braided insulation of electrical wiring; a plasticizer in wire and cable coatings; capacitors and askarel-type transformers; and plasticizers of vinyl chloride polymer films. Because of their thermal stability and fire resistance, the PCB's also find application in high-pressure hydraulic fluids, specialized lubricants and gasket sealers, heat transfer agents, and machine tool cutting oils. Miscellaneous uses include: formulation into some epoxy paints; protective coatings for wood, metal, and concrete; adhesives; and in carbonless reproducing paper. One of the primary manufacturers of carbonless reproducing paper also sells Aroclors in an encapsulated form.

Generally the kinds of applications described above mean that the PCB's will be in many types of products that eventually find their way to the domestic market. When used in manufacture of ballasts for fluorescent fixtures they will be found in kitchens, bathrooms, stores, and offices throughout the country. Wherever office forms are used that do not use carbon paper, one may find PCB's formulated into the microcapsules of dye that comprise the reproducing layer of the business form. PCB's have also been found on the transparent receipts used in credit card charge forms. As plasticizers they can be expected to appear in many consumer plastics.



Gas chromatogram A is of a standard pesticide mixture, B is typical of Aroclor 1254, and A + B is the chromatogram of a 50 : 50 mixture of both. The concentration of Aroclor 1254 is approximately 10 times those of the pesticides in A, hence it is understandable why PCB's were not readily recognized in pesticide chromatograms. Gas chromatograph (Packard 7620) conditions: gas flow 80 ml./min. nitrogen; temperatures—oven, 210° C., inlet, 230° C., detector, 218° C.; Ni^{63} electron capture detector; 6' × ⅛" glass column packed with 8% SE-30 on Chromosorb Q 80–90 mesh.

Since the chronic toxicities are so significant, it becomes important to know just how extensively the PCB's are distributed in the ecosystem, and just how they find their way into the environment. Rainwater in England, brown seals off the coast of Scotland, white-tailed eagles in Sweden, cod in the Baltic Sea, mussels in The Netherlands, adelie penguin eggs in the Antarctica, brown pelican eggs in Panama, Arctic terns, shrimp in Florida, river water in Japan, waters in the Great Lakes, human hair, and human adipose tissue—samples of all these have been found to contain PCB's,

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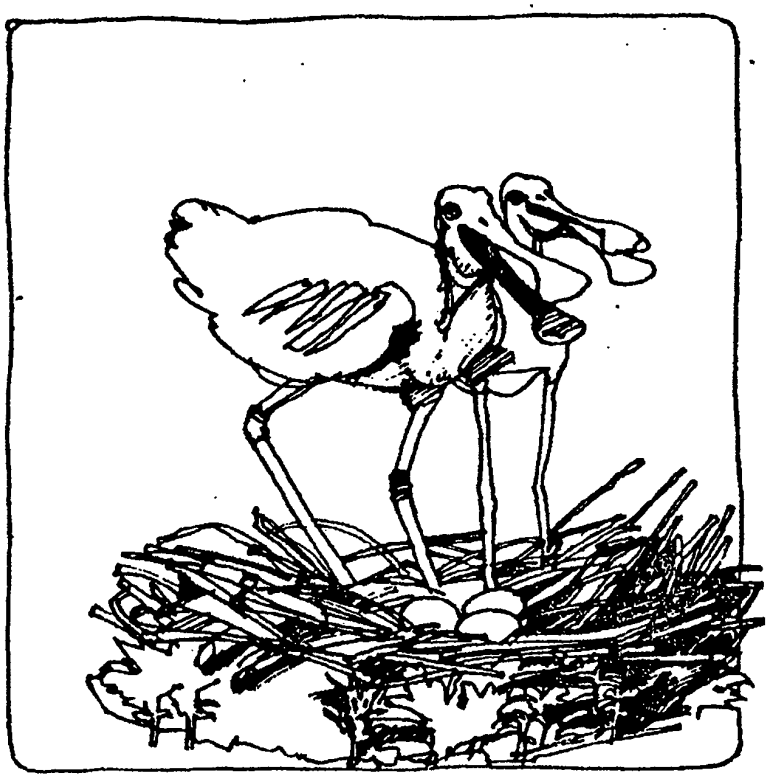
thus making them a class of widely dispersed pollutants.

Readily absorbed

The properties of PCB's that make them industrially useful are the same properties that cause them to persist in the environment. These include thermal stability, resistance to oxidation and hydrolysis, solubility in a wide range of organic solvents, water insolubility, high dielectric constant, and compatibility with many types of macromolecules. Their resistance to oxidation and hydrolysis also makes PCB's more stable and persistent than DDT. Consequently, they could eventually accumulate to a higher concentration than DDT, especially if the use of DDT is sharply curtailed in the U.S.

The solubility of PCB's in nonpolar solvents explains why they are readily absorbed into fatty tissue and into the liver. Their resistance to oxidation or other types of chemical degradation explains their persistence in the environment and accumulation in animal tissue. The latter effect is enhanced both by their insolubility in water and solubility in organic solvents. Their chemical inertness and resistance to metabolism account for their low acute toxicity. But as they slowly build up in a living system their concentration approaches toxicity levels, at which point chronic effects make themselves evident.

It has been established that fish-eating birds will accumulate large concentrations of PCB's, as in the case of the white-tailed eagle, which has been found to have as much as 14,000 p.p.m. of PCB's. Peregrine falcons, taken off the coast of California, were found to have as much as 2000 p.p.m. in their lipid tissue. When shrimp were exposed to 10 p.p.b. of Aroclor 1254 for 48 hours, they accumulated 1300 p.p.b. of PCB's, which represents a 130-fold concentration in a very short time. Oysters, exposed to an identical concentration of Aroclor 1254 for 96 hours and then placed in PCB-free water for four days, still had a concentration of 33,000 p.p.b. of PCB's, which constitutes a 3300-fold concentration. This means that even though the concentrations of PCB's are in the parts-per-billion range in the environment, their high lipid solubility causes them to collect in fatty tissues of lower animals and marine life. Therefore, species at the top of a food chain will also accumulate PCB's in their bodies, particularly in their lipid tissue and liver, in much the same way as they accumulate DDT and other chlorinated pesticides.



Because of the low solubility of PCB's in water, when a solution or dispersion of them is discharged into a river or lake, they will accumulate on the sediment in relatively high concentrations. Subsequently, they will redissolve very slowly in the water as conditions change. Therefore, it will usually take a long time to flush out a contaminated area.

Accidental occurrence

The reason that PCB's have not been found in the ecosystem as extensively as DDT, and are not present in environmental samples at as high a concentration as DDT, is that PCB's find their way into the environment accidentally. DDT is deliberately spread because this is the only way its insecticidal properties can be utilized. PCB's are not intended to get into the environment, but they do because their unique chemical properties prevent them from being destroyed by our usual waste disposal methods. Thus, they inadvertently escape and become widely dispersed.

In Sweden, where the use of DDT has been banned, and where the main power source is hydroelectric, investigators find that the concentration of PCB's in the environment is as high as that of DDT.

There are several ways by which PCB's get into the ecosystem. One of these is by incineration. Products containing PCB's, such as carbonless reproducing paper in business forms, plastics (especially polymer film and sheeting that contain PCB's as plasticizers), spent ballasts from fluorescent light fixtures, and objects coated with PCB-formulated coatings, all find their way to the city dump or incinerator for burning. The PCB's do not burn but are vaporized. They are then carried into the atmosphere, where they collect on particulate matter and are subsequently returned to the surface of the earth, into the rivers, lakes, and oceans. In this way they become widely distributed throughout the global environment. Another source is probably land run-off from industrial wastes and dumps. A third source is the point of manufacture and the plants where PCB's are processed into other products. They can escape through the plant ventilation and exhaust systems into the atmosphere and through its waste treatment system into sewers or directly into waterways.

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It is interesting to note that the incidence of PCB's in environmental samples is highest in industrialized and urbanized areas. Birds whose primary habitat is the San Francisco Bay area have a larger concentration of PCB's per unit of body weight than those located in Baja, Calif., which is completely rural. Aquatic life in the Archipelago of Stockholm, the most industrialized area of Sweden, were found to have a higher concentration of PCB's than fish samples taken from the western coast of Sweden, a less developed area. Sediment samples taken from southern portions of Lake Michigan have a higher concentration of PCB's than those from other parts of the lake.

Monsanto states that until a recent change in marketing policy (see inset, page 814), sales of Aroclors were increasing at the rate of 8% per year. While this increase does not seem significant, it may be important if the increased consumption was in consumer products and thus would find their way into our normal solid waste disposal systems. Such an occurrence would mean a definite increase of PCB residues in the environment, and therefore a marked increase in their chronic toxicity effects.

Detection

PCB's were not discovered in environmental samples until very recently for several reasons. First, as indicated above, they have not been deliberately distributed about the ecosystem. Secondly, because of their relatively low acute toxicities, their presence was not immediately evident. Finally, they are difficult to detect analytically.

The PCB's were first detected as interfering peaks in the gas chromatographic analysis (GC) of environmental samples being analyzed for chlorinated pesticide residues. When PCB's are present in a sample they give a pattern of several GC peaks, whose retention times are similar to those of dieldrin, DDT, DDE, aldrin, and heptachlor oxide. Because the peaks were not large or sharp, investigators tended to ignore them until S. Jensen, in Sweden, and R. Risebrough, at the University of California at Berkeley, identified them as corresponding to common constituents of environmental samples being analyzed for persistent pesticides.

The problem of the interferences of PCB's with the analysis of other chlorinated pesticides has been largely overcome by prior treatment of the sample. Several investigators have used column chromatography to separate PCB's from chlorinated pesticides. At a recent meeting, sponsored by the FWQA's National Water Quality Laboratory, Duluth, Minn., a general procedure was recommended for separation of PCB's from pesticides. In this procedure for biosamples, the sample is extracted with hexane as in regular pesticide analysis. It is then partitioned with acetonitrile to remove fats, the cleaned-up extract is passed through a Fluorisil column and then through a silicic acid column. Finally, the sample is analyzed by gas chromatography, with a chloride-specific detector. In this way the pesticides are retained on the silicic acid column for later elution and identification.

Research needs

To assess fully the significance of PCB's as environmental pollutants, additional research is needed. No one really knows the extent of the chronic effects of these chlorinated hydrocarbons. Some problems that need to be considered are:

- Although PCB's are known to accumulate in human organs we do not know at what concentration they will begin to exhibit toxic effects. Will these chronic effects be similar to those shown in animals—microsomal enzyme activity, calcium metabolism inhibition, and so on? What are other possible chronic effects?
- Which of the many PCB compounds in the commercially available mixtures are responsible for their toxicity? Can commercial PCB mixtures be modified to eliminate the toxic components? Pure samples are required to answer these questions. At the present time work is continuing at the FWQA's Southeast Water Laboratory to separate each of the Aroclor mixtures into its many components, and to identify each component.
- We need to know all the uses for the PCB's. What is the annual production of PCB's? Our knowledge of these facts is limited and needs to be expanded. These facts should be known if we are to accurately determine how they get into the environment, and take steps to prevent further environmental contamination by them.
- In view of the complexity of the isolation and accurate quantitative analysis of PCB's in chlorinated residues, a straightforward, unambiguous measurement of them needs to be developed.
- What is the fate of PCB's in natural waters? More needs to be known of their partition coefficients between bottom sediments and water. This is vital if we are to estimate how long it will take for a river bed to clean itself of contamination. It will also be useful when assessing the effects of PCB's on marine life that feed on the bottoms of lakes, rivers, and estuaries. We should also learn more about PCB solubility in water of various ionic strengths.
- Are present waste treatment systems adequate to handle PCB's? Do special measures need to be taken when PCB's are part of the waste effluent being treated?

By trying to get some of these answers now, we may find that we are in a position to control the escape of PCB's into the environment before additional damage is done. So frequently, action is taken only after it is evident that massive damage has resulted from a particular pollutant. In the case of the PCB's we may have an opportunity to resolve the situation before that happens.

Additional Reading

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Risebrough, R. N., *et. al., Nature* 220 (1968).



Carl G. Gustafson, *chairman of the Department of Chemistry of King's College, Briarcliff Manor, N.Y., received a Ph.D. in organic chemistry from the University of Delaware in 1957. During the 1969–70 academic year, he was on leave at the FWQA Southeast Water Laboratory in Athens, Ga., where he studied trace organic analysis in waste effluents. As a member of the National Water Contaminants Characterization Research Program, he worked with PCB's and pulp and paper mill effluents.*

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Almon-Wiggins Company
610 Decatur Street
Richmond, Virginia 23224

Director of Purchases
Allied Chemical Corporation
P. O. Box E
Moundsville, West Virginia 26014

Director of Purchases
Alpha Portland Cement
15 South Third Street
Easton, Pennsylvania 18042

MCL001116

Director of Purchases
Amercoat Corporation
201 North Berry Street
Brea, California

Director of Purchases
American Cyanamid Company
P. O. Box 1924
Mobile, Alabama 36601

Director of Purchases
American Bakeries Company
1674 Atlantic Avenue
Brooklyn, New York 11213

Office of the President
American Decalcamania Company
4334 West Fifth Avenue
Chicago, Illinois

Director of Purchases
American Bakeries Company
Grennan Bakeries Division
1250 17th Street
Detroit, Michigan

Mr. H. S. Poe

American Enka Corporation

Enka, North Carolina

Director of Purchases
American Cyanamid Company
1937 West Main Street
Stamford, Connecticut

Director of Purchases
American Hydrotherm Corporation
Rogers Corporation
County Road
East Woodstock, Connecticut

Director of Purchases
American Cyanamid Company
Organic Chemicals Division
Boundbrook, New Jersey

Director of Purchases
American Hydrotherm Corporation
470 Park Avenue South
New York, New York 10016

MCL001117

Director of Purchases
American Mineral Spirits Company
3100 South Meacham Road
Palatine, Illinois

Director of Purchases
Amex Plastics, Inc.
Box 1002
Morristown, New Jersey 07960

Director of Purchases
American Oil Company
Div., Standard Oil of Indiana
Whiting, Indiana

Director of Purchases
Amex Spec. Metals
P. O. Box 1748
Parkersburg, West Virginia 26101

Director of Purchases
American Smelting & Refining Co.
Southwestern Mining Division
Mission Unit Box 111
Sahuarita, Arizona

Director of Purchases
Amtek Corporation
Westchester Plastics Division
233 Broadway
New York, New York 10007

Director of Purchases
American Thermoplastics
Building 6 E
Chimney Rock Road
Bound Brook, New Jersey

Director of Purchases
Amoco Chemical Corporation
130 East Randolph Drive
Chicago 1, Illinois

Director of Purchases
Ametek/Westchester
326 Waverly Avenue
Mamaronack, New York 10543

Director of Purchases
Amoco Chemical Corporation
P. O. Box 2215
Decatur, Alabama 35601

MCL001118

Director of Purchases
Amoco Chemical Corporation
P. O. Box 941
Joliet, Illinois

Director of Purchases
Ansley Corporation
Old Easton Road
Doylestown, Pennsylvania 18901

Director of Purchases
Amsco
14 Commerce Road
Cranford, New Jersey 07016

Director of Purchases
Ansley Corporation
Park Avenue & Ridge Road
Perkasie, Pennsylvania 18944

Office of the President
Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Director of Purchases
Applied Equipment Company
15048 Delano Street
Van Nuys, California 91401

Director of Purchases
Anetek/Westchester Plastic
8 Krein Avenue
Wapakeoneta, Ohio 45895

Director of Purchases
Arapahoe Chemicals, Inc.
2855 Walnut Street
Boulder, Colorado

Office of the President
Ansen Automotive
13715 S. Western Avenue
Gardena, California 90249

Director of Purchases
Argonne National Laboratory
9700 South Cass
Argonne, Illinois

MCL001119

Director of Purchases
Argus Chemical Corporation
Div. of Witco Chemical Co.
633 Court Street
Brooklyn, New York 11231

Director of Purchases
Armory Supply Corporation
Rockwood Avenue
Amityville, New York 11701

Director of Purchases
Argus Chemical Corporation
P. O. Box 310
Hahnville, Louisiana

Director of Purchases
Armour Industrial Chemical Company
Div. of Armour & Company
~~Box 1805 , 401 N. Wabash Ave.~~
Chicago, Illinois 60690
P.O. Box 9222

Office of the President
Arizona Chemical Company
Panama City, Florida

Director of Purchases
Armstrong Cork Company
2500 Columbia Avenue
Lancaster, Pennsylvania

Director of Purchases
Armco Steel Corporation
P. O. Box 159
Davis, California 95616

Director of Purchases
Armstrong Cork Company
P. O. Box 4288
Macon, Georgia 31208

Director of Purchases
Armco Steel Corporation
703 Curtis Street
Middletown, Ohio

Director of Purchases
Armstrong Rubber Company
Midwest Division
2345 E. Market Street
Des Moines, Iowa

MCL001120

Director of Purchases
Arrow Spinning Co., Inc.
Erie Avenue
Susquehanna, Pa. 18847

Director of Purchases
Ashland Chemical Co., Div.
Ashland Oil & Refining Co.
142nd Street & Paxton Avenue
Calumet City, Illinois 60409

Director of Purchases
Arsynco, Inc.
P. O. Box 8
Carlstadt, New Jersey 07072

Director of Purchases

Ashtabula Rubber Company

Ashtabula, Ohio

Director of Purchases
Artcraft Industries
548 North 1st Street
Turlock, California 95380

Director of Purchases
Associated Photographers, Inc.
3710 Main Street
Kansas City, Mo. 64111

Director of Purchases
Artisan Metal Products
73 Pond Street
Waltham, Massachusetts

Director of Purchases
Athol Manufacturing Company
P. O. Box 105
Butner, North Carolina

Director of Purchases
Art Photo Service, Inc.
260 Lunenburg Street
Fischburg, Mass. 01420

Director of Purchases
Atlantic Cement Company
Box 3
Ravena, New York 12143

MCL001121

Director of Purchases
Atlantic Research Corporation
Shirley Highway & Edsall Road
Alexandria, Virginia

Director of Purchases
Atlas Chemical Industries, Inc.
Delaware Trust Building
Wilmington 99, Delaware

Director of Purchases
Atlantic Richfield
P. O. Box 2819
Dallas, Texas

Director of Purchases
Automatic Lift Co., Div.
Eaton, Yale & Towne
101 West 87th Street
Chicago, Illinois 60620

Director of Purchases
Atlantic Richfield
155 North Wacker Drive
Chicago, Illinois 60606

Director of Purchases
Automotive Rentals, Inc.
c/o The Borden Chemical Company
P. O. Box 208
Columbus, Ohio 43216

Director of Purchases
Atlantic Shippers, Inc.
P. O. Box 479
Morehead City, N. C. 28557

Office of the President
Awrey Bakeries
5231 Tierman
Detroit, Michigan 48204

Director of Purchases
Atlantex Mills, Inc.
No. 3 Plant Road
Hasbrough Heights, New Jersey

Director of Purchases
Babcock & Wilcox Co.
Research & Development Dept.
Harrisburg & Sawburg Road
Alliance, Ohio

MCL001122

Director of Purchases
Badger By-Products
P. O. Box 396
Milwaukee, Wisconsin 53201

Director of Purchases
Barry of Goldsboro, Inc.
1700 South Johns Street
Goldsboro, North Carolina

Director of Purchases
Badger Company
56 Woodrock Road
East Weymouth, Mass. 02189

Director of Purchases
Bartlett-Snow Pacific Corporation
P. O. Box 8158
San Francisco, California

Director of Purchases
Bagcraft Corp. of America
3900 West 43rd Street
Chicago, Illinois

Director of Purchases
Basic Ceramics, Inc.
221 7th Avenue
Hawthorne, N. J. 07507

Director of Purchases
Baker Engineering Corporation
351 S. Anderson Street
Los Angeles, California 90033

Director of Purchases
Battelle Memorial Institute
Polymer Research
505 King Avenue
Columbus 1, Ohio

Director of Purchases
Barksdale Valved Division
De Laval Turbine
5125 Alcoa Avenue
Los Angeles, California 90058

Director of Purchases
F. Baumgartner Co.
P. O. Box 12711
St. Petersburg 33, Florida

MCL001123

X

Director of Purchases
Bechtel Corporation
P. O. Box 47
Route 9
Manor Woods Road
Frederick, Maryland 21701

Director of Purchases
Becton Dickinson & Co.
P. O. Box 123
East Rutherford, N. J. 07073

Office of the President
Bourget Company, Inc.
1614 Main Street
Brockton, Massachusetts

Director of Purchases
Belden Corporation
415 S. Kilpatrick Avenue
Chicago, Illinois 60644

Director of Purchases
Bechtold Engineering, Division
Roberts Consolidated Industries
1851 NW 22nd Street
Fort Lauderdale, Florida

Director of Purchases
Belden Manufacturing Company
~~N. W. H Street~~ P.O. Box 341
Richmond, Indiana 47374

Director of Purchases
Beckman Instruments, Inc.
89 Commerce Street
Cedar Grove, New Jersey 07009

Director of Purchases
Bell Aerosystems Corporation,
Div. Bell Aerospace Corporation
P. O. Box 1
Buffalo 5, New York

Director of Purchases
Beckwith Carbon Corporation
16140 Raymer
Van Nuys, California 91406

Director of Purchases
Bel-Art Creations
P. O. Box 273
Hermosa Beach, California 90254

MCL001124

Director of Purchases
Bendix Corporation
95th & Troost
Kansas City, Missouri

Director of Purchases
Bendix Corporation
211 Seward Avenue
Utica, New York

Director of Purchases
Bendix Corporation
Electronic Component Division
Sidney, New York 13838

Director of Purchases
Benjamin Moore & Company
134 Lister Street
Newark, New Jersey

Director of Purchases
Bendix Corporation
Bendix Brake & Steering Division
401 Bendix Drive
South Bend, Indiana 46620

Office of the President
Berkey Photo of New England, Inc.
260 Lunenburg Street
Fitchburg, Maine 01420

Director of Purchases
Bendix Corporation
Bendix Products
Aerospace Division
410 West Bendix Drive
South Bend, Indiana 46619

Director of Purchases
Betz Laboratories, Inc.
Gillingham & Worth Streets
Philadelphia 24, Pennsylvania

Director of Purchases
Bendix Corporation
Friction Material Division
P. O. Box 238
Green Island
Troy, New York 12181

Director of Purchases
Black Clawson Company
Hamilton Division
Second & Vine Streets
Hamilton, Ohio 45011

MCL001125

Director of Purchases
Blanke Mechanical Contractors, Inc.
2112 Mistletoe Boulevard
Fort Worth, Texas 76110

Director of Purchases
Boise Cascade Corporation
13300 Interstate Drive
Hazelwood, Missouri 63042

Office of the President
Blazon Incorporated
100 Tubb Avenue
West Point, Mississippi 39773

Director of Purchases
Borden, Inc.
50 West Broad Street
Columbus, Ohio

Director of Purchases
Bond Baking Co., Division
General Host Company
25th and McKean Street
Philadelphia, Pa. 19145

Director of Purchases
Borden Chemical Company
1280 ~~31280~~ North Grant Avenue
Columbus, Ohio 43216

Director of Purchases
~~Bond Division~~
~~General Host Company~~ Denk Baking Co
495 Flatbush Avenue
Brooklyn, New York 11225

Director of Purchases
Borden Company
Chemical Division
Lincoln Boulevard
Middlesex, New Jersey

Director of Purchases
Borden Company
Chemical Division
Bainbridge, New York

Director of Purchases
Borden Chemical Division
Borden, Inc.
603 Norton Building
Seattle, Washington 98104

Director of Purchases
Borden, Inc.
41100 Boyce Road
Fremont, California 94582

Office of the President
Henry Bower Chem. Mfg. Company
Grays Ferry Road & 29th Street
Philadelphia 46, Pennsylvania

Director of Purchases
Borden Incorporated
General Purchasing Department
350 Madison Avenue
New York, New York 10017

Director of Purchases
Bradley University
1501 West Bradley Avenue
Peoria, Illinois 61606

Director of Purchases
Borg Warner Corporation
Pesco Products Division
24700 Miles Road
Bedford, Ohio

Director of Purchases
C. F. Braun Company
1000 South Fremont
Alhambra, California

X

Director of Purchases
Bostrum Corporation
133 West Oregon Street
Milwaukee, Wisconsin 53204

Director of Purchases
Brea Canyon Oil Company
1531 Brea Canyon Road
Brea, California

Office of the President
Bourget Company, Inc.
1614 Main Street
Brockton, Massachusetts

Director of Purchases
Brilliant Seafood, Inc.
215 Northern Avenue
Boston, Massachusetts 02210

MCL001127

Director of Purchases
Bristol Lab, Inc.
P. O. Box 657
Syracuse 1, New York

Office of the President
B.S.P. Corporation
100 Valley Drive
Brisbane, California 94005

Director of Purchases
Brown Bros. Plastic Fabricators
1055 Atlas Peak Road
Napa, California 94558

Director of Purchases
Buell Cabinet Company
1027 North Monroe
Kansas City, Missouri 64120

Director of Purchases
Brown Company
243 East Paterson Street
Kalamazoo, Michigan

Director of Purchases
Burhans-Sharpe Company
P. O. Box 3906
Seattle, Washington 98124

Director of Purchases
Brown Shoe Company
8300 Maryland Avenue
Clayton, Missouri 63105

Director of Purchases
Burlington Industries, Inc.
Altavista Fiber Glass &
Weaving Co. Division
Altavista, Virginia

Director of Purchases
Brundy Corporation
Tape Cable Division
15 Linden Part
Rochester, New York 14625

Director of Purchases
Burlington Industries, Inc.
Cheraw Weaving Mill Division
Cheraw, South Carolina

MCL001128

Director of Purchases
Burlington Industries
2407 Doyle Street
Greensboro, North Carolina 27410

Director of Purchases
Cabot Titania, Inc.
P. O. Box 160
Ashtabula, Ohio 44004

Office of the President
Burny Brothers, Inc.
4600 West Chicago Avenue
Chicago, Illinois 60651

Office of the President
Cal Bond Industries
13030 Raymer Street
North Hollywood, California

Director of Purchases
Butler Manufacturing Company
900 Sixth Avenue, S. E.
Minneapolis, Minnesota 55414

Director of Purchases
Callahan Mining Company
Harborside, Maine 04642

Office of the President
Butterfield Barry Co., Inc.
800 Huyler Street
Teterboro, New Jersey

Director of Purchases
Campbell Soup Company
100 Market Street
Camden, New Jersey

Director of Purchases
Cabon Corporation
Concord Road
Billerica, Massachusetts

Director of Purchases
Campbell Soup Company
Napoleon, Ohio 43545

MCL001129

Director of Purchases
Cannon Muskegon Corporation
2875 Lincoln Street
Muskegon, Michigan

Director of Purchases
Cargill, Inc.
3030 Southeast Granger
Des Moines, Iowa

Director of Purchases
The Carborundum Company
P. O. Box 337
Niagara Falls, New York

Director of Purchases
Cargill, Inc.
Pensacola, Florida

Director of Purchases
The Carborundum Company
Graphite Products Division
Hickman, Kentucky 42050

Director of Purchases
Carlisle Chemical Works
510 Reading Road
Reading 15, Ohio

Director of Purchases
Cargill, Inc.
Lake Marian Road & CottageAvenue
Carpentersville, Illinois 60110

Director of Purchases
Carnation Company
Cereal & Pet Food Division
5045 Wilshire Boulevard
Los Angeles, California 90036

Director of Purchases
Cargill, Inc.
Cumming, Iowa 50061

Director of Purchases
Carnation Research
8015 Van Nuys Boulevard
Van Nuys, California 91412

MCL001130

Director of Purchases
Carrier Air Conditioning Co.
Thompson Road
Syracuse, New York 13210

Director of Purchases
Celanese Coatings Company
Delancy & Rutherford Street
Newark, New Jersey

Director of Purchases
Cascade Fiber Company
50 North Danbo Avenue
Eugene, Oregon 97402

Director of Purchases
Celanese Corp. of America
Research Laboratory
Morris Court
Summit, New Jersey

Director of Purchases
Caswell Industries
1809 Abbott Street
Ann Arbor, Michigan 48103

Director of Purchases
Celanese Fibers Company
P. O. Box 1414
Charlotte, North Carolina 28201

Director of Purchases
Catalytic Chemical Corporation
Box 1108
Phillipsburg, New Jersey 08865

Director of Purchases
Celanese Plastics Company
P. O. Box 828
Greer, S. C. 29651

Director of Purchases
Cat-Chem Corporation
P. O. Box 108
Phillipsburg, New Jersey

Director of Purchases
Celanese Polymer Company
160 Aterminal Avenue
Clark, New Jersey

MCL001131

Director of Purchases
Cellu Craft Company
1401 Fourth Avenue
New Hyde Park, New York

Office of the President
Charlotte Carotek Company
P. O. Box 11271
Charlotte, North Carolina 28209

Director of Purchases
Cenac Towing Company
Palm Avenue
Houma, Louisiana 70360

Director of Purchases
Chef's Best Food
3122 20th Street
Sacramento, California 95820

Director of Purchases
Champion Papers Company
Hamilton Mill
Hamilton, Ohio 45013

Director of Purchases
Chemetron Corporation
Chemicals Group
471 Howard Avenue
Holland, Michigan 49424

Director of Purchases
A. B. Chance Company
210 North Allen Street
Centralia, Missouri

Director of Purchases
Chemetron Corporation
300 East Primm
St. Louis, Missouri

Director of Purchases
Chanslor Western Oil Company
4549 Produce Plaza
Los Angeles, California 90058

Director of Purchases
Chemetron Corporation
Wilmington Industrial Park
Foot of East 7th Street
Wilmington, Delaware 19801

MCL001132

Director of Purchases
Chem. Fleur, Inc.
200 Pulaski
Newark, New Jersey

Director of Purchases
Chevron Chemical Company
Ortho Division
940 Hensley
Richmond, California

Director of Purchases
Chemical and Solvents Co.
924 Jones Law Bldg.
Pittsburgh, Pennsylvania

Director of Purchases
Chevron Oil Company
Room 800
1111 Tulane Avenue
New Orleans, Louisiana 70112

Director of Purchases
Chemical Flow Corporation
199 Lackawanna Avenue
West Paterson, New Jersey 07424

Director of Purchases
Chevron Research Company
555 Market Street
San Francisco, California 94210

Director of Purchases
Chemical Process Corporation
142 Hamilton Avenue
Stamford, Connecticut 06902

Director of Purchases

Chicopee Manufacturing Company

Milltown, New Jersey 08850

Director of Purchases
Chemical Processors Company
[illegible] South Lucile Street
Seattle, Washington 98108

Director of Purchases
Cities Service Company
1212 Main Street
Houston, Texas

MCL001133

Director of Purchases
Classic Textiles
6101 Buchanan Place
W. New York, New Jersey 07093

Office of the President
Climate Conditioning Company
10560 Fern Avenue
Stanton, California

Office of the President
Clayton Chemical Company
10 South Brentwood Blvd.
Clayton, Missouri 63105

Director of Purchases
C & M Color Prints, Division
Berkey Photo, Inc.
34-06 Skillman Avenue
Long Island City, New York 11101

Office of the President

Cleaver Brooks Company

Greenville, Mississippi

Director of Purchases
Coastal Chemical Company
P. O. Drawer C
~~Abbeyville~~ Abbeville, Louisiana 70510

Director of Purchases
Clermont Engineering Company
1300 North Ninth Street
Philadelphia, Pa. 19122

Director of Purchases
Coastal States Petrochemical Co.
P. O. Box 521
Corpus Christi, Texas

Office of the President
Cleveland Supply Company
1790 Grand Avenue
Cleveland 4, Ohio

Director of Purchases
Coca Cola Bottling Works
1507 Dana Avenue
Cincinnati, Ohio

MCL001134

Director of Purchases
Coca Cola Bottling Co.
9515 Lapeer Road
Flint, Michigan 48503

Director of Purchases
Collins Radio Company
Cedar Rapids, Iowa

Director of Purchases
Coca Cola Bottling Works
Portsmouth, Virginia 23705

Office of the President
Colloid Chemical Lab., Inc.
Cedar Knolls Road
Cedar Knolls , New Jersey

Director of Purchases
Coen Company
1510 Rollins Road
Burlingame, California 94010

Director of Purchases
Colonial Baking Company
211 Moreland Avenue, N. E.
Atlanta, Georgia

X

Director of Purchases
Coen Company
Ravena, New York

Office of the President
Colonial Press
1 Green Street
Clinton, Massachusetts

Director of Purchases
Cold Spring Company
P. O. Box 375
Yardley, Pennsylvania 19067

Director of Purchases
Colorado Oil Company
P. O. Box 4
Bitter Creek, Wyoming

MCL001135

Director of Purchases
Colorcraft of Charlotte, Inc.
P. O. Box 2048
Charlotte, North Carolina

Director of Purchases
Cominco American, Inc.
818 West Riverside Avenue
Lincoln Building
Spokane, Washington 99201

Director of Purchases
Colorcraft Corporation
P. O. Box 2975
Durham, N. C. 27705

Director of Purchases
Commercial Solvents Corporation
P. O. Box 420
Terre Haute, Indiana

Office of the President
Colorpac Incorporated
708 South Avenue
Franklin, Ohio

Director of Purchases
Commodity Pasteurizing
P. O. Box 248
Stockton, California 94201

Director of Purchases
Columbia Gulf Transmission
P. O. Box 683
Houston, Texas 77001

Director of Purchases
Compo Chemical Company
125 Roberts Road
Waltham, Massachusetts 02154

Director of Purchases
Combustion Engineering, Inc.
C. E. Natco Division
Drawer 1710
Tulsa, Oklahoma 74101

Director of Purchases
Container Corporation of America
5008 South Boyle Avenue
Los Angeles, California

MCL001136

Director of Purchases
Container Corporation of America
5000 Flatrock Road
Philadelphia, Pennsylvania 19127

Director of Purchases
Congoleum Industries, Inc.
195 Belgrove Drive
Kearny, New Jersey 07032

Director of Purchases
Container Corporation of America
7000 South 143rd Street
Renton, Washington

Director of Purchases
Continental Baking Co., Inc.
P. O. Box 731
Rye, New York 10580

Director of Purchases
Container Corporation of America
1601 Triview Avenue
Sioux City, Iowa

Director of Purchases
Continental Can Company, Inc.
135 S. LaSalle Street
Chicago 3, Illinois

Director of Purchases
Conco, Inc.
155 North Main
Racine, Wisconsin 53402

Director of Purchases
Continental Can Company
Culloden, West Virginia 25510

Director of Purchases
Concord Mica Corporation
Wellesley Office Park
Wellesley Hills, Mass. 02181

Director of Purchases
Continental Can Corporation
6001 South Eastern Avenue
Los Angeles, California

MCL001137

Director of Purchases
Continental Can Company, Inc.
Plant 26A
Mt. Vernon, Ohio

Director of Purchases
Contour Laminates, Inc.
623 Dexter Avenue, North
Seattle, Washington

Director of Purchases
Continental Can Company
720 Laurel Street
P. O. Box 1137
Reading, Pennsylvania 19602

Director of Purchases
Copolymer Rubber & Chem. Corp.
P. O. Box 1029
Baton Rouge, Louisiana

Director of Purchases
Continental Can Co., Inc.
P. O. Box Drawer 520
Rogers, Arkansas 72756

X

Director of Purchases
Corn Products Company
West 63rd & South Archer
Argo, Illinois 60501

X

Director of Purchases
Continental Can Company
976 Glenn Street
Van Wert, Ohio 45891

Director of Purchases

Cortland Line Co., Inc.

Cortland, New York

Director of Purchases
Continental Rubber Works
19th and Liberty Streets
Erie, Pennsylvania

Director of Purchases
Cotter Corporation
NSL
P. O. Box 751
Canon City, Colorado 91212

MCL001138

Director of Purchases
CPC International
Argo, Illinois 60501

Director of Purchases
Crown Plastics Corporation
745 Industrial Road
San Carlos, California

Director of Purchases
Crane Packing Company
6400 West Oakton Street
Morton Grove, Illinois

Director of Purchases
Crown Zellerbach Corporation
Gaylord Container Division
4351 Pleasantdale Road
P. O. Box 29125
Atlanta, Georgia 30529

Director of Purchases
Crane Company
Chem Pump Division
175 Titus Avenue
Warrington, Pennsylvania

Director of Purchases
Crown Zellerbach Corporation
5900 Sheila Avenue
Los Angeles, California 90022

Director of Purchases
Crawford Manufacturing Co., Inc.
Third & Decatur Streets
Richmond, Virginia 23212

Office of the President
Curtis Manufacturing Company
1905 Kienlin Avenue
St. Louis, Missouri

Director of Purchases
Crown Fiber Glass Company
P. O. Box 138
Orrville, Ohio 44667

Director of Purchases
Customs Materials, Inc.
Alpha Industrial Park
Chelmsford, Mass. 01824

MCL001139

Office of the President
C and T Refinery, Inc.
P. O. Box 3343
Charlotte, North Carolina

Director of Purchases
Dan River Mills, Inc.
Danville, Virginia

Director of Purchases
Cuzn, Inc.
990 Industrial Way
San Luis Obispo, California 93401

Director of Purchases
Dana Corporation
Victor Division
P. O. Box 1333
Chicago, Illinois 60690

Director of Purchases
C X Processing Laboratories, Inc.
1201 Second Avenue
Seattle, Washington 98101

Director of Purchases
Dana Corporation
Churobusco Oil Seal Plant
Churobusco, Indiana

Director of Purchases
D. C. Sales & Mfg., Inc.
16309 Piuma Street
Cerritos, California 90701

Director of Purchases
Dana Corporation
Rt. 35 West
P. O. Box 990
Richmond, Indiana 47374

Office of the President
A. Daigger Company
159 West Kinzie
Chicago, Illinois 60610

Director of Purchases
Davis Supply Company
P. O. Box 856
Flint, Michigan 48501

MCL001140

Director of Purchases
D. C. A. Food Industries, Inc.
31-01 Washington Blvd.
Baltonsville, Maryland 21228

Director of Purchases
De Soto, Inc.
Central Resin Division
300 State Street
Chicago Heights, Illinois

Office of the President
Lee Deane Products, Inc.
15511 S. Carmenita Road
Santa Fe Springs, California

Director of Purchases
Desalvo Construction Co.
3701 Red Bank Road
Cincinnati, Ohio 45227

Director of Purchases
Deering Milliken Company
P. O. Box 1927
Spartanburg, S. C.

Director of Purchases
De Soto, Inc.
Illinois Plant
1034 South Kostner Avenue
Chicago, Illinois 60624

Director of Purchases
D. E. K. Manufacturing Company
P. O. Box 138
Orrville, Ohio 44667

Director of Purchases
De Soto, Inc.
P. O. Box 10
Garland, Texas

Director of Purchases
Dennison & Sons Corporation
45-37 36th Street
Long Island City, New York

Director of Purchases
Diamond Shamrock Corporation
300 Union Commerce Building
Cleveland, Ohio 44114

MCL001141

Director of Purchases
Diamond Shamrock Corporation
P. O. Box 2127
Oxnard, California

Director of Purchases
Dixie Chemical Company
P. O. Box 13410
Houston, Texas 77019

Director of Purchases
Diamond Shamrock Corporation
P. O. Box 430
Painesville, Ohio 44077

Office of the President
Dixie Solvents & Chemicals Co.
Appleton Lane
Louisville, Kentucky

Office of the President
Dikeman Laminating Corporation
181 Sargeant Avenue
Clifton, New Jersey

Director of Purchases
Dravo Corporation
Neville Island
Pittsburgh, Pennsylvania 15225

Director of Purchases
Dip Seal Plastics, Inc.
2311 23rd Avenue
Rockford, Illinois 61101

Director of Purchases
Dock Resins Corporation
512 West Elizabeth Avenue
Linde, New Jersey

Director of Purchases
Distillation Products Industry
755 Ridge Road West
Rochester 13, New York

Director of Purchases
Dolly Madison Cake Company
2330 Ripple Street
Los Angeles, California 90039

MCL001142

Director of Purchases
Donje Cal-Themes Corporation
16109 Piuma
Cerritos, California

Director of Purchases
Dow Chemical Company
P. O. Box 6417
Cleveland 1, Ohio

Director of Purchases
Doubleday & Company
Ridge Avenue
Hanover, Pennsylvania

Director of Purchases
Dow Chemical Company
Texas Division
Freeport, Texas

Director of Purchases
Douglas United Nuclear, Inc.
P. O. Box 490
Richland, Washington 99352

Director of Purchases
Dow Chemical Company
P. O. 1724
Midland, Michigan

Director of Purchases
Dover Corporation
1900 Pratt Blvd.
Elk Grove Village, Illinois 60007

Director of Purchases
Dow Corning Corporation
12334 Geddes Road
Hemlock, Michigan

Director of Purchases

Dow Badische Chemical Company

Freeport, Texas

Director of Purchases
Dow Corning Corporation
P. O. Box 592
Midland, Michigan

MCL001143

Director of Purchases
Dow Corning Corporation
Trumbull, Connecticut

Director of Purchases
E. I. Du Pont De Nemours & Co.
Purchasing Department
Room 6074, Du Pont Building
Wilmington, Delaware 19898

Director of Purchases
Durametallic Corporation
2104 Factory Street
Kalamazoo, Michigan 49001

Director of Purchases
E. I. Du Pont De Nemours & Co.
Washington Road
Parlin, New Jersey 08859

Director of Purchases
Dresser Magcobar Division
Dresser Industries, Inc.
P. O. Box 6504
Houston, Texas 77005

Director of Purchases
Duriron Company, Inc.
450 North Findlay Street
Dayton 3, Ohio

Director of Purchases
Dunham-Bush, Inc.
179 South Street
West Hartford, Connecticut 06110

Director of Purchases
Duval Sierrita Corporation
P. O. Box 125
Sahuarita, Arizona 85629

Director of Purchases
Dunbar Stanley Furnishing
P. O. Box 1749
Charlotte, North Carolina 28203

Director of Purchases
Eastalco
~~East Alcoa~~ Aluminum
Frederick, Maryland

MCL001144

Director of Purchases
East Coast Terminal
P. O. Box 6
Wilmington, North Carolina 28401

Office of the President
E. Edelmann & Company
2332 Logan Boulevard
Chicago, Illinois 60647

Director of Purchases
Eastern Industries
100 Skiff Street
Hamden, Conn.

Director of Purchases
Edwards Engineering Corporation
101 Alexander Avenue
Pompton Plains, New Jersey 07444

Director of Purchases
Eastman Kodak Company
Kodak Park Works
543 State Street
Rochester, New York

Director of Purchases
Edwards Lab., Division
American Hospital Supply
624 Dyer Road
Santa Ana, California 92705

Director of Purchases
Eckerd Drug Co., Inc.
Photo Lab 195
0349 Geve Street
Winter Park, Florida 32789

Director of Purchases
Ehgelhard Industries
100 Chestnut Street
Newark 5, New Jersey

Director of Purchases
Ecology, Inc.
221 Varick Avenue
Brooklyn, New York 11237

Director of Purchases
El Monte Chemical Company
521 East Green Street
Pasadena, California 91101

MCL001145

Director of Purchases
El Paso Products Company
P. O. Box 3986
Odessa, Texas

X

Director of Purchases
Emery Industries, Inc.
Western Division
P. O. Box 54358
Terminal Annex
Los Angeles, California

Director of Purchases
Elan Chemical Company
268 Doremus Avenue
Newark, New Jersey 07905

Director of Purchases
Engineering Proto Type Service
10312 Taylorsville Road
Jeffersontown, Kentucky

Office of the President
Embossograph ProcessCo., Inc.
3720 14th Street
Brooklyn, New York

Director of Purchases
Enjay Fibers & Laminates Company
Div., Enjay Chemical Company
Odenton, Maryland 21113

Director of Purchases
Emerson Electric Company
8100 West Florissant
St. Louis, Missouri, 63136

Director of Purchases
Enterprise Paint Manufacturing Co.
2841 South Ashland Avenue
Chicago 7, Illinois

X

Director of Purchases
Emery Industries, Inc.
4300 Carew Tower
Cincinnati, Ohio

Director of Purchases
Essex International, Inc.
1601 Wall Street
Fort Wayne, Indiana

MCL001146

Director of Purchases
Esso Research & Engineering Company
P. O. Box 4255
Baytown, Texas 77520

Director of Purchases
Fabricators, Inc.
799 Freedom Street
Ravenna, Ohio 44266

Director of Purchases
Esso Research & Engineering Company
P. O. Box 243
Elizabeth, New Jersey

Director of Purchases
Fabri Form Company
1102 Burt Avenue
Byesville, Ohio

Director of Purchases
Ethyl Corporation
P. O. Box 341
Baton Rouge, Louisiana

Director of Purchases
Fabri Kal Corporation
3303 East Cork Street
Kalamazoo, Michigan

Director of Purchases
Eureka Chemical Company
234 Lawrence Avenue
San Francisco, California 94080

Director of Purchases
Fairbank Chemical Corporation
Silver Street & Pennsylvania R. R.
New Albany, Indiana

Director of Purchases
F. M. C. Corporation
American Viscose Corporation
Front Royal, Virginia

Director of Purchases
Fairchild Engine & Airplane Corp.
Stratos Division
Bay Shore, Long Island, New York

MCL001147

Director of Purchases
Farm Crest Bakeries
5845 Russell Street
Detroit, Michigan

Director of Purchases
Federal Paper Board Co., Inc.
6001 South Eastern Avenue
Los Angeles, California 90022

Director of Purchases
Farnow, Inc.
77 Jacobus Avenue
South Kearny, New Jersey

Director of Purchases
Felton Chemical Company
599 Johnson Avenue
Brooklyn, New York

Director of Purchases
Farrel Corporation
148 Maple Street
Ansonia, Connecticut 06401

Director of Purchases
Fenwal Electronics, Inc.
51 Mellon Street
Framingham, Massachusetts

Director of Purchases
Federal Color Laboratories, Inc.
4526 Chickering Avenue
Cincinnati, Ohio

Director of Purchases
Fibreboard Corporation
4301 East Firestone Blvd.
South Gate, California

Director of Purchases
Federal Mogul Corporation
P. O. Box 1966
Detroit, Michigan 48235

Director of Purchases
Findett Service Company
R. R. 1, Box 13C
St. Charles, Missouri 63301

MCL001148

Director of Purchases
Findley Adhesives, Inc.
1690 New Grade Lane
Louisville, Kentucky

Director of Purchases
Firestone Tire and Rubber Company
2nd and Hoffman Road
Des Moines, Iowa

Office of the President
Fine Organics, Inc.
205 Main Street
Lodi, New Jersey

Director of Purchases
Firestone Tire & Rubber Co.
Synthetic Rubber & Latex Division
381 West Wilbeth Road
Akron, Ohio

Director of Purchases
Firestone Industrial Products Co.
Corner of Division & 16th Streets
Noblesville, Indiana

Director of Purchases
Flexan Corporation
3949 North Normandy Avenue
Chicago 34, Illinois

Director of Purchases
Firestone Tire & Rubber Company
1200 Firestone Parkway
Akron 17, Ohio

Office of the President
Flexible Products Company
2678 East 7th Avenue
North St. Paul, Minnesota 55109

Director of Purchases
Firestone Tire & Rubber Company
2611 North 22nd Street
Decatur, Illinois

Director of Purchases
Flexonics Company
Division of U.O.P.
300 East Devon
Bartlett, Illinois 60103

MCL001149

Director of Purchases
Flint Chemical Coating Co.
2312 Lapeer Road
Flint, Michigan 48503

Director of Purchases
FMC Corporation
12000 Bay Area Boulevard
Houston, Texas 77062

Director of Purchases

Florida Corrugating Company

Wildwood, Florida 32785

Director of Purchases
FMC Corporation
American Viscose Division
1617 Pennsylvania Boulevard
Philadelphia, Pa. 19103

Director of Purchases
Florida Portland Cement Division
General Portland Cement Co.
Tampa, Florida 33601

Director of Purchases
FMC Corporation
Chemicals & Plastics Division
P. O. Box 1616
Baltimore, Maryland

Director of Purchases
Florida Steel Corporation
P. O. Box 3321
Tampa, Florida 33601

Director of Purchases
Ford Motor Company
Box 458
Dearborn, Michigan 48121

Director of Purchases
Ford Motor Company
Woodhaven Stamping Plant
P. O. Box 327
Trenton, Michigan 48183

Director of Purchases
Ford Motor Company
General Service Division
P. O. Box 1738
Dearborn, Michigan 48121

MCL001150

Director of Purchases
Ford Motor Company
Plant & Mfg. Engineering
400 Groesbeck Highway
Mount Clemens, Michigan 48043

Director of Purchases
Fowler Machine & Engineering Co.
2805 South Halladay
Santa Ana, California 92705

Director of Purchases
Ford Motor Company
Steel Division
P. O. Box 538
Dearborn, Michigan 48121

Director of Purchases
Franklin Container Corporation
7900 Tabor Road
Philadelphia, Pa. 19111

Director of Purchases

Foremost Chemical Company

Oakland, California

Director of Purchases
Franklin Fibre Lomitex Corporation
903 East 13th Street
Wilmington, Delaware

Director of Purchases
C. J. Fortman Mfg. Co.
P. O. Box 37
Iron, Minnesota

Director of Purchases
Friedheim Tool Supply Co.
412 West 6th Street
Los Angeles, California 90014

Director of Purchases
Foster Grant Co., Inc.
Box 667
Leominster, Mass. 01453

Director of Purchases
Frito Lay Company
P. O. Box 92660
World Way Center
Los Angeles, California 90009

MCL001151

Director of Purchases
~~Frito-Lay, Inc.~~ H. H. Evon Co.
4051 West 51st Street
Chicago, Illinois 60632

Director of Purchases
Fulton Boiler Works
P. O. Box 122
Pulaski, New York 13142

Director of Purchases
~~Frito-Lay, Inc.~~ H. H. Evon Co.
5801 Grandy
Detroit, Michigan 48211

Office of the President

Gas Processors Company

Brea, California

Director of Purchases
G. A. F. Corporation
156 West 56th Street
Denver, Colorado 80216

Director of Purchases
Gaylord Container Company
Div. of Crown Zellerbach Company
708 South Howard Avenue
Tampa, Florida 33606

Director of Purchases
G. A. F. Corporation
912 East Washington Street
Joliet, Illinois 60434

Director of Purchases
Geigy Chemical Corporation
P. O. Box 2055
Edgewood Station
Providence, Rhode Island

Director of Purchases
Frye Manufacturing Company
2531 Dean Avenue
Des Moines, Iowa

Director of Purchases
General American Research
1669 Marshall Drive
Des Plaines, Illinois

MCL001152

X

Director of Purchases
General American Transportation
Corporation
135 S. LaSalle Street
P. O. Box 817
Chicago 90, Illinois

Director of Purchases
General Electric Company
250 East Main Street
Hendersonville, Tennessee

Director of Purchases
General Baking Company
495 Flatbush Avenue
Brooklyn, New York 11225

Same as Clerk

Director of Purchases
General Motors Corporation
Electro-Motive Division
McCook, Illinois

Director of Purchases
General Dynamics Corporation
P. O. Box 0608
San Diego, California

Director of Purchases

General Electric Company

Waterford, New York 12188

Director of Purchases
General Electric Company
1635 Broadway
Fort Wayne 2, Indiana

Director of Purchases
General Electric Company
Atomic Power Equipment Dept.
P. O. Box 254
2151 South First Street
San Jose, California

Director of Purchases
General Electric Company
1430 East Fairchild
Danville, Illinois 61832

Director of Purchases
General Electric Company
Applicance Control Department
West Wall Street
Morrison, Illinois

MCL001153

Director of Purchases
General Electric Company
Central Purchasing Department
Building 501
Cincinnati 15, Ohio

X

Director of Purchases
General Mills, Inc.
9200 Wayzata Boulevard
Minneapolis 26, Minnesota

Director of Purchases
General Electric Company
Magnetic Materials Section
Edmore, Michigan 48829

Director of Purchases
General Motors Corporation
Chevrolet Motor Division
National Parts Distr.
6060 West Bristol Road
Flint, Michigan

Director of Purchases
General Electric Company
Nela Park
Cleveland, Ohio

Director of Purchases
General Motors Corporation
Chevrolet Division
1200 West 8th Street
Muncie, Indiana

Director of Purchases
General Electric Company
c/o E. L. Dion
Polycarbonate Manufacturing
Mt. Vernon, Indiana

Director of Purchases
General Motors Corporation
Chevrolet Motor Division
Toledo Plant
P. O. Box 909
Toledo, Ohio

X

Director of Purchases
General Mills, Inc.
P. O. Box 191
Kankakee, Illinois 60901

Director of Purchases
General Motors - Delco Battery
West Willard Street
Muncie, Indiana

MCL001154

Director of Purchases
General Motors Corporation
Delco Remy Division
Anderson, Indiana 46014

Director of Purchases
General Motors Corporation
Research Laboratory
Box 388
Warren, Michigan

Director of Purchases
General Motors Corporation
Guide Lamp Division
P. O. Box 1090
Anderson, Indiana

Director of Purchases
General Portland Cement Company
P. O. Box 44 336
Miami, Florida 33144

Director of Purchases
General Motors Corporation
Manufacturing & Development
12 Mile and Mound Roads
Warren, Michigan

Director of Purchases
General Portland Cement Company
P. O. Box 1002
Tampa, Florida 33601

Director of Purchases
General Motors Corporation
Oldsmobile Division
Lansing, Michigan

Director of Purchases
General Tire & Rubber Company
1 General Street
Akron, Ohio 44309

Director of Purchases
General Motors Corporation
Pontiac Motor Division
Box 55
Pontiac, Michigan

Director of Purchases
General Tire & Rubber Company
Pennsylvania Division
Jeannette, Pennsylvania

MCL001155

Director of Purchases
General Tire & Rubber Company
Textileather Division
Toledo, Ohio

Office of the President
P. D. George Company
5200 North Second Street
St. Louis, Missouri 63107

Director of Purchases
General Tire & Rubber Co.
Delta Products Division
151 Canal Street
Lawrence, Massachusetts

Office of the President
Gilman Brothers
Gilman, Connecticut

Director of Purchases
General Tire & Rubber Company
Columbus Division
Highway 69
Columbus, Mississippi 39701

Director of Purchases
N. C. Ginther Gas Plant
P. O. Box 1749
Gillette, Wyoming, 82716

Director of Purchases
Geo Space Corporation
5803 Glenmont Drive
Houston, Texas 77036

Director of Purchases
Glidden Durkee
P. O. Box 389
Jacksonville, Florida

Director of Purchases
George & Lynch, Inc.
113 West Sixth Street
Newcastle, Delaware 19720

Director of Purchases
Glidden Durkee
Division of SCM Corporation
Third & Bern Streets
Reading, Pennsylvania 19603

MCL001156

Director of Purchases
Globe Albany Company
P. O. Box 1062
1400 Clinton Avenue
Buffalo, New York 14240

Director of Purchases
B. F. Goodrich Chemical Co.
P. O. Box 134
Avon Lake Village, Ohio

Director of Purchases
Globe Industries, Inc.
2638 East 126th Street
Chicago, Illinois 60633

Director of Purchases
Goodrich-Gulf Chemicals, Inc.
Research Center
Independence, Ohio

Director of Purchases
Glyco Chemical Company
5333 Northfield Road
Bedford Heights, Ohio 44146

Director of Purchases
Goodyear Aerospace Corporation
1210 Massillon Road
Akron 15, Ohio

Director of Purchases
Glyco Chemicals, Inc.
P. O. Box 349
679 Hardy Road
Painesville, Ohio 44077

Director of Purchases
Goodyear Tire & Rubber Company
1144 East Market Street
Akron 16, Ohio

Director of Purchases
B. F. Goodrich Company
500 S. Main Street
Akron, Ohio

Director of Purchases
Goodyear Tire and Rubber Co.
Logan Plant
P. O. Box 799
Logan, Ohio 43138

MCL001157

Director of Purchases
Goodyear Tire & Rubber Company
Point Pleasant, W. Virginia

Director of Purchases
Grant & Roth Plastics, Inc.
1600 N. E. 25th Street
Hillsboro, Oregon

X

Director of Purchases
Goren Food Company
Jessup and Grove Road
Thorofare, New Jersey 08086

Director of Purchases
Gray Chemical Company
61 Grove Street
Gloucester, Mass. 09130

Director of Purchases
W. R. Grace & Company
Grace Research & Development
Washington Research Center
Clarksville, Maryland

Director of Purchases
Gray Company
22211 Telegraph Road
Southfield, Michigan 48077

Director of Purchases
W. R. Grace & Company
Hatco Chemical Division
King George Post Road
Fords, New Jersey 08863

Director of Purchases
Great Atlantic & Pacific Tea Compar
P. O. Box 214
Newark, New Jersey

Director of Purchases
W. R. Grace & Company
Highway 60 E., R. 1
Owensboro, Kentucky 42301

Director of Purchases
Great Lakes Carbon Corporation
P. O. Box G
Rosamond, California 93560

MCL001158

Director of Purchases
Great Lakes Carbon Corporation
P. O. Box 2868
Carondelet Station
526 East Catalina Street
St. Louis, Missouri 63111

Director of Purchases
A. Gross & Company, Division
Hillmaster Onyx Corporation
P. O. Box 818
Newark, New Jersey 07101

Director of Purchases
Great Lakes Carbon Corporation
Electrode Division
P. O. Box 60
Morganton, North Carolina

Director of Purchases
Gruenberg Udolf, Inc.
20 Vesey Street
New York, New York 10007

Director of Purchases

Green Bay Packaging, Inc.

Green Bay, Wisconsin

Director of Purchases
Grummann Aerospace Corporation
Bethpage, Long Island, N. Y.

Director of Purchases
Greentree Electronics Division
Bell & Howell Company
2602 Michelson
Irvine Industrial Complex
Irving, California

Office of the President
Guardsman Chemical Coatings, Inc.
1350 Steele Avenue, S. W.
Grand Rapids 2, Michigan

Office of the President
Gregory Industries, Inc.
E. 28th and Toledo Avenue
Dorain, Ohio 44055

Director of Purchases
Gulf Coast Aluminum Corporation
P. O. Box LL
Lake Charles, Louisiana 70601

MCL001159

Director of Purchases
Gulf Oil Corporation
Chemical Department
P. O. Drawer 3
Henderson, Kentucky 42420

Director of Purchases
C. P. Hall Company
5145 West 67th Street
Chicago, Illinois

Director of Purchases
Gulf Oil Corporation
Gulf Building
P. O. Box 1160
Pittsburgh 30, Pennsylvania

Director of Purchases
Halocarbon Products Corporation
82 Burlews Court
Hackensack, New Jersey 07601

Director of Purchases
Gulf Plastics Company
P. O. Box 5456
New Orleans, Louisiana

Director of Purchases
Hamilton Manufacturing Co.
P. O. Box 6494
Richmond, Virginia

Director of Purchases
Gulton Industries, Inc.
312 Durham Avenue
Metuchan, New Jersey

Director of Purchases
Hamilton Standard Division
United Aircraft Corporation
Windsor Locks, Connecticut

X

Director of Purchases
Haelmeister, Inc.
1300 Island Avenue
P. O. Box 357
Pittsburgh, Pennsylvania

Director of Purchases
Harbo, Inc.
205 East 8th Street
St. Paul, Minnesota 55101

MCL001160

Office of the President
E. L. Harley Company
8701 Third Avenue
Brooklyn, New York 11209

Director of Purchases
F. H. Hartman Company
21 West Street
New York, New York 10006

Director of Purchases
Harringan Reid Company
1365 Bagley Avenue
Detroit, Michigan 48226

Director of Purchases
Harvey Aluminum, Inc.
19200 S. Western Avenue
Torrance, California 90509

Director of Purchases
Harwick Standard Chem. Co. of
California
7225 Paramount Boulevard
Pico Rivera, California 90660

Director of Purchases
Haveg Industries, Inc.
900 Greenbank Road
Wilmington, Delaware

Director of Purchases
Harshaw Chemical Company
Div. Kewanee Oil Company
19200 Villaview Road, N. E.
Centerline Bldg., Room 303
Cleveland, Ohio 44119

Director of Purchases
Haveg Industries, Inc.
Glascote Products Division
20900 St. Clair Avenue
Cleveland, Ohio 44117

Director of Purchases
Harshaw Chemical Company
1945 East 97th Street
Cleveland, Ohio 44106

Office of the President
Heat & Control, Inc.
225 Shaw Road
S. San Francisco, California
94080

MCL001161

Director of Purchases
Heat Exchanger & Transfer Company
500 Superior Street
Carnegie, Pennsylvania 15106

Director of Purchases
Hewitt Robins, Inc.
Hewitt Rubber Division
240 Kensington Avenue
Buffalo, New York

Director of Purchases
Heat Engineering & Supply, Inc.
213 East Valley Boulevard
San Gabriel, California 91776

Director of Purchases
Hexagon Laboratories, Inc.
3536 Peartree Avenue
Bronx 69, New York

Office of the President
Henderson Portion Pak
4015 Laguna Street
Coral Gables, Florida

Office of the President
High Vacuum Metals, Inc.
180 Dayton Avenue
Passaic, New Jersey

Director of Purchases
Hercules, Inc.
900 Market Street
Wilmington, Delaware

Director of Purchases
Hilton-Davis Chemical Company
Div. Sterling Drug, Inc.
2235 Langdon Garm Road
Cincinnati, Ohio 45237

Director of Purchases
Hercules, Inc.
Imperial Color Chemical & Paper Dept.
Glens Falls, New York

Director of Purchases
Hitco Company
P. O. Box 1097, Alondra Sta.
1600 West 135th Street
Gardena, California

MCL001162

Office of the President
Hite Photo, Inc.
693 West Milwaukee Avenue
Detroit, Michigan 48202

Director of Purchases
Holy Cross Hospital
4777 East Outer Drive
Detroit, Michigan 48234

Director of Purchases
Hodag Chemical Corporation
7247 North Central Park
Stokie, Illinois 60076

X

Director of Purchases

Honeymead Products

Mankato, Minnesota 56001

Office of the President
Hoffmeister Cabinets
3069 Sheridan Street
Las Vegas, Nevada

Director of Purchases
Hooker Chemical Corporation
P. O. Box 344
Niagara Falls, New York

Office of the President

Holland-Suco Color Company

Holland, Michigan

Director of Purchases
Hooker Chemical Company
Ruco Division
New South Road
Hicksville, Long Island, N. Y.

Director of Purchases
Stanley H. Holmes Company
4601 North Ronald Avenue
Chicago, Illinois 60656

Director of Purchases
Hooker Chemical Company
P. O. Box 33
Southshore, Kentucky 41175

MCL001163

Office of the President
Horn and Hardart Baking Co.
9801 Blue Grass Road
Philadelphia, Pennsylvania 19114

Director of Purchases
J. M. Huber Corporation
Clay Division
Twiggs County
Huber, Georgia

Director of Purchases
Houdaille Ind., Inc.
2660 East Grand
Detroit, Michigan 48211

Director of Purchases
Humble Oil Company
P. O. Box 1512
Houston, Texas 77007

Director of Purchases
Houdaille Industries, Inc.
P. O. Box 948
Lancaster, Ohio 43130

Director of Purchases
Hunt Foods
United Can Division
P. O. Box 591
Fullerton, California

Director of Purchases
Howard Johnson, Inc.
309 Battles Street
Brockton, Massachusetts 02401

Director of Purchases
Hunt-Wesson Foods, Inc.
P. O. Box 311
Fullerton, California 92632

Office of the President
J. M. Huber Company
Thornall Street
Edison, New Jersey 08817

Director of Purchases
Hydro Aire, Inc.
3000 Winona Avenue
Burbank, California

MCL001164

Director of Purchases
Hydrothane
1308 West Anaheim
Long Beach, California 90813

Director of Purchases
Imperial Fabricating
P. O. Box 70
Portland, Tennessee 37148

Director of Purchases
I.C.I. America, Inc.
P. O. Box 1274
151 South Street
Stamford, Connecticut 06904

Office of the President
Inca Inks, Inc.
1836 Stanley Street
Northbrook, Illinois 60062

X

Office of the President
Iceland Products
Slate Hill Road
Camp Hill, Pa. 17011

X

Director of Purchases
City of Huntsville, Alabama
Industrial Development Board
c/o PPG Industries, Inc.
1 Gateway Center
Pittsburgh, Pa. 15222

Director of Purchases
IMC Corporation
Siresen-Reuter International
400 West Roosevelt Avenue
Bensenville, Illinois 60106

Director of Purchases
Industrial Tech.
142 Nevada Street
El Segundo, California

Director of Purchases
Imperial Adhesives & Chemicals
6315 Wiebe Road
Cincinnati, Ohio 45216

Director of Purchases
Inmont Company
P. O. Box 3938
Anaheim, California 92803

MCL001165

Director of Purchases
Inmont Corporation
P. O. Box 8
Carlstadt, New Jersey

Director of Purchases
Intalco Aluminum Corporation
P. O. Box 937
Ferndale, Washington 98248

Director of Purchases
Inmont Corporation
1754 Dana Avenue
Cincinnati, Ohio 45207

Director of Purchases
Inter-American Foods, Inc.
P. O. Box 787
Brownsville, Texas 78520

Director of Purchases
Inmont Corporation
5935-71 Milford Avenue
Detroit, Michigan 48210

Director of Purchases
Inter Royal

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Director of Purchases
Inmont Corporation
P. O. Box 509
St. Louis, Missouri 63166

Director of Purchases
Intercontinental Plastics
825 Trunk Avenue
Dallas, Texas 75210

Director of Purchases
Inmont Corporation
P. O. Box 911
Toledo 1, Ohio

Director of Purchases
Intermountain Concrete
425 West 17th Street
Salt Lake City, Utah

MCL001166

Director of Purchases
International Flavors &
Fragrances, Inc.
Van American Haebler Division
521 West 57th Street
New York, New York

Director of Purchases
International Nickel Company
Box 656
Wrightsville Beach, North Carolina

Director of Purchases
International Flavors &
Fragrances, Inc.
155 East Railway Avenue
Patterson, New Jersey 07503

Director of Purchases
International Paper Company
Fond Du Lac, Wisconsin 54935

Director of Purchases
International Flavors &
Fragrances, Inc.
800 Rose Lane
Union Beach, New Jersey 07735

Director of Purchases
International Paper Company
Tonawanda Mill
North Tonawanda, New York

Director of Purchases
International Harvester
1401 Perkins Avenue
Waukesha, Wisconsin 53186

Director of Purchases
International Paper Company
Bagpak Division
Camden, Arkansas

Director of Purchases
International Multi-Foods, Inc.
633 North Baldwin Park Boulevard
City of Industry, California 91746

Director of Purchases
International Paper Company
Bagpak Division
1601 Los Plumas
San Jose, California

MCL001167

Director of Purchases
International Paper Company
Container Division
P. O. Box 185
Auburndale, Florida 33823

Director of Purchases
Ionac Chemical Company, Div.
Pfaudler-Permutit
Birmingham, New Jersey

Director of Purchases
International Paper Company
Container Division
Clyde & Warwick Streets
Somerville, Mass. 02145

Director of Purchases
International Paper Company
Southern Kraft Division
Springhill, Louisiana

Director of Purchases
Interpace
P. O. Box 785
Ione, California 95640

Director of Purchases
Interplastics Corporation
Commercial Resins Division
2015 N. E. Broadway
Minneapolis, Minnesota

Director of Purchases
Interpace
P. O. Box F
Mankato, Kansas 66956

X

Director of Purchases
Interstate Bakeries
40 East Garfield
Chicago, Illinois 60615

Director of Purchases
Interpolymer Research Corporation
P. O. Box 35
Farmingdale, N. J. 07727

Director of Purchases

Iowa State College

Ames, Iowa

MCL001168

Director of Purchases
N. M. Isabella, Inc.
1401 West Badger
Madison, Wisconsin 53713

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Director of Purchases

Jasper Rubber Products, Inc.

Jasper, Indiana

Director of Purchases

Jensens, Inc.

Shelbyville, Tennessee 37160

Director of Purchases
Jeanco Laminates, Inc.
251 Dixon Avenue
Amityville, New York 11701

Director of Purchases
Jeris Herbicide Mfg. Co.
100 Jersey Avenue
New Brunswick, New Jersey 08901

Director of Purchases
Jefferson Chemical Company, Inc.
P. O. Box 53300
3336 Richmond Avenue
Houston, Texas 77052

Director of Purchases
Jersey Maid Milk Products
1040 West Slauson
Los Angeles, California 90044

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George Jenkins Company

Bridgewater, Massachusetts

Director of Purchases
Jersey Nuclear Company
2101 Horn Rapids Road
Richland, Washington 99352

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Office of the President
Jenos, Inc.
525 Lake Avenue South
Duluth, Minnesota 55802

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Jiffy Fry
Foremost Foods
P. O. Box 618
Crookston, Minnesota 56716

Director of Purchases
Jiffy Manufacturing Company
237 Ridge Avenue
Hanover, Pennsylvania 17331

Director of Purchases
Johnson & Johnson
501 George
New Brunswick, New Jersey 08901

Director of Purchases

Jiffy Manufacturing Company
2150 Brevard Road
High Point, North Carolina 27261

Director of Purchases
Jones-Scott Company
No. 10 Third Avenue
Walla Walla, Washington 99362

Director of Purchases
Jiffy Manufacturing Company
360 Florence Street
Hillside, New Jersey

Director of Purchases
KABL Radio Station
632 Commercial Street
San Francisco, California

Director of Purchases
Jiffy Manufacturing Company
P. O. Box 469
Salem, Illinois 62881

Director of Purchases
Kaiser Aluminum & Chemical Sales, Inc.
6620 W. Dakin Street
Chicago, Illinois 60634

Director of Purchases
Jiffy Packaging, Inc.
16330 Phoebe Avenue
La Mirada, California 90638

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Kaiser Aluminum & Chemical Corp.
300 Lakeside Drive
Oakland, California 94604

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Director of Purchases

Kaiser Aluminum

Permanente, California

Director of Purchases
Kawecki Berylec Industries, Inc.
P. O. Box 60
Bovertown, Pennsylvania 19512

Director of Purchases
Kaiser Aluminum & Chemical Corp.
P. O. Box 860
Pleasanton, California 94566

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Kay Equipment Company
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Kellogg Company
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96th & F Streets
Omaha, Nebraska 68103

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Kard Manufacturing Company
5304 Valley Blvd.
Los Angeles, California 90032

Director of Purchases
The M. W. Kellogg Company
711 Third Avenue
New York, New York

Director of Purchases
Kasey Chemical Company
6411 San Fernando Road
Glendale, California 91201

Director of Purchases
Kendall Company
Bauer & Black Division
2500 South Dearborn Street
Chicago, Illinois

Director of Purchases

Kaiser Aluminum

Permanente, California

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Bauer & Black Division
2500 South Dearborn Street
Chicago, Illinois

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Polyken Plant
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Franklin, Kentucky 42134

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1528 North Fulton Avenue
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Director of Purchases
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P. O. Box 430
Augusta, Georgia 30906

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Kester Solder Company
4201 Wrightwood Avenue
Chicago, Illinois 60639

Director of Purchases
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West Street
Walpole, Massachusetts 02081

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871A W. 15th St.
Newport Beach, California

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58 Second Avenue
Brooklyn, New Yokr 11215

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Kings Electric Services
220 S. Cypress Street
Hammond, La. 70401

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Knolls Atomic Power Lab
P. O. Box 1072
Schenectady, New York 12301

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Kiwi Shoe Polish
High Street
Pottstown, Pennsylvania

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George Koch & Sones, Inc.
P. O. Box 385
Evansville, Indiana

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Koss Construction Company
P. O. Box 850
El Reno, Oklahoma 73036

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Kontro Company
465 Main Street
Athol, Massachusetts 01331

Director of Purchases
Koss Construction Company
Box 277
Yukon, Oklahoma 73099

Director of Purchases
Koppers Company, Inc.
750 Koppers Building
Pittsburgh, Pennsylvania

Office of the President
K-S-U Plastics, Inc.
10091 Manchester Road
St. Louis, Missouri

Director of Purchases
Koppers Company
Research and Development
440 College Park Drive
Monroeville, Pennsylvania 15146

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K & S Manufacturing Company
P. O. Box 313
Freeport, Illinois 61032

Office of the President
Kores Manufacturing Company
701 Whittier Street
Bronx, New York

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K & W Products
239 W. Grimes Lane
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P. O. Box 148
Florissant, Missouri

Director of Purchases
Latrobe Steel Company
Latrobe, Pennsylvania

Director of Purchases
Lake Chemical Company
P. O. Box 112
Chicago, Illinois

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Lawrence Paper Company
Lawrence, Kansas

Director of Purchases
Lakeway Chemicals, Inc.
5025 Evanston Avenue
Muskegon, Michigan

Director of Purchases
Lawter Chemicals, Inc.
24 Jacobus Avenue
South Kearny, New Jersey

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Lange Company
Box 308
Bloomfield, Colorado 80020

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Lee Metal Products
Phillipsburg, Pennsylvania 16866

Office of the President
Lanson Chemical Corporation
P. O. Box 128
East St. Louis, Illinois

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Lees-Bradner Company
12120 Elmwood Avenue
Cleveland, Ohio 44111

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Les Johnson Cabinet
106 Smith Street
Iron Mountain, Michigan 49801

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Liquid Dynamics Corporation
Buck & County Line Roads
Southhampton, Pennsylvania 18966

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Parispanny, New Jersey 07054

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P. O. Box 77
Lisbon, Maine 04250

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Lesli Manufacturing Corporation
Rocky Avenue
Lebanon, Tennessee 37087

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550 Central Avenue
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390 Park Avenue
New York, New York 10022

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Marietta, Georgia

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275 Fourth Avenue
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P. O. Box 1202
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St. Louis, Missouri 63166

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Altavista, Virginia 24517

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P. O. Box 711
New Orleans, La. 70118

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P. O. Box 8009
Charlotte, North Carolina

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6700 Stanford Avenue
Los Angeles, California

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MCB Mfg. Chemists
2909 Highland Avenue
Norwood, Ohio 45212

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9177 Kelvin Avenue
Chatsworth, California 91311

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McDonnell Douglas Astronautics Co.
Western Division
3000 Ocean Park Blvd.
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Old Iron Ore Road, Box 1926
Spartanburg, South Carolina

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Marathon Oil Corporation
1300 South Fort Street
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Windy Hills
Newark, Delaware

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Marco Chemicals Division
W. R. Grace Co.
291 W. Adams St.
Colton, California 92324

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39 Utter Avenue
Hawthorne, New Jersey

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1711 West Elizabeth Avenue
Linden, New Jersey 07036

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46 Stauffer Street
Lawrence, Massachusetts

Office of the President
Marsh Instrument Company
3501 Howard Street
Skokie, Illinois 60076

Mr. Carl W. Newell
Manufacturing
6739 San Fernando Road
Glendale, California 91201

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Martin Marietta Corporation
P. O. Box 31
Denver, Colorado 80201

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Director of Purchases
Southern Dyestuff Company
Div. of Martin Marietta Company
P. O. Box 10098
Charlotte, North Carolina 28201

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Mayflower Electronics Corp.
20 Industrial Avenue
Little Ferry, N. J. 07643

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316 North Ashland Avenue
Lexington, Kentucky

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Mead Container

Spartanburg, S. Carolina

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Railroad Ave. & Mathers Road
Ambler, Pa. 19002

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800 South Parker
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950 W. Marietta St.
P. O. Box 4417
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P. O. Box 367
Neenah, Wisconsin 54956

Director of Purchases
Mead Containers Division
Mead Corporation
Washington Court House, Ohio 43160

Director of Purchases
Merck & Company
P. O. Box 67
Rahway, New Jersey

Director of Purchases
Mead Corporation
Chillicothe Mills
8th and Hickory Streets
Chillicothe, Ohio 45601

Director of Purchases
Menasha Corporation
Air Lake Industrial Park
Lakeville, Minnesota 55044

Director of Purchases
Mercury Molding Machine Co.
2380 Beryllium Road
Scotch Plains, New Jersey 07076

Director of Purchases
Menasha Corporation
Container Division
600 Alexander Avenue
Tacoma, Washington 98421

Director of Purchases
Mercury Photo Service,
Division of Berkely Photo
1030 Long Beach Blvd.
Long Beach, California

Director of Purchases
Metal Products Corporation
P. O. Box 1924
Greenville, South Carolina 29602

Director of Purchases
Milchem Incorporated
3020 Essex Lane
P. O. Box 22111
Houston, Texas

Director of Purchases
Metal Wire Recovery
RD 2
Danville, Pennsylvania

Director of Purchases
Millmaster Onyx Corporation
Berkeley Chemical Dept.
11 Summit Avenue
Berkeley Heights, New Jersey

Director of Purchases
Midland Division
Dexter Corporation
East Water Street
Waukegan, Illinois 60085

Director of Purchases
Millmaster Chemical Company
Div. of Millmaster Onxyl Corporatio
99 Park Avenue
New York, New York

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Midland Division
Dexter Corporation
Dividend Road
Rocky Hill, Conn. 06067

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Milross Control
511 2nd St. Pike
Southhampton, Penn. 18966

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Mid-West Wax Paper
P. O. Box 116
Ft. Madison, Iowa

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Minerals Research
318 West Colorado
Glendale, California 91204

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Minnesota Mining & Mfg. Co.
2501 Walnut Street
Roseville, Minnesota

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Mobay Chemical Company
Penn Lincoln Parkway
Pittsburgh, Pa.

Director of Purchases
Minnesota Mining & Mfg. Co.
2501 Hudson Road
St. Paul, Minnesota 55101

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Agricultural Chemical Company
Div. Mobil Chemical Company
Box 1136
401 East Main Street
Richmond, Virginia

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Minnesota Mining & Mfg. Co.
Irvington Division
P. O. Box 108
Freehold, New Jersey

Director of Purchases
Mobil Chemical Company
Research & Development Dept.
P. O. Box 631
Midland, Michigan 23005

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Mirrolike Photo Service
P. O. Box 3006
Seattle, Washington 98114

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Mobil Oil Company
Rochester Plant
P. O. Box 349
Rochester, Pa. 15074

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Royal Ind.
947 Vignes St.
Los Angeles, Calif. 90012

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Moderncote Inc.
Box 353
New Castle, Indiana

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Director of Purchases
Montgomery Bros.
4800 District Blvd.
Los Angeles, California 90058

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2000 Westhall Street
Pittsburgh, Pa. 15233

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Morton Frozen Foods Division
Continental Baking Co., Inc.
Box 97
Crozet, Virginia 22932

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Benjamin Moore & Co.
P. O. Box 1888
Denver, Colorado

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MR Plastics & Coatings, Inc.
11460 Dorsett Road
Maryland Heights, Mo. 63043

Director of Purchases
Benjamin Moore & Co.
3325 South Garfield Avenue
Los Angeles, California

Director of Purchases
Mrs. Paul's Kitchens
5830 Henry Avenue
Philadelphia, Pa. 19128

Director of Purchases
Benjamin Moore & Co.
North & 25th Avenue
Melrose Park, Illinois

Director of Purchases
Mrs. Smith's Colonial Baking Co.
8210 Colonial Street
Silver Springs, Maryland

Director of Purchases
Motorola, Inc.
P. O. Box 20922
Phoenix, Arizona 85036

MCL001184

Director of Purchases
Murphy Oil Corporation
200 Jefferson Avenue
El Dorado, Arkansas 71730

Director of Purchases
National Can Company
3217 West 47th Place
Chicago, Illinois

Director of Purchases
Murray Rubber Company
608 N. Milby Street
Houston, Texas

Director of Purchases
National Can Corporation
700 Canal Street
Stamford, Connecticut

Director of Purchases
Nalco Chemical Company
4001 W. 71st Street
Chicago, Illinois 60629

Director of Purchases
U. S. Industrial Chemical Company
Div. of National Distillers & Chem.
99 Park Avenue
New York, New York

Director of Purchases
National Biscuit Company Bakery
Roosevelt Blvd.-Byberry Road
Philadelphia, Pennsylvania

Director of Purchases
U. S. Industrial Chemical Company
Div. of National Distillers & Chem.
Cincinnati, Ohio

Director of Purchases

National By Products

Mason City, Illinois

Director of Purchases
National Felt Company
180 Pleasant Street
East Hampton, Massachusetts

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Director of Purchases
National Fibrit
General Office
P. O. Box 428
Mansfield, Ohio 44901

Director of Purchases
Baroid Division
National Lead Company
P. O. Box 1675
Houston, Texas 77001

Director of Purchases
National Floor Products Co., Inc.
P. O. Box 354
Florence, Alabama

Director of Purchases
NL Industries
Sayreville Plant
Chevalier Avenue
P. O. Box 58
South Amboy, New Jersey 08879

Director of Purchases
National Homes Company
P. O. Box 680
Lafayette, Indiana 47902

Director of Purchases
NL Industries
Titanium Division
100 Chevalier Avenue
South Amboy, New Jersey 08879

Director of Purchases
National Lead Company
Atlantic Branch
P. O. Box 831
1050 State Street
Perth Amboy, New Jersey

Director of Purchases
National Starch & Chemical Corp.
1735 West Front Street
Plainfield, New Jersey 07063

Director of Purchases
NL Industries
Atlantic Branch
Rt. 130
Cranbury, New Jersey

Director of Purchases
National Tea Company
1000 North Crosby Street
Box 6970A
Chicago, Illinois

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Director of Purchases
National Wax Company
3650 Touhy
Skokie, Illinois 60076

Director of Purchases
Nicolet Industries
P. O. Box 777
Rockdale Road
Hamilton, Ohio

Director of Purchases
Supply Officer
Naval Powder Factory
Indian Head, Maryland

Director of Purchases
Nicolet Industries
Ford & Washington Streets
Morristown, Pa.

Director of Purchases
Nefco Industries
4051 West 51st Street
Chicago, Illinois 60632

Director of Purchases
Nilok Chemicals, Inc.
P. O. Box 27134
Memphis, Tennessee 38127

Director of Purchases
Nepacco
P. O. Box 158
Verona, Missouri 65769

Director of Purchases
Noranda Aluminum Inc.
P. O. Box 70
New Madrid, Mo. 63869

Director of Purchases
New England Petroleum Corp.
825 Third Street
New York, New York 10022

Director of Purchases
Norman Engineering Company
5899 Venice Boulevard
Los Angeles, California 90019

MCL001187

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North American Rockwell Corp.
4300 East Fifth Avenue
Columbus, Ohio 43216

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O.K.C. Division
Fanner Mfg. Co.
900 North Chapel Street
Louisville, Ohio 44641

Director of Purchases

Northern Natural Gas Co.

Wichita, Kansas

Director of Purchases
Oil Base Inc.
3625 Southwest Hwy.
Houston, Texas

Director of Purchases
Norton Company
10th Avenue & 27th St.
Troy, New York 12181

Director of Purchases
Blockson Chemical Company
Div. of Olin Corporation
P. O. Box 130
Joliet, Illinois 60434

Director of Purchases
Off-Shore Chemicals Sales &
Service Company
Oil Center Station
P. O. Box 52207
Lafayette, La. 70501

Director of Purchases
Olin Corporation
100 McKee Road
Rochester, New York

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Ohio Sealer & Chemical Corp.
3060 East River Road
Dayton, Ohio

Director of Purchases
Olinkraft, Inc.
465 S. Delaney
Owosso, Michigan

MCL001188

Director of Purchases
Olin Research Center
275 Winchester Avenue
New Haven, Connecticut 06511

Director of Purchases
Outside Carpets, Inc.
P. O. Box 692
Rome, Georgia 30161

Mr. Olney

P. O. Box 1642

Newport Beach, California

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Owens Corning Fiberglas Corp.

Anderson, South Carolina

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Onyx Chemical Company
Div. of Millmaster Onyx Corp.
190 Warren Street
Jersey City, New Jersey

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Owens Corning Fiberglas Corp.

Granville, Ohio

Director of Purchases
Oregon Metallurgical Corp.
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Albany, Oregon 97321

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P. O. Box 326
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Ormet Corporation
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Director of Purchases

Owens Illinois, Inc.

Alton, Illinois

Director of Purchases
Owens Illinois
P. O. Box 260
Four Owens Road
Brockport, New York 14420

Director of Purchases
Pacific Airmotive Corp.
2940 North Hollywood Way
Burbank, California 91503

Director of Purchases
Owens Illinois Glass Inc.
North Laurel Street
Bridgeton, New Jersey 08302

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Pacific Power & Light Co.
920 S. W. Sixth Avenue
Portland, Oregon 97204

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P. O. Box 11067
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Durham, North Carolina 27703

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Packaging Corporation of America
2 West Scott St.
Vincennes, Indiana

Director of Purchases
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Toledo, Ohio

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River Rouge, Michigan 48218

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Forest Products Division
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Director of Purchases
Pall Corporation
30 Sea Cliff St.
Glen Cove, Long Island, N. Y.
11542

Director of Purchases
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2828 Brannon
St. Louis, Missouri 63139

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Parallel Products
319 South Main
Dawson Springs, Kentucky

Director of Purchases
Pan American World Airways
Guided Missiles Range Division
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2177 East Milwaukee
Detroit, Michigan 48211

Director of Purchases
Panelform Corporation
205 East Second Street
Mineola, New York 11501

Director of Purchases
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Roosevelt Park Annex
Detroit, Michigan

Director of Purchases
Paper Converting & Finishing Co.
1101 South Kilbourn Avenue
Chicago, Illinois

Office of the President
Parkson Industrial Equipment Co.
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Ft. Lauderdale, Fla. 33308

Director of Purchases
Paragon Wayne Plastic
3033 Wayne Trace
Ft. Wayne, Indiana 46806

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Parsons Linoleum & Rug Company
143 East Main Street
Columbus, Ohio 43215

MCL001191

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Pasadena Hydraulics
Div. of the Rucker Company
1434 Tyler Avenue
South El Monte, Calif. 91733

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Box 108, Route 24
Phillipsburg, N. J. 08865

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Patco Products Division
C. J. Patterson Company
3947 Broadway
Kansas City, Missouri

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102 McDowell Street
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Office of the President
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569 Market Street
San Francisco, California

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Pee Dee Fabrics Company
P. O. Box 845
Cheraw, S. C. 29520

Director of Purchases

Patterson Industries, Inc.

East Liverpool, Ohio 43920

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7847 W. 47th Street
McCook, Illinois

Director of Purchases
Peabody and Lane, Inc.
89 Broad Street
Boston, Mass. 02110

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Three PemCenter Plaza
Philadelphia, Pa.

MCL001192

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Pennwalt Corporation
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Wyandotte, Michigan

Director of Purchases
Perkin-Elmer Corporation
98 Westport Avenue
Norwalk, Connecticut

Director of Purchases
Pennwalt-Kerns United
P. O. Box 352
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Director of Purchases
Perfect Photo, Inc.
4747 North Broad Street
Philadelphia, Pa. 19141

Director of Purchases
Pennsylvania Refining Company
2686 Lisbon Road
Cleveland, Ohio

Director of Purchases
Permaform Company
1290 Third Avenue
New Kensington, Pa. 15068

Director of Purchases
Penobscot Unit
Callahan Mining Corporation
Harborside, Maine 04642

Director of Purchases
Perry Photo, Inc.
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Perfect Photo Company
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Charlotte, North Carolina

Director of Purchases
Perry Plastics, Inc.
3409 W. 14th Street
Erie, Pennsylvania 16505

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Director of Purchases
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Tretolite Division
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St. Louis, Missouri 63119

Director of Purchases
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Director of Purchases
Pfaudler Company
Div. of Sybron Corporation
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Rochester, New York 14603

Director of Purchases
Phillips Petroleum Company
1245 Adams Building
Bartlesville, Oklahoma

Director of Purchases
Chas. Pfizer & Co., Inc.
Groton Plant
Groton, Conn.

Director of Purchases
Philmont Mfg. Co.
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Linden Avenue
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Director of Purchases

Pillsbury Company

Terre Haute, Indiana

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Piedmont Manufacturing Company
Altavista, Virginia 24517

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Director of Purchases
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Director of Purchases
Pipeline Service
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Director of Purchases
Pima Mining Company
P. O. Box 7187
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Director of Purchases
Pitt-Consol Chemical Company
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Research & Development Center
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Director of Purchases
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Coatings & Resins Division
3½ miles S. of U.S. Route 23
Circleville, Ohio

Director of Purchases
PPG Industries, Inc.
465 Crenshaw Blvd.
Torrance, California

Director of Purchases
Plastic & Rubber Products Co.
2150 Parco Avenue
Ontario, California 91764

Director of Purchases
PPG Industries, Inc.
Chemical Divisio
New Martinsville, W. Virginia

Director of Purchases
PPG Industries, Inc.
One Gateway Center
Pittsburgh, Pennsylvania

Director of Purchases
PPG Industries, Inc.
Chemical Division
Lake Charles, La. 70601

Director of Purchases
Plasticraft Tops, Inc.
1450 Colton Avenue
Colton, California 92324

MCL001196

Director of Purchases
Plastic Product Company
12808 Nutwood
Garden Grove, California

Director of Purchases
Polychemical International
491-498 Hunts Point Avenue
Bronx, New York 10474

Office of the President
Plastic Tops, Inc.
13281 Merrimon
Livonia, Michigan 48150

Director of Purchases
Polymer Corporation
1257 Fifth Street
Reading, Pennsylvania

Director of Purchases
Point of Purchases
Display Lane
Kettering, Ohio

Office of the President
Polyrez Company, Inc.
South Columbia St. and R. R.
Woodbury, New Jersey

Director of Purchases
Polaroid Corporation
730 Main Street
Cambridge, Mass.

Director of Purchases
Pratt and Lambert, Inc.
73 Tonawanda Street
Buffalo, New York

Director of Purchases
Poling & Bacon
10400 South Abe
Youngstown, Ohio 44500

Director of Purchases
Pratt & Whitney Aircraft
Governors Highway
South Windsor, Connecticut

MCL001197

Director of Purchases
Pratt & Whitney Aircraft
Florida Operations
Div. United Aircraft Corp.
West Palm Beach, Florida

Director of Purchases
Process Control Corporation
Peachtree Dekalb Airport
Chamblee, Georgia 30340

Director of Purchases
Premix Inc.
P. O. Box 281
North Kinsville, Ohio 44068

Director of Purchases
Process Services, Inc.
1011-3/4 West 190 Street
Gardena, California 90247

Office of the President
Preservative Paint Co.
5410 Airport Way
Seattle, Washington

Director of Purchases
Process Supply Company
747 W. Katella Avenue
Orange, California 92667

Director of Purchases
Princeton Chemical Research, Inc.
P. O. Box 652
Princeton, New Jersey

Director of Purchases
Proctor and Gamble Company
P. O. Box 599
Cincinnati, Ohio

Director of Purchases
Process Equipment Engineering Co.
36 Chatham Road
Summit, New Jersey 07901

Director of Purchases
Proctor Products
299 Hanley Industrial Court
St. Louis, Missouri 63144

MCL001198

Director of Purchases
Products Research & Chemical Corp.
2919 Empire Avenue
Burbank, California 91504

Director of Purchases
Purex Corporation Ltd.
24600 South Main Street
Wilmington, California 90745

Director of Purchases
Protective Closures Company
Mokon Division
2207 Elmwood Avenue
Buffalo, New York 14216

Director of Purchases
P.V.T. Inc.
P. O. Box 36272
Houston, Texas 77036

Director of Purchases
Publishers Printing Co., Inc.
P. O. Box 1494
Louisville, Kentucky 40201

Director of Purchases
Quaker Chemical Company
14301 Birwood
Detroit, Michigan 48238

Director of Purchases

Purdue University

Lafayette, Indiana

Director of Purchases
Quaker Oats Company
Merchandise Mart Plaza
Chicago, Illinois

Director of Purchases
Purex Corporation
5900 West 51st Street
Chicago, Illinois 60638

Director of Purchases
Quaker Oats Company
P. O. Box 8035
Memphis, Tennessee 38108

MCL001199

Director of Purchases
Quaker State Oil
Box 3367
Smithport, Pa. 16749

Director of Purchases
R. C. A. Corporation
Consumer Electronics Division
600 North Sherman Drive
Indianapolis, Indiana 46201

Director of Purchases
R & A Manufacturing
P. O. Box 31005
6500 West 21st Street
Wichita, Kansas

Director of Purchases
R. C. A. Corporation
Magnetic Products Division
6300 East 30th Street
Indianapolis, Indiana 46219

Office of the President
Ramshaw Photo, Inc.
13310 W. Chicago
Detroit, Michigan 48228

Director of Purchases
R. C. A. Victor
600 North Sherman Drive
Indianapolis, Indiana 46201

Office of the President
Randolph Manufacturing Co.
32 South Main Street
Randolph, Massachusetts

Director of Purchases
Rea Magnet Wire Company, Inc.
Route 6, Concord Road
Lafayette, Indiana

Director of Purchases
Raychem Corporation
300 Constitution Drive
Menlo Park, California 94025

Director of Purchases
Resistoflex Corporation
Department 20
Woodland Road
Roseland, New Jersey

MCL001200

Director of Purchases
Republic Container Corporation
1561 Hudson Blvd.
Jersey City, New Jersey

Director of Purchases
Reichhold Chemicals, Inc.
Varcum Chemical Corp. Div.
P. O. Box 863
Packard Road
Niagara Falls, N. Y. 14302

Director of Purchases
Reichhold Chemicals, Inc.
726 Rockefeller Street
Elizabeth, New Jersey 07202

Director of Purchases
Reichhold Chemicals, Inc.
Haysville Boro
Sewickley, Pennsylvania 15143

Director of Purchases
Reichhold Chemicals, Inc.
525 N. Broadway
White Plains, N.Y.

Director of Purchases
Reichhold Chemicals, Inc.
P. O. Box 1482
Tacoma, Washington 98401

Director of Purchases
Reichhold Chemicals, Inc.
P. O. Box 6227
Jacksonville, Fla. 32205

Director of Purchases
Reichhold Chemicals, Inc.
P, O. Box 1610
Tuscaloosa, Ala. 35401

Director of Purchases
Reichhold Chemcals, Inc.
P. O. Box 550
Morris, Illinois 60450

Director of Purchases
Reichhold Chemicals, Inc.
525 North Broadway
White Plains, New York

Director of Purchases
Red Point Corporation
P. O. Box 107
Burbank, California 91503

Director of Purchases
Resyn Corporation
1401 West Blancke Street
Linden, New Jersey 07036

Director of Purchases
Rea Magnet Wire Company, Inc.
East Pontiac Street
Fort Wayne, Indiana

Director of Purchases
Revere Copper & Brass, Inc.
P. O. Box 788
Scottsboro, Ala. 35768

Director of Purchases
Republic Container
1561 Hudson Blvd.
Jersey City, N. J.

Director of Purchases
Reynolds Metals
Front & Lloyd Streets
Chester, Pennsylvania

Director of Purchases
Republic Mill
P. O. Box 692
Rome, Ga.

Director of Purchases
Reynolds Metals Company
P. O. Box 500
Massena, New York

Director of Purchases
Republic Steel
P. O. Box 6778
Cleveland, Ohio 44101

Director of Purchases
Reynolds Metals Company
Reynolds Metals Building
Richmond, Virginia

MCL001202

Director of Purchases
Reynolds Metals Company
P. O. Box 128
Grottoes, Virginia

Office of the President
Rietz Manufacturing
P. O. Box 80
Santa Rosa, California 95402

Director of Purchases
Rhodia, Inc.
Chipman Division
6200 N.S. St. & Helens Rd.
Portland, Oregon 97210

Director of Purchases
Riker Laboratories Div.
Rexall Drug & Chemical Co.
P. O. Box 3743
Terminal Annex
Los Angeles, California 90054

Office of the President
Ridgway Lithograph Company
411-156th Avenue, N.E.
Redmond, Washington 98052

Director of Purchases
Riverside ~~Oil Mill~~ Industries
Marks, Mississippi 38646

Director of Purchases
Riegel Paper Corporation
5810 Fee Fee Road
Hazelwood, Missouri 63042

Office of the President
River House Co-Op
8900 East Jefferson
Detroit, Michigan 48214

Director of Purchases
Riegel Paper Corporation
Frenchtown Road
Milford, New Jersey 08848

Director of Purchases
Riverside Plastics Division
Bischoff Chemical Corporation
220 Miller Road
Hicksville, New York 11801

MCL001203

Director of Purchases
Roberts Consolidated Industries, Inc
Chemical Division
600 East Evergreen Street
Monrovia, California 91016

Director of Purchases
Rohr Corporation
4605 Morena Blvd.
San Diego, California 92117

Director of Purchases
Roblen Research & Development Corp.
P. O. Box 602
Colton, California

Director of Purchases
Ronson Metals Corporation
55 Manufacturers Place
Newark, New Jersey

Office of the President
Roesel
P. O. Box 281M
Route 2
Brandenton, Florida 03505

Director of Purchases
Rose Chemical Engineering &
Supply Company
P. O. Box 6518
Bakersfield, California 93306

Director of Purchases
Rohm & Haas Company
Independence Mall West
Philadelphia, Pennsylvania

Director of Purchases
Ross Engineering Division
Midland Ross Corporation
817 Beverly Blvd.
Montebello, California 90640

Director of Purchases
Rohr Corporation
Accrued Liabilities Group
H Street, P. O. Box 878
Chula Vista, California

Director of Purchases
Rotary Seal Corporation
7440 W. Lawrence Avenue
Chicago, Illinois 60656

Director of Purchases
Royal Industries
Engineered Products Division
2040 East Dyer Road
Santa Ana, California 92705

Director of Purchases
Royal Typewriter Co., Inc.
1031 New Britain Avenue
West Hartford, Connecticut

Director of Purchases

Rubatex Corporation

Bedford, Georgia

MCL001205

Director of Purchases
Safeway Stores, Inc.
Bakery Division
6211 East Slauson
Los Angeles 22, California

Director of Purchases
Sandrik Steel, Inc.
1702 Nevins Road
Fairlawn, New Jersey 07410

Director of Purchases
Safeway Stores, Inc.
Bakery Division
P. O. Box 1238
San Jose 26, California

Director of Purchases
Sav a Stop Stores
7660 Gainesville Ave.
Jacksonville, Florida 32208

Director of Purchases
Sav a Stop
2001 Apperson Drive
Salem, Va. 24153

Director of Purchases
Sandia Corporation
P.O. Box 5800
Alburquerque, New Mexico

Office of the President
Schaeffer Manufacturing Co.
102 Barton
St. Louis, Mo.

Director of Purchases
Sandoz Pharmaceuticals
Div. of Sandoz, Inc.
P. O. Box 11
Honover, New Jersey

Director of Purchases
Schenectady Chemicals, Inc.
P. O. Box 1046
Schenectady, New York

MCL001206

Director of Purchases
Schildwachter Oil Company
1400 Ferris Place
Bronx, New York 10461

Office of the President
Scott Wise Polymers
P. O. Box 958
Crowley, Louisianna

Director of Purchases
Schenuit Indust. Inc.
Railroad & Union Ave.
Baltimore, Md. 21211

X

Office of the President
Sea Pass Corporation
1211 South Kingshighway
St. Louis, Missouri 63110

Director of Purchases
Schoen Paving Company
310 South Westwood
Toledo, Ohio 43609

X

Director of Purchases
Sealtest Corporation
3950 North Holton
Milwaukew, Wisconsin 53212

Director of Purchases
Schulz Rubber Products, Inc.
430 Madera Street
San Gabriel, California

Director of Purchases
Seed Electronics Corporation
9 Cypress Drive
Burlington, Mass. 01803

W. A. Schuman & Co.
Director of Purchases
11463 St. Charles Rd.
Bridgeton, Mo. 63042

Director of Purchases
Selastomer Chicago, Inc.
45 East Green Street
Bensenville, Illinois 60106

Director of Purchases
Selastomer Detroit, Inc.
Sub. of Vare Corporation
30595 West 8 Mile Road
Livonia, Michigan 48152

Director of Purchases
Shell Chemical Corporation
P. O. Box 2099
Houston, Texas

Director of Purchases
Serv-Us Bakers of Phoenix
Div. C. J. Patterson Co.
1502 E. Buckeye Road
Phoenix, Arizona

Director of Purchases
Shell Oil Company, Inc.
Houston Refinery
P. O. Box 2527
Houston Texas

Director of Purchases
Shamrock Corporation
P. O. Box 14146
258 Eiler Avenue
Louisville, Kentucky

Director of Purchases
Shell Oil Company, Inc.
1008 West 6th Street
Los Angeles, California

Director of Purchases
Shell Chemical Company
Plastics and Resins
P. O. Box 2633
Deer Park, Texas 77536

Director of Purchases
Shell Oil Co.
P.O. Box 591
Morgan City, La.

Director of Purchases
Shell Oil Company
P. O. Box 691
Ventura, California 93002

MCL001208

Office of the President
C. E. Shepherd Company
P. O. Box 9445
Houston, Texas 77001

Office of the President
Sierra Engineering Company
123 East Montecito Avenue
Sierra Madre, California

Director of Purchases
Sinclair Petrochemicals Co.
P. O. Box 2411
Houston, Texas 77001

Director of Purchases
Sherwin Williams Company
P. O. Box 6027
Cleveland 1, Ohio

Director of Purchases
Skyline Industries, Inc.
4969 N.E. Parkway
Fort Worth, Texas 76101

Director of Purchases
Sherwin Williams Co.
General Purchasing Dept.
P. O. Box 6027
Cleveland, Ohio 44101

Director of Purchases
A. O. Smith Corporation
Smith Plastics Division
2700 West 65th Street
Little Rock, Arkansas 72206

Office of the President
Siebel Air Company
5563 West Washington
Los Angeles, California 90016

Director of Purchases
Henry T. Smith Co.
588 South Cooper Street
Memphis, Tenn 38104

MCL001209

Director of Purchases
L. E. Smith Company
P. O. Box 428
Bryan, Ohio 43506

Director of Purchases
Southern Bakery Co.
375 Highland Ave
Atlanta, Ga. 30312

Mr. H. J. Snellson
Route 3, Box 3568
Statesville, North Carolina 28677

Director of Purchases
~~South Wire Company~~
~~Daniels Construction Co.~~
Hawesville, Kentucky
National Southwire Aluminum Co.

Director of Purchases
Soo Valley Company
R.F.D. 3
Columbia, South Carolina

Director of Purchases
Southern Container Corporation
140 West Industry Court
Deer Park, New York 11729

Director of Purchases
Sou-Tex Chemical Company
P. O. Box 866
Mt. Holly, North Carolina 28180

Director of Purchases
Southern Dyestuff
Div. of Martin Marietta Corp.
Sodyeco, North Carolina

Director of Purchases
Southern Adhesive
4105 Courthouse Rd.
P. O. Box 3498
Richmond, Va.

Director of Purchases
Southern Natural Gas
P. O. Box 2563
Birmingham, Ala.

MCL001210

Director of Purchases
Southwest Forest Industries
13833 E. Freeway Drive
Santa Fe Springs, California 90670

Director of Purchases
St. Joe Paper Company
700 Sam Houston Road
Mesquito, Texas 75149

Director of Purchases
Southwest Grease & Oil Co.
19530 South Almeda
Compton, California

Director of Purchases
St. Mary Chemical Co., Inc.
P. O. Drawer D
Morgan City, Louisiana 70380

Director of Purchases
Southwest Potash Corporation
P. O. Box 3
Vicksburg, Mississippi 39160

Director of Purchases
St. Regis Paper Company
150 East 43rd Street
New York, New York

Director of Purchases
Specialty Papers Company
802 Miami Chapel Road
Dayton, Ohio

Director of Purchases
Standard Chemical Products, Inc.
1301 Jefferson Street
Hoboken, New Jersey

Director of Purchases
Spectrocon Inc.
3025 S. Kilson Dr.
Santa Ana, California 92707

Director of Purchases
Standard Felt Co.
115 South Palm Ave.
Alhambra, California

MCL001211

Director of Purchases
Standard Oil of California
605 West Olympic Boulevard
Los Angeles, California 90015

Director of Purchases
Standard Packaging Co.
National Metallizing Division
Foragate Industrial Park
Section 1
Cranbury, New Jersey

Director of Purchases
Standard Oil of California
Swanson River Compressor Station
Swanson River, Akaska

Director of Purchases
Standard Paving & Engineering Co.
21010 Outer Loop
Louisville, Kentucky 40219

Director of Purchases
Standard Oil of California
Western Operations
1318 Fourth Avenue
Seattle, Washington 98111

Director of Purchases
Standard Supply Company
P. O. Box 100
Maysville, Kentucky

Director of Purchases
Standard Oil Co. of California
605 West Olympic Blvd.
Los Angeles, California

Director of Purchases
Standard Thomson Corporation
Clifford Mfg. Co. Div.
Grove Street
Waltham, Massachusetts

Director of Purchases
Standard Oil Co. of California
225 Bush Street
San Francisco, California

Director of Purchases
Std. T Chemical Co., Inc.
2600 Federal Street
Chicago 16, Illinois

MCL001212

Director of Purchases
Stanley Works, Inc.
Stanco Packaging Division
Curtis Street
New Britain, Connecticut

Director of Purchases
Stauffer Chemical Company
Richmond Research Lab
1375 S. 47th Street
Richmond, California

Office of the President

Star Fibers, Inc.

Edgefield, S. C. 29824

Director of Purchases
Stauffer Chemical Co.
Anderson Chemical Division
3940 Summit Street
Weston, Michigan

Director of Purchases

Stauffer Chemical Co.

Gallispolis Ferry, W. Va.

Director of Purchases
Steaman Electronics
1201 Shorham Bldg.
Washington, D. C. 20005

Director of Purchases
Stauffer Chemical Company
Campground Road
Louisville, Kentucky

Director of Purchases
Stein Hall & Co.
P. O. Box 369
Argo, Illinois

Director of Purchases
Stauffer Chemical
2 Paulston Ave.
Pasaic, N. J. 07055

Director of Purchases
Stepan Chemical Company
1211 North Olive Street
Anaheim, California 92801

MCL001213

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X

Director of Purchases
Stepan Chemical Company
Industrial Chemicals Division
Millsdale, Illinois

Director of Purchases
Stop & Shop, Inc.
Bakery Division
226 Causeway Street
Boston, Mass 02114

Director of Purchases
Stepco Company
P. O. Box 9836
El Paso, Texas 79988

Director of Purchases
Stresskin Products Co.
3030 Red Hill Ave.
Santa Ana, Calif. 92705

Director of Purchases
Sterling, Inc.
5200 West Clinton Avenue
Milwaukee, Wisconsin 53223

Director of Purchases
D. A. Stuart Oil Company
2727 South Troy Street
Chicago, Illinois

X

Director of Purchases
J. P. Stevens & Co., Inc.
Duncan Plant
Greenville, South Carolina 29602

Director of Purchases
Stuckeys, Inc.
Eastman, Georgia

Director of Purchases
Stone Container Corporation
Ritchie Division
7701 South Baltimore Avenue
Chicago 17, Illinois

Director of Purchases
Sun Chemical Co.
Chester, South Carolina 29706

MCL001214

Director of Purchases
Sun Oil Co.
Franklin, Pa.
unable to locate per
ltr 3/12/71

Director of Purchases
Sun Oil Company
1608 Walnut Street
Philadelphia 3, Pa.

Director of Purchases
Sun Oil Company
Classen Center 8th Floor
North Building
Oklahoma City, Oklahoma 73106

Director of Purchases
Sun Oil Company
DX Division
418 Market Street
Shreveport, La.

Director of Purchases
Sun Oil Company
P.O. Box 570
Morgan City, La.

Director of Purchases
Sun Oil Company
DX Division
P. O. Box 381
Tulsa, Oklahoma

Director of Purchases
Sun Oil Co.
P. O. Box 758
Nederland, Tx. 77627

Director of Purchases
Sun Shipbuilding & Dry Dock
P. O. Box 430
Chester, Pa 19013

Director of Purchases
Sun Oil Company
DX Division
P. O. Box 51265
Oil Center Station
Lafayette, Louisiana 70505

Director of Purchases
Superior Oil Company
P. O. Box 728
Lake Arthur, La. 70549

MCL001215

Director of Purchases
Syn-Chem Corp.
Compton Rd. Box 95
Inman, S.C. 29349

Director of Purchases
Tecumseh Products
333 Joseph Street
Marion, Ohio 53302

Office of the President
Systems Printers
8332 Secura Way
Santa Fe Springs, Calif. 90670

Director of Purchases
Tenneco Chemicals, Inc.
American Plastics Division
Bainbridge, New York 13735

Director of Purchases
Target Photo Finishers, Inc.
1712 North Mill Street
Jackson, Mississippi 39202

Director of Purchases
Tenneco Chemicals Inc.
Hwy. 21 at 38
Lobeco, S.C.

Director of Purchases
Techform Laboratories
707 South Hampton Drive
Venice, California 90291

Director of Purchases
Tenneco, Inc.
Packaging Corporation
Burlington, Wisconsin

Director of Purchases
Technical Chemicals Corp.
131 Willow Street
Cheshire, Connecticut

Director of Purchases
Tenneco Colors Division
Tenneco Chemicals, Inc.
P. O. Box 51
Reading, Pa. 19603

MCL001216

Director of Purchases
Tenneco Oil Company
~~C/O St. Mary Chemical Co.~~
~~Highway 90 East~~
~~Morgan City, Louisiana~~
Lafayette, La.

Director of Purchases
Texas Instruments, Inc.
Apparatus Division
Optics Department
6000 Lemmon Avenue
Dallas 9, Texas

Director of Purchases
Tennessee Eastman Corporation
P. O. Box 511
Kingsport, Tennessee

Director of Purchases
Texas Marine & Industrial
Supply Company
8050 Harrisburgh Blvd.
Houston 12, Texas

Director of Purchases
Terrell Corporation
820 Woburn Street
Wilmington, Massachusetts

Director of Purchases
Texas Refinery Corporation
P. O. Box 711
Fort Worth, Texas

Director of Purchases
Texaco Inc.
24501 Ecorse Rd.
Taylor, Miss. 48180

Director of Purchases
Texstream Corporation
322 Hughes Street
Houston, Texas 77100

Office of the President
Tex Trude, Inc.
P. O. Box 12465
Houston, Texas

Office of the President
Thayer-Coggins, Inc.
800 West Burton Street
High Point, N.C. 27260

MCL001217

Director of Purchases
Thayer School of Engineering
Dartmouth College
Hanover, New Hampshire 03755

Office of the President
Thiele Kaolin Company
Sandersville, Georgia

Director of Purchases
Thermo-O-Dis
South Main Rd.
Mansfield, Ohio 44907

Director of Purchases
Thomas L. Lipton Company
800 Silvan Avenue
Englewood Cliffs, New Jersey

Office of the President
Thermo Electron Corporation
15 Lunda Street
Waltham, Massachusetts

Director of Purchases
Titanium Chemicals, Inc.
Middle Road
Ashtabula, Ohio

Office of the President
Thermon Manufacturing Co.
9941 Rowlett
Houston, Texas 77034

Director of Purchases
Titanium Metals Corporation
P. O. Box 2128
Henderson, Nevada 69015

Director of Purchases
Thermotics, Inc.
Fellows, California

Director of Purchases
Tolo Incorporated
2401 South Pullman
Santa Ana, California

MCL001218

Director of Purchases
Topco Laminents
1027 North Monroe
Kansas City, Mo. 64120

Director of Purchases
Troy Mills, Inc.
Troy, New Hampshire

Director of Purchases
Trade Winds No. 2
P. O., Box 1867
Brownsville, Texas 78521

Director of Purchases
True Temper Corporation
1623 Euclid Avenue
Cleveland, Ohio 44115

Director of Purchases
Trans Line Inc.
Box 511
Chanute, Kansas

Director of Purchases
TRW, Inc.
23555 Euclid Avenue
Cleveland, Ohio 44117

Director of Purchases
Trans Plastics
Box 328
Conneaut, Ohio 44030

Director of Purchases
Tull Chemical Co.
Oxford, Alabama

X

Director of Purchases
Trostel Compound
Lake Geneva, Wisconsin

X

Director of Purchases
Ugine Kulhann of America, Inc.
745 Fifth Avenue
New York, New York 10016

MCL001219

Director of Purchases
Union Bag Camp Corp.
Lakeland Plant
P. O. Box 1608
Lakeland, Florida

Director of Purchases
Union Camp Corporation
Folding Carton & Label Division
P. O. Box 865
Atlanta, Georgia 30301

Director of Purchases
Union Bag Camp Paper Corp.
8300 Valcour
Affton, Mo. 63123

Director of Purchases
Union Camp Paper Corp.
793 N. Lathrop Avenue
Savannah, Ga. 31401

Director of Purchases
Union Camp Corp.
P. O. Box 1568
Decatur, Ala. 35620

Director of Purchases
Union Carbide Corporation
Union Carbide Metals Co. Div.
Marietta, Ohio

Director of Purchases
Union Camp Corp.
P. O. Box 220
Dover, Ohio 44622

Director of Purchases

Union Carbide Nuclear Company

Oakridge, Tennessee

Director of Purchases
Union Camp Corporation
Container Division
P. O. Box 645
Morristown, Tennessee 37814

Director of Purchases
Union Carbide Corporation
Riber Road
Bound Brook, N.J. 08805

MCL001220

Director of Purchases
Union Carbide Corporation
Nuclear Division
P. O. Box 1410
Paducah, Kentucky 42001

Director of Purchases
Union Oil Company
Boston Division
P. O. Box 2007
Milwaukee, Wisconsin 53201

Director of Purchases
Union Carbide Corporation
Chemicals Division
270 Park Avenue
New York 17, New York

Director of Purchases
Union Oil
1300 Canal Boulevard
Richmond, California 94804

Mr. C. B. Gardner, Loc 527
Union Carbide Corporation
P. O. Box 8083
South Charleston, W. Va. 25303

Director of Purchases
Uniroyal Incorporated
Uniroyal Chemical Division
Elm Street
Naugatuck, Connecticut 06770

Director of Purchases
Union Carbide Corporation
Silicones Division
333 Woodward Avenue at East
Park Drive
Tonawanda, New York

Director of Purchases
UniRoyal, Inc.
Providence Plant
10 Eagle Street
Providence, Rhode Island

Director of Purchases
Union Contracting & Materials Co.
11835 Central Park
Chicago, Illinois 60655

Director of Purchases
UniRoyal, Inc.
1 Market Street
Passaic, New Jersey 07055

MCL001221

Director of Purchases
United Aircraft
Farmington, Conn.
unable to locate per ffp

Director of Purchases
United Resin Products, Inc.
100 Sutton Street
Brooklyn, New York

Director of Purchases
Pratt & Whitney Aircraft Corp.
Div. United Aircraft Corp.
400 Main Street
E. Hartford, Conn. 06008

Director of Purchases
United States Adhesive
1735 West Carroll Ave.
Chicago, Ill

Director of Purchases
Pratt & Whitney Aircraft Corp.
SWEF
400 East Main Street
Hartford, Conn. 06118

Director of Purchases
USAF
Building 70
Wright Patterson A.F.B., Ohio

Director of Purchases
United Air Lines
Bradley International Airport
Windsor Locks, Conn.

Director of Purchases
U. S. Air Force
Research Labs, Bldg. 1105-A
Hanscom Field
Bedford, Ma. 01730

Director of Purchases
Biggs-United Division
United McGill Corporation
1007 Bank Street
Akron, Ohio 44305

Director of Purchases
U. S. Airforce
Limestone, Maine

MCL001222

Director of Purchases
U. S. Corrugated Fibre Box Co.
2900 North Franklin Road
Indianapolis, Indiana 46819

Director of Purchases
U. S. Government
D. H. Adams, Control Officer
Naval Ammunitions Depot
McAlester, Oklahoma 74501

Director of Purchases
U. S. Gear Corp.
9420 Stony Island Ave.
Chicago, Ill. 60617

Director of Purchases
United States Gypsum Co.
561 Richmond Terrace
New Brighton, S.I., New York

Director of Purchases
U. S. Government Finance &
Accounting Office
Granite City, Army Depot
Granite City, Illinois 62040

Director of Purchases
United States Gypsum Company
9306 Sorensen Avenue
P. O. Box 2816
Santa Fe Springs, California

Director of Purchases
U. S. Government Ordinance
Huntsville, Alabama

Director of Purchases
U. S. Gypsum Co.
P. O. Box 2204
Santa Fe Springs, Calif. 90670

Director of Purchases
U. S. Government
Loring Air Force Base
Loring Air Force Base, Maine

MCL001223

Director of Purchases
U. S. Industrial Chem. Div.
99 Park Ave.
New York, N. Y.

Director of Purchases
Universal Bonding & Processing
Corporation
100 Maltese Drive
Totowa, New Jersey 07512

Director of Purchases
United States Moviedne
863 North Orleans
Chicago, Illinois 60610

Director of Purchases
University of Louisville
Scientific Buyers Office
511 S. Floyd Street
Louisville, Kentucky 40202

Director of Purchases
OIN C USN Comm. Store
U. S. Naval Air Depot
Crane, Indiana

Director of Purchases
U. S. Plywood
P. O. Box 2317
Redding, Calif.

Director of Purchases
United States Steel Corporation
Clairton Works
Clairton, Pa.

Director of Purchases-Universal Oil
30 Algonquin Rd.
Des Plains, Ill.

Director of Purchases
United States Steel Corp.
P. O. Box 267
Pittsburgh, Pa. 15230

Director of Purchases
Universal Oil Products
State Hwy Rt. 17
East Rutherford, N.J.

MCL001224

Director of Purchases
Upjohn Company
Polymer Chemicals Division
P. O. Box 685
La Porte, Texas

Director of Purchases
Vance Steel Products Co.
Belleville, N. J. 07109

Director of Purchases
The Upson Company
43 Upson Point
Lockport, New York 14094

Director of Purchases
Moly Corporation
Questa, New Mexico

Director of Purchases
Vacudyne Corporation
375 East Joe Orr Road
Chicago Heights, Ill.

Office of the President
Van Dyk & Co.
Main and Williams Streets
Belleville 9, New Jersey

Director of Purchases
Vacuum Industries, Inc.
34 Linden Street
Somerville, Mass.

Office of the President
Van-Top, Inc.
Holstein, Iowa

Office of the President
Valley Kitchens, Inc.
Route 42
Mason, Ohio 45040

MCL001225

Director of Purchases
Van Waters & Rogers, Inc.
P. O. Box 6176 B
Albuquerque, New Mexico

Director of Purchases
Vinyl Maid, Inc.
380 Union Street
West Springfield, Mass.

Director of Purchases
Van Waters & Rogers
4707 Alpha Road
P. O. Box 34749
Dallas, Texas 75234

X

Director of Purchases
Vons Bakery Div.
1522 Shirley Ave.
El Monte, Calif.

Director of Purchases
Vapor Corporation
6421 Howard Street
Miles, Ill. 60048

Director of Purchases
Wakefield Engineering, Inc.
Audobon Road
Wakefield, Mass. 01880

Director of Purchases
Vasco Metals Corporation
Head Division
901 South Richland Ave.
York, Pennsylvania 17405

Office of the President
Walsello Products, Inc.
132 Beckwith Street
Paterson, New Jersey

Director of Purchases
Velsicol Chemical Corporation
347 East Ohio Street
Chicago 11, Ill.

Director of Purchases
Wallace & Tiernan, Inc.
Harehem Division
Box 178
Newarkl, New Jersey

MCL001226

Director of Purchases
Ward Foods, Inc.
Fourth Avenue & North 13th
East Orange, New Jersey

Director of Purchases
Watson Flour Company
57-01 32nd Avenue
Woodside, New York 11377

Director of Purchases
Warco Steel Company
7541 E. Rosecrane Avenue
Paramount, Calif. 90723

Director of Purchases
Welding Engineers Inc.
303 E. Church Rd.
King of Prussia, Pa. 19406

Director of Purchases
Warwick Electric
3333 Warwick Rd.
Forrest City, Arizona 72335

Director of Purchases
Wells Manufacturing Corp.
26 S. Brooks Streets
Fond Du Lac, Wisconsin 54935

Director of Purchases
Warwick Electronics
7400 Lehigh
Niles, Illinois 60648

Director of Purchases

West Bend Company
West Bend, Wisconsin

Director of Purchases
Waterloo Corrugated Box Company
800 West Parker Street
Waterloo, Iowa 50703

Office of the President
West Co.
10th & G. Streets
Millwille, N.J.

MCL001227

Director of Purchases
West Virginia Pulp & Paper Co.
299 Park Avenue
New York, New York 10017

Director of Purchases
Westfield Sheet Metal Works
Monroe Avenue & 8th Avenue
Kenilworth, New Jersey 07032

Director of Purchases
West Virginia Pulp & Paper Co.
407 Decatur Street
Sandusky, Ohio 44870

Director of Purchases
Western Precipitation
Div. of Joy Mfg. Co.
P. O. Box 2744
Terminal Annex
100 West 9th Street
Los Angeles, California 90054

Director of Purchases
Western Chemical Company
417-427 South Fourth Street
St. Joseph, Missouri

Director of Purchases
Westinghouse Electric Corporation
23rd and Cowan Road
Muncie, Indiana

Director of Purchases
Western Electric Company
204 Graham-Hopedale Road
Burlington, North Carolina

Director of Purchases
Westinghouse Electric Corp.
Box 67
San Clemente, California

Director of Purchases
Western Electric Company
P. O. Box 1111
Shreveport, Louisiana 71102

Director of Purchases

Westinghouse Electric Corp.

Vicksburg, Mississippi

Director of Purchases
Weston Chemical Co., Inc.
P. O. Box 816
Morgantown, W. Virginia

Director of Purchases
Westvaco Corporation
P. O. Box 5207
N. Charleston, S. C. 29406

Director of Purchases
Westreco, Inc.
P. O. Box 89
Marysville, Ohio 43040

Director of Purchases
Weyerhaeuser Company
Pulp & Paper Division
Longview, Washington

Director of Purchases
Westvaco Corporation
3301 West 47th Place
Chicago, Illinois 60632

Director of Purchases
Wheeling Corrugating Company
Jamesburg, New Jersey

Director of Purchases
Westvaco Corporation
13870 West Chicago
Detroit, Michigan

Director of Purchases
Wheeling Steel Corporation
Jamesburg, New Jersey

Director of Purchases
Westvaco Corporation
299 Park Avenue
New York, New York 10017

Director of Purchases
Whittaker Corporation
Costa Mesa, California

MCL001229

Director of Purchases
Zinaco Electrical Prod.
729 Temple Street
Los Angeles, California 90012

MCL001230

X

Director of Purchases
White Rogers Company
9797 Reavis Road
St. Louis, Missouri

Director of Purchases
William Wrigley Jr. Co.
3535 S. Ashland Avenue
Chicago, Illinois 60609

Director of Purchases
Whittaker Corporation
P. O. Box 2525
Research & Development Division
Van Nuys, California 91404

Director of Purchases
Witco Chemical Co., Inc.
1914 South Kilbourn Avenue
Chicago, Illinois 60623

Director of Purchases
E. L. Wiegand Company
7500 Thomas Blvd.
Pittsburgh, Pennsylvani

Director of Purchases
Witco Chemical Co., Inc.
2-16 Wood Street
Patterson, New Jersey 07524

Director of Purchases
Wildolf Manufacturing Company
26096 Getty Drive
Laguna Miguel, California

Director of Purchases
Xerox Corporation
Webster Plant
Rochester, New York 14580

Director of Purchases
~~Wilkins Coffee Company~~
3300 Pennsylvania Drive
Landover, Maryland 20785

Great Atlantic & Pacific Tea Co.
Coffee Division

Director of Purchases
Zignego Contractors, Inc.
3321 Rawson Avenue
Franklin, Wisconsin 53132

MCL001231

Director of Purchases
Air Cargo Equipment
5555 S. Garnett Road
Tulsa, Oklahoma 74145

Director of Purchases
Basic Ceramics, Inc.
160 School House Road
Mainland, Pa.

Director of Purchases
American Mineral Spirits Company
14420 Macaw Street
Lamirada, California 90638

Director of Purchases
Chanslor-Western Oil & Develop.
Fellows, California

Director of Purchases
American Mineral Spirits Company
2275 Tucker Ind. Blvd.
Tucker, Georgia

Director of Purchases
Coen Company
% Alpha Portland Cement Company
Highway 9 W. (near Catskill, N.Y.)
Cementon, New York

Director of Purchases

Anadarko Production Company

Liberal, Kansas 67901

Director of Purchases
Coen Company
% Martin-Marietta
C & L Div. Project Office
Dragon Cement
Thomaston, Maine

Director of Purchases
Atlantic Richfield
3500 Indianapolis Blvd.
East Chicago, Indiana

Director of Purchases
Coen Company
% Hudson Cement Company
Road 1
Kingston, New York

MCL001232

Director of Purchases
Coen Company
% Atlantic Cement Company
Ravena, New York

Director of Purchases
Continental Baking Company
1011 West Sommers Street
Milwaukee, Wisconsin 53205

Director of Purchases
Colonial Sand & Stone Company
1740 Broadway
New York, New York 10019

Director of Purchases
Crane Packing Company
Keefer at Jefferson St.
Vandalia, Illinois

Director of Purchases
Colorado Oil Company
Rock Springs, Wyoming

Director of Purchases
Deering Milliken
% Sylvan Chemical Company
Inman, So. Carolina

Director of Purchases
Columbia Gulf Transmission
Hampshire, Tennessee

Director of Purchases
E. I. Du Pont De Nemours & Co.
4251 S. Crawford Avenue
Chicago, Illinois

Director of Purchases
Continental Baking Company
1100 Oakman Blvd.
Detroit, Michigan 48238

Director of Purchases
E. I. Du Pont De Nemours & Co.
P. O. Box 89
Circleville, Ohio 43113

MCL001233

Director of Purchases
E. I. Du Pont De Nemours & Co.
Chambers Works
Deep Water, New Jersey

Director of Purchases
E. I. Du Pont De Nemours & Co.
Cellophane Department
Richmond, Virginia

Director of Purchases
E. I. Du Pont De Nemours & Co.
Graingers, No. Carolina

Director of Purchases
E. I. Du Pont De Nemours & Co.
Towanda, Pennsylvania

Director of Purchases
E. I. Du Pont De Nemours & Co.
Newport, Delaware

Director of Purchases
E. I. Du Pont De Nemours & Co.
Vee, Ohio

Director of Purchases
E. I. Du Pont De Nemours & Co.
Sabine River Works
Orange, Texas

Director of Purchases
Federal Mogul Corporation
National Seal Division
3847 So. Research Park Dr.
Ann Arbor, Michigan

Director of Purchases
E. I. Du Pont De Nemours & Co.
35 Grays Ferry Avenue
Marshall Laboratories
Philadelphia, Pennsylvania

Director of Purchases
GAF Corporation
N. Broadway Street
Joliet, Illinois 60433

MCL001234

Director of Purchases
General Electric Company
Highway 41-A
Madisonville, Kentucky

Director of Purchases
Hewitt Robins, Inc.
144 Kensington Avenue
Buffalo, New York 14214

Director of Purchases
Globe Industries, Inc.
101 W. Oakley Avenue
Lowell, Indiana

Director of Purchases
Hewitt Robins, Inc.
Buffalo & 47th St.
Niagara Falls, New York

Director of Purchases
Goodyear Tire & Rubber Company
Applegrove, West Virginia

Director of Purchases
Hooker Chemical
P. O. Box 295
Montague, Michigan 49437

Director of Purchases
Gruenberg Udolf, Inc.
% Norton Company
Central Abrasive & Tape Div.
Troy, New York

Director of Purchases
Hooker Chemical
Taft, Louisiana

Director of Purchases
Harshaw Chemical
Spencer Mountain Road
Lowell, North Carolina

Director of Purchases
Hudson Cement Company
North Street
Kingston, New York 12401

MCL001235

Director of Purchases
International Flavors & Fragrances
100 Green Street
Teterboro, N. J. 07608

Director of Purchases
Koppers Company
15 Plum Street
Verona, Pennsylvania

Director of Purchases
Jiffy Manufacturing Company
Granite Falls, North Carolina

Director of Purchases
Lee Metal Products
Arlington, Texas

Director of Purchases
Kendall Company
Athens Industrial Park
Athens, Georgia

Director of Purchases
King Industries
% Lamb Industries
Evangeline Thruway East
Lafayette, Indiana

Director of Purchases
Koppers Company
P. O. Box 508
400 Commonwealth Avenue
Bristol, Virginia

MCL001236

Director of Purchases
Lever Brothers Company
6300 E. Sheila
Los Angeles, Calif. 90022

Director of Purchases
National Can Corporation
Great Pasture Road
P. O. Box 291
Danbury, Connecticut

Director of Purchases
Lever Brothers Company
5300 Holabird Avenue
Baltimore, Md. 21224

Director of Purchases
National Fibrit
Springfield, Tennessee

Director of Purchases
Minnesota Mining & Mfg. Company
2501 Walnut Street
Roseville, Minnesota

Director of Purchases
National Starch & Chemical Corp.
3641 Washtenau Avenue
Chicago, Illinois

Director of Purchases
Minnesota Mining & Mfg. Company
Hutchinson, Minnesota

Director of Purchases
National Starch & Chemical Corp.
750 3rd Avenue
New York, New York 10017

Director of Purchases
Murphy Oil Corporation
270 Apache
Rhineland, Wisconsin

Director of Purchases
New England Petroleum Corp.
Hudson Cement Company
Kingston, New York

MCL001237

Director of Purchases
Pittsburgh Plate Glass
Glass Research Center
Guys Run Road
Harmarville, Pennsylvania

Director of Purchases
Republic Steel Corporation
465 Walnut Street
Niles, Ohio

Director of Purchases
Pittsburgh Plate Glass
Glass Research Melting & Forming Laboratories
Creighton, Pennsylvania

Director of Purchases
Reynolds Metals
Pittsburgh, Pennsylvania

Director of Purchases
Process Equipment Engineering
Catalytic Construction Company
c/o Hooker Chemical Company
River Road
Burlington, New Jersey

Director of Purchases
Riegel Paper
Riegelsville, New Jersey

Director of Purchases
Proctor & Gamble
Miami Valley Lab
Route 27
Ross, Ohio 45061

Director of Purchases
Rohm & Haas Company
P. O. Box 1559
Louisville, Kentucky 40201

Director of Purchases
Quaker State Oil Refining Corp.
Emlenton Plant
Emlenton, Pennsylvania 16373

Director of Purchases
Rohr Corporation
Riverside, California

MCL001238

Director of Purchases
Shell Oil Company
Molina Gas Plant
Highway 101
Goleta, California

Director of Purchases
Standard Chemical Prod.
Sugar Creek Road
Charlotte, North Carolina 28213

Director of Purchases
Sherwin Williams Company
11541 Champlain Avenue
Chicago, Illinois 60647

Director of Purchases
Standard Oil of California
Gaviota Gas Plant
Gaviota, California

Director of Purchases
Sherwin Williams Company
501 Murray Road
Cincinnati, Ohio

Director of Purchases
Stedfast Rubber Company, Inc.
Corner of Elm and Oliver Streets
North Easton, Massachusetts

Director of Purchases
Sinclair Petrochemicals Company
Sheldon Road
Channelview, Texas

Director of Purchases
Sun Oil Company
Fairfield, Texas

Director of Purchases
Southern Natural Gas
3411 Richmond
Houston, Texas

Director of Purchases
Sun Oil Company
Tonkawa, Oklahoma

MCL001239

Director of Purchases
Sun Oil Company
H. L. McCann Lease
Chapman Ranch Road
Bishop, Texas

Director of Purchases
Topco Laminents
Ft. Scott, Kansas

Director of Purchases
Sun Oil Company
Drawer W
Premont, Texas 78375

Director of Purchases
U. S. Plywood
Anderson, California

Director of Purchases
Tenneco Chemicals, Inc.
Tenneco Colors Division
12th & Bern Sts.
Reading, Pennsylvania

Director of Purchases
Western Precipitation
Div. of Joy Mfg. Co.
920 Bixel Street
Los Angeles, California 90054

Director of Purchases
Texaco, Inc.
Brown & Root Yard
Morgan City, Louisiana

Director of Purchases
Westvaco Corporation
3400 E. Biddle Street
Baltimore, Maryland 21213

Director of Purchases
Topco Laminents
% Quality Plastics
8974 St. Charles Rock Road
St. Johns, Missouri

Director of Purchases
Westvaco Corporation
Highway 35 West
Eaton, Ohio 45407

MCL001240

Director of Purchases
Westvaco Corporation
Empire Avenue
Meriden, Connecticut 06453

Director of Purchases
Westvaco Corporation
401 West Shoreline Drive
Sandusky, Ohio 44870

Director of Purchases
Witco Chemical
1000 Convery Blvd.
Perth Amboy, N. J. 08862

MCL001241

Director of Purchases
Hamilton Standard Systems Center
Div. of United Aircraft Corp.
1690 New Britain Avenue
Farmington, Conn. 06032

Director of Purchases
Turbo Power & Marine Systems Inc.
Sub. of United Aircraft Inc.
1690 New Britain Avenue
Farmington, Conn. 06032

MCL001242

Monsanto

FROM (NAME & LOCATION) B2SD - P. W. Gann

DATE March 24, 1972

SUBJECT Therminol FR Conversion Status
Week of March 20, 1972

REFERENCE

TO : C. Paton

cc: B2SL - T. L. Gossage
B2NK - W. B. Papageorge
B2SF - N. T. Johnson
B2SC - J. J. Roder
B2SC - D. E. Roush
1070 - H. R. Ford
1800 - D. R. Hansen
1010 - E. L. Shimley
1650 - P. L. Slayton
1460 - D. W. Stegen
FMC/DED/RLN

I. Project Status	This Week	1972 Cumulative
A. Commitments to Convert	11	100
B. Actual Conversions	3	43

1. Atlantic Baking Co., Atlanta, Ga. (T-55)
   Just notified. Converted 3 months ago, now returning used FR.
2. Owens Corning, Granville, Ohio.
   On T-55 flush, will convert to T-66.
3. Parker Co., Madison Heights, Mich. (T-55)

C. Customers Lost	6	16

1. Chemstrand Research, Durham, N. C. (20 gallon). Lost to Mobiltherm due to customer error on pricing.
2. Houdaille Ind., Lancaster, Ohio (volume ?). Lost to Ucon; insurance company directed them to Ucon.
3. K&W Products, Bloomington, Ind. (volume ?). Lost to Dowtherm A.
4. Kitchen Planning Center (Marvaglass Inc.), Lexington, Ky. (1 gallon) Lost to another fluid.
5. Reichhold Chemical, Niagara Falls, N. Y. (volume ?) Lost to Mobiltherm 600.
6. U.S. Gypsum, Southgate, Cal. (300 gallon) Lost to Ucon due to higher flash and fire points. Used glycol flush, will return FR layer and recharge glycol layer.

D. New Potential Losses for 1972

1. Maclin Co., City of Industry, Calif. (100 gallon)
   Expect to lose to Mobiltherm 603.

E. New Refusals

1. Diamond Shamrock, Oxnard, Cal. (1 gallon) Used in buffle thermowell.
2. Dip Seal Plastics, Rockford, Ill. (40 gallon) Tight system, sees no risk. Can run 2 years.

MCL001243

E. New Refusals (Continued)

3. Hoffmeister Cabinets, Las Vegas, Nev. (1 gallon) Has enough FR to last forever.
4. Inmont Corp., Cincinnati, Ohio. Obtaining a competitive PCB product.
5. M&R Plastics, Maryland Heights, Mo. (1500 gallons) Has 4 new drums of FR on hand. Can go 3 years. Does not want to spend conversion dollars.
6. Moderncote Inc., New Castle, Ind. Used in heating rolls.
7. Stanley H. Holmes, Chicago, Ill. (50 gallons) FR in equipment sold to a customer; not convinced Holmes will notify customer.

F. New Delays

1. Graniteville Co., Graniteville, S. C. Delay conversion 1 year. Requested name of user to obtain a drum of FR.
2. Halo-Carbon Prod. Co., Hackensack, N. J. Delaying conversion over future years.
3. F. W. Hartman (Hansa Line), New York, N. Y. Conversion of fleet over next 2 years in Europe.
4. International Harvester, Waukesha, Wis. Originally, delay 1-2 years. Used as seal in hatches on annealing ovens. Now may use Pydraul 50-E.

G. Major Complaints

1. Dexter - Midland, Waukegan, Ill. (volume ?). Upset over FR-1 discontinuation. First knowledge was 3/21/72 call by Conversion Team. Feels Monsanto should pay for replacement fluid.
2. Hazen Research, Golden, Col. (200gallons). Wants dollar refund for conversion. Can run a year on present FR. (Not on any registered mailing.)

H. Old Unreported Losses

1. K&S Mfg., Freeport, Ill. (small volume). Cannot use T-55 for flammability reasons, (even though 3 x 5 gallon cans sent at N.C. in 1971). Now using other fluids.
2. Kings Electric Services, Hammond, La. (small). No longer uses FR.
3. Lakeway Chemical, Muskegon, Mich. Heating trial, no longer uses FR.
4. Lang Co., Broomfield, Col. (volume ?). Lost to Dowtherm.

I. Once Through Situations "No Conversion Potential"

1. Farrel Corp., Ansonia, Conn.
2. King Industries, (Lamb), Lafayette, La. System abandoned. Requested to drain FR.
3. Sea Train Lines (SS Manhattan), New York, N. Y. Ship in dry dock. Heating system removed. Will return available FR.
4. U.S. Government, NASA, Huntsville, Ala. May not return FR on hand.

J. Special Situations

1. Cargill Inc., Minneapolis, Minn. Signed survey letter and stated no use where food contamination could occur, but still use in a resin plant - conversion targeted May, 1972.
2. DeSoto, Chicago Heights, Ill. Major system leak. Needed more FR-1, bought some from Vapor Corp. in Chicago and some Aroclor 1242 from Japan (perhaps through Coastal Chemical Supply). Now anxious to convert.
3. General Tire, Toledo, Ohio. Plans to order 3000 gallons T-55 soon. Note: If delivery request is for April 15, 1972 or sooner, we will cause delay in converting.
4. Interplastic Corp., Minneapolis, Minn. 1971 conversion to T-55. Just had a "minor"(?) fire at a phthalic and T-55 leak.
5. McKesson Chemical (Divn Foremost), New Orbans, La. Bought FR only for resal. Has none on hand.
6. Reichhold Chemical, Chicago, Ill. Plant shut down and FR returned in 1970, but some FR may have gone to landfill.
7. Reynolds Metals, Richmond, Va. (Headquarters, Packaging Research) Developing corporate statement on FR heat transfer systems in packaging (aluminum cans and liners). FDA law appeared March 18, 1972 on Federal Register; giving food customers 30 days to convert if passed as is after the present 60-day appeal period.
8. Sav-A-Stop, Salem, Va. (Turco Case Washer). Not yet converted. Used seldom.
9. Texaco, Inc., Morgan City, La. Has been using Coastal's Safeheat 600 for make up in FR system. Purchased 26 drums early March, 1972.
10. Thompson Farms Co., Chicago, Ill. (400 gallons) Old Aroclor system. Very unsure on how to convert.
11. United Aircraft (Hamilton Standard), Windsor Locks, Conn. (2000 gallons) Will use MCS 681 for 3-day flush (instead of T-55), then convert to T-66.

MCL001245

II. ACTIVITIES

A. Conversion Team, this week's new contacts at 83.

B. Mr. O. S. Ratterman's assignment to the conversion team ended March 23, 1972.

C. December 15, 1971 Termination Letter, registered status.

787 letters registered
742 receipts returned
35 receipts not returned, but 34 have had team contacts at least one location.
10 letters undelivered, and unable to locate these companies. (see Table I)

D. March 6, 1972 Registered Survey Letter.

130 letters registered
118 receipts returned
64 signed letters received
2 unsigned letters but with notes (Dow and Heterene Chemical)
1 return undelivered -- Jersey Farm Baking, Detroit, Mich. Unable to locate but believe affiliated with Farm Crest Baking in Columbus, Ohio. We have a signed letter on file from Farm Crest Baking in Detroit, Mich.

E. A non-registered mailing was made to 72 O.E.M.'s on March 14, 1972 (copy attached).

P. W. Gann

Attachments

/kl

MCL001246

Customers not located (registered letter returned, undelivered)

Koss Construction Box 277 Yukon, Oklahoma 73099	Checked Thomas Register Moody's Monsanto Library District Sales Office & Area Salesman
Koss Construction Company P. O. Box 850 El Reno, Oklahoma 73036	" " "
Flexible Products Company 2678 East 7th Avenue North St. Paul, Minn. 55109	" " "
Foremost Chemical Foremost-Mckesson Oakland, Cal.	FMC checking further. Possibly San Francisco location.
Process Services Co. Gardena, Cal.	Checked Thomas Register Moody's Monsanto Library thru telephone company--No number listed. FMC tried to locate unsuccessfully.
Pan American World Airways Guided Missiles Range Divn. P. O. Box 670 Las Vegas, Nev. 89101	Checked Thomas Register Moody's Monsanto Library
Hydrothane 1308 West Anaheim Long Beach, Cal. 90813	" " "
Schulz Rubber Products, Inc. 430 Madera Street San Gabriel, Cal.	" " "

MCL001247

Customers out of business (registered letter returned, undelivered)

Lisbon Vinyl Dyne Corporation
P. O. Box 77
Lisbon, Maine 04250

Harbo, Inc.
205 East 8th Street
St. Paul, Minn. 55101

MCL001248