

US EPA ARCHIVE DOCUMENT



P.O. BOX 248, 1186 LOWER RIVER ROAD, NW, CHARLESTON, TN. 37310-0248  
(423) 336-4000 FAX: (423) 336-4166

March 15, 2004

U. S. Environmental Protection Agency  
Martha Bosworth, Enforcement Coordinator  
Office of Site Remediation and Restoration (HBS)  
One Congress Street, Suite 1100  
Boston MA 02114

ATTN: Wells G&H Case Team

Re: Whitney Barrel Company

Dear Ms. Bosworth,

Enclosed please find Olin Corporation's response to EPA's 104(e) Information Request dated 12/15/2003 pertaining to Whitney Barrel Company.

Upon receipt of EPA's request, Olin undertook a diligent investigation to identify information or documents responsive to the Request. As indicated in Olin's response the only relationship with Whitney Barrel which Olin has identified involved a one-time purchase of two 55-gallon drums from Whitney Barrel in December 1982.

Please direct all future correspondence relating to this matter to me at the address above.

Very truly yours,

Olin Corporation

A handwritten signature in cursive script that reads "Curtis M. Richards".

Curtis M. Richards, Vice President, Environment, Health and Safety

0041-0012

## CERTIFICATION OF RESPONSES TO REQUEST

This response is not made on the basis of personal knowledge unless otherwise indicated and was prepared by or with the assistance of agents, representatives, and employees of Olin Corporation or others believed to have relevant information, and on the advice of counsel, which advice was relied upon herein. The answers set forth herein, subject to inadvertent or undiscovered errors or omissions, are based on and therefore necessarily limited by the records and information still in existence, currently recollected, thus far discovered in the course of the preparation of this response, and currently available to the undersigned. Olin Corporation reserves the right to supplement this response in the event that it locates additional information which makes such supplementation appropriate.

*Curt M Richards*

Curt M. Richards  
V.P. Environment, Health & Safety

OK  
TRK



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US EPA ARCHIVE DOCUMENT

0041-0014

**RESPONSE OF OLIN CORPORATION  
TO 104(E) INFORMATION REQUEST**

**WHITNEY BARREL**

0041-0015

## RESPONSE TO 104(E) INFORMATION REQUEST WHITNEY BARREL

### Preliminary Statement

In a Request for Information attached to a letter dated December 15, 2003, the Environmental Protection Agency, EPA New England ("EPA"), asked Olin Corporation ("Olin" or the "Company") to provide certain information and documents in connection with EPA's investigation of releases or threatened releases at the Whitney Barrel Company, 256 Salem Street, Woburn, Massachusetts, ("Whitney Barrel") situated within the Wells G&H Superfund Site in Woburn, Massachusetts. Specifically, EPA has requested information and documents explaining Olin's relationship to Whitney Barrel. Olin submits this response to EPA's information request (the "Request") in accordance with Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), as amended, and Section 3007 of RCRA, 42 U.S.C. § 6927, and in accordance with extensions of time as confirmed in a letter dated December 23, 2003, from Stuart N. Roth to Martha Bosworth, a letter dated January 23, 2004 from Laurie Burt of Foley Hoag to Ms. Bosworth, and a letter dated February 25, 2004, from Randall Kromm of Foley Hoag to Ms. Bosworth and confirmed by Ms. Bosworth in an e-mail to Mr. Kromm dated February 26, 2004.

Upon receipt of EPA's request, Olin undertook a diligent investigation (the "investigation") to identify information or documents responsive to the Request. The investigation focused on facilities affiliated with Olin during the period being investigated (the "relevant period") that were located within a 25-mile radius of the Whitney Barrel facility.<sup>1</sup> Two such facilities were identified, one located at 51 Eames Street in Wilmington, Massachusetts, and the other located in Cambridge, Massachusetts.

The Wilmington facility was acquired by Olin in 1980 and used for manufacturing operations until 1986, when it was closed. This property is part of a site classified as a Tier 1A disposal site under M.G.L. c. 21E ("Chapter 21E") and the Massachusetts Contingency Plan ("MCP"). Extensive information about environmental conditions and historical operations at the facility have been developed and submitted to regulatory agencies in the context of remedial work at this facility that has been ongoing for nearly two decades. In preparing this response, Olin reviewed the indexes of some 900 boxes of documents related to operations at this location. Approximately 150 boxes of material were identified as potentially containing responsive information and were further reviewed for relevant and responsive documents. Olin also contacted current and former employees believed to have relevant information. The only relationship which Olin has identified between the Wilmington facility and Whitney Barrel involved a one-time purchase of two 55-gallon drums from Whitney Barrel in December 1982 (see responses to question 7 below).

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<sup>1</sup> Olin objects to the scope of the Request to the extent that it seeks extensive information about operations and practices over a 35-year period for any and all Olin-affiliated facilities located in four New England states, without suggesting any basis for any business or contractual relationship of such Olin-related facilities with the Whitney Barrel facility. If EPA has information suggesting that any other facility may have a connection to the Whitney Barrel facility in Woburn, Massachusetts, Olin asks that EPA provide that information.

The second facility, a manufacturing facility<sup>2</sup> located in Cambridge, Massachusetts, was apparently operated by Olin Industries, Inc., in the early 1950's. Based on available records, Olin believes that this facility manufactured polyethylene sheet and tubing. Olin has no further information or records relating to the Cambridge facility. Accordingly, this response is made based on information obtained regarding the 51 Eames Street facility during the period of Olin's ownership.<sup>3</sup> If EPA has specific information indicating that any facility affiliated with Olin, including the Olin facility at 51 Eames Street, Wilmington, Massachusetts, has or may have done business with Whitney Barrel, Olin requests that EPA provide such information. Olin reserves the right to supplement its response, as appropriate, if such information is made available.

In preparing this response, Olin notes that it is Olin's practice and policy to protect the privacy of its employees and not to provide certain personal information, including Social Security numbers, to outside entities. Accordingly, Olin has provided last known addresses and, to the extent available, telephone numbers, of individuals identified in response to this Request.

If, upon review of this response to the Request, EPA requires additional information and documents, please contact Curt Richards of Olin (See Question 1(c) below for contact information). Olin understands that EPA is primarily interested in information relating to business relationships between Olin and Whitney Barrel and does not require cumulative or duplicative documentation evidencing transactions with other entities. Based on its investigation and subject to the foregoing understandings and reservations, Olin makes the following response to the Request.

### **Specific Responses to Information Request**

#### **1. General Information About Respondent**

Note: All questions in this section refer to the present time unless otherwise indicated.

- a. Provide the full legal name and mailing address of the Respondent.

#### **Response to Question 1(a):**

Olin Corporation  
501 Merritt 7  
Norwalk, CT 06856

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<sup>2</sup> This facility was owned/operated by the Harwid Company, Inc., acquired by Olin Industries, Inc., in 1950, and operated as a subsidiary until it was "folded into" Olin Industries, Inc., as a part of its Film Division. So far as Olin has been able to determine, the Cambridge facility was no longer operating as of 1954. For information about the history of Olin Corporation and its relationship to Olin Industries, Inc., see response to Question 2(a).

<sup>3</sup> Although Olin acquired the facility in September 1980, Olin has, in the course of ongoing remedial activities at the property become aware of some information and documents concerning operations and practices prior to its acquisition of the facility. See Response to Question 8(b). Those documents have in some cases been obtained through public records requests to regulatory agencies. For EPA's convenience, Olin's response refers in some instances to such information and documents. While Olin has no reason to believe that this information is incorrect, Olin has not attempted to independently verify this information.

- b. For each person answering these questions on behalf of Respondent, provide:
- i. Full name
  - ii. Title
  - iii. Business address; and
  - iv. Business telephone number.

Response to Question 1(b): This response is made on behalf of Olin by:

Curtis M. Richards  
Vice President, Environment, Health & Safety  
Olin Corporation  
1186 Lower River Road, N.W.  
P.O. Box 248  
Charleston, TN 37310  
(423) 336-4000 (telephone)

This response is not made on the basis of personal knowledge unless otherwise indicated and was prepared by or with the assistance of agents, representatives and employees of Olin Corporation or others believed to have relevant information, and on the advice of counsel, which advice was relied upon herein. The answers set forth herein, subject to inadvertent or undiscovered errors or omissions, are based on and therefore necessarily limited by the records and information still in existence, currently recollected, thus far discovered in the course of the preparation of this response, and currently available to the undersigned.

- c. If Respondent wishes to designate an individual for all future correspondence concerning this Site, including any legal notices, please so indicate here by providing that individual's name, address, and telephone number.

Response to Question 1(c): Future correspondence concerning this Site, including any legal notices, should be directed to Curtis M. Richards, Vice President, Environment, Health & Safety, Olin Corporation. Mr. Richards' contact information is provided in the response to Question 1(b).

- d. Provide the names of all Superfund sites in Region I (New England) for which Respondent has received a 104(e) Request for Information Letter from EPA.

Response to Question 1(d): As stated in the Preliminary Statement, Olin is responding on behalf of the facility at 51 Eames Street in Wilmington, MA. On information and belief, 104(e) Requests seeking information about the 51 Eames Street facility have been received for the following Superfund sites in Region I:

- Charles George Land Reclamation, Tyngsboro, MA
- Industri-Plex Superfund Site/Wells G&H Superfund Site, and associated

Halls Brook Holding Area and Aberjona River Study (the "Aberjona River 104(e)")

- Whitney Barrel Company, Woburn, MA

## 2. Respondent's Legal Status

Note: All questions in this section refer to the present time unless otherwise indicated.

- a. If the Respondent has ever done business under any other name;
  - i. List each such name; and
  - ii. List the dates during which such name was used by Respondent.

Response to Question 2(a): Olin Corporation is the result of the merger in August 1954 of Olin Industries, Inc., and Mathieson Chemical Corporation, both of which were incorporated in 1892. Between 1954 and 1969 the company did business under the name Olin Mathieson Chemical Corporation. In 1969, the name was shortened to Olin Corporation. Further information regarding Olin's corporate history is available at Olin's website at:

<http://www.olin.com/about/history.asp>

A copy of this information is attached hereto as **Exhibit A**.

- b. If Respondent is a corporation, provide:
  - i. The date of incorporation;
  - ii. State of incorporation; and
  - iii. Agent for service of process.

Response to Question 2(b): Olin was incorporated in 1892 and is incorporated in the State of Virginia. Olin's agent for service of process in Massachusetts is CT Corporation Systems, 101 Federal Street, Boston, Massachusetts 02110.

- c. If Respondent was a business entity other than a corporation, provide:
  - i. The type of organization (sole proprietorship, partnership, trust, etc.)
  - ii. The date the business began; and
  - iii. Owner, managing partner, or other equivalent person in charge.

Response to Question 2(c): Not applicable.

- d. If Respondent is, or was at any time during the period being investigated, a subsidiary of, otherwise owned or controlled by, or otherwise affiliated with another corporation, then describe the nature of each such corporate relationship, including but not limited to:

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- i. a general statement of the nature of the relationship
- ii. the dates such relationship existed
- iii. the percentage of ownership of Respondent that is held by such other entity; and
- iv. for each such affiliated entity provide the names and complete addresses of its parent, subsidiary, and otherwise affiliated entities.

Response to Question 2(d): Not applicable.

- e. Identify all of Respondent's predecessors-in-interest and provide a description of the relationship between Respondent and each of those predecessors-in-interest.

Response to Question 2(e): The corporate history of Olin is described in the response to Question 2(a). As described in the Preliminary Statement to this response, Olin acquired the Harwid Company, including a facility it then owned in Cambridge, Massachusetts, in 1950. Olin has identified no other predecessor-in-interest of Olin that had a facility within a 25-mile radius of Whitney Barrel.

To the extent that EPA seeks information concerning predecessor owners of the Wilmington plant, a list of those owners is provided in **Exhibit B**. The 51 Eames Street facility began manufacturing operations in 1953 and operations continued under various owners until Olin acquired the facility in 1980. None of the prior owners have or had any corporate relationship with Olin.

- f. If Respondent no longer exists as the same legal entity it was during the period being investigated because of transactions involving asset purchases or mergers, provide;
  - i. the titles and dates of the transactions and copies of documents that embody the terms of such transactions (i.e. purchase agreements, merger and dissolution agreements, etc.);
  - ii. the identities of the seller, buyer, and any other parties to such transactions
  - iii. a brief statement describing the nature of the asset purchases or mergers
  - iv. a brief statement describing and copy(s) of documents embodying any/all indemnification agreements.

Response to Question 2(f): See responses to Questions 2(a) and 2(e).

- g. If Respondent has filed for bankruptcy, provide:
  - i. the U.S. Bankruptcy Court in which the petition was filed
  - ii. the document numbers of such petition
  - iii. the date the bankruptcy petition was filed
  - iv. whether the petition is under Chapter 7 (liquidation), Chapter 11 (reorganization), or other provision

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- v. a brief description of the current status of the petition

Response to Question 2(g): Not applicable.

### 3. Respondent's Operations

Note: All questions in this section refer to the period being investigated (1950-1985) unless otherwise indicated.

Also note: All questions in the Section refer to facilities owned or operated by the Respondent within Massachusetts, Rhode Island, New Hampshire or Maine and to any other facility owned or operated by Respondent which had any business or other contractual relationship with Whitney Barrel Company. **Please note that it is not necessary to identify or provide information about any facilities that are engaged solely in clerical/office work.**

General Response to Question 3: As indicated in its Preliminary Statement above, Olin's response to the following question and its subparts is limited to Olin's manufacturing operations at 51 Eames Street in Wilmington, Massachusetts during the period being investigated.

- a. Provide the complete address of Respondent's plants and other buildings or structures where Respondent carried out its operations.

Response to Question 3(a):

Olin Corporation  
51 Eames Street,  
Wilmington, MA 01887

- b. Provide a brief description of the nature of Respondent's operations at each location including:
- i. The date such operations commenced and concluded
  - ii. The types of work performed at each location, including but not limited to the industrial, chemical, or institutional processes undertaken at each location
  - iii. The type of products manufactured, recycled, recovered, treated or otherwise processed in these operations

Response to Question 3(b): As described in the Preliminary Statement, Olin acquired the facility at 51 Eames Street on September 15, 1980. Manufacturing operations at the facility ceased by 1986. During the period of Olin's operations, the facility manufactured chemical blowing agents, stabilizers, antioxidants and other specialty chemicals for the rubber and plastics industry. The principal products manufactured by Olin at the site include Opex®, Kempore®, Kempore® dispersions and Wyttox®. Prior to Olin's ownership, the facility had been involved in chemical

manufacturing operations under a series of predecessor owners since 1953. Those owners are identified in **Exhibit B**. There are no present business operations at the facility.

- c. Enclosure F provides a list of chemical constituents conclusively identified to date at the site. For each facility identified in 3.a above, identify, to the best of your knowledge, any chemical constituents listed in Enclosure F that:
- i. would have been produced, processed, or used in connection with facility operations; or
  - ii. would have been present in materials produced, processed, or used in connection with facility operations

Response to Question 3(c): A copy of Enclosure F, marked to identify those constituents that, based on information and belief, were produced, processed or used in connection with facility operations or that would have been in present in materials produced, processed or used in connection with facility operations, is attached as **Exhibit C**.

- d. If the nature or size of Respondent's operations changed over time, describe those changes, the dates they occurred, and the nature of the current business at each such location, including but not limited to a brief description of the major products or services Respondent manufactures or provides.

Response to Question 3(d): Olin's operations at the 51 Eames Street facility during the period being investigated are described in the response to Question 3(b). Approximately 60 people were employed by the facility during the years in which Olin conducted manufacturing operations at the facility. The facility was closed in 1986 and there have been no manufacturing operations at the facility since that time.

- e. List the products Respondent manufactured, recycled, recovered, treated, or otherwise processed in these operations.

Response to Question 3(e): The principal products produced by Olin at the Eames Street facility are identified in the response to Question 3(a). Additional information concerning the products historically manufactured at the Eames St. facility is contained in **Exhibit D, Attachments 1 and 2**.

- f. In general terms, list the types of raw materials used in the operations.

Response to Question 3(f): Information concerning raw materials used in the Wilmington manufacturing operations is contained in **Exhibit D, Attachments 1-3 and 6**.

- g. Describe the cleaning and maintenance of the equipment and machinery involved in these operations, including but not limited to:
- i. the types of materials used to clean/maintain this equipment/machinery; and
  - ii. the monthly or annual quantity of each material used.

Response to Question 3(g): Safety Kleen provided cleaning services to the Wilmington facility over some unknown period of time during the period being investigated; Safety Kleen provided solvent to perform the cleaning and removed the spent solvent from the facility. Maintenance personnel cleaned process equipment by wiping with rags. Large process equipment, such as a reactor, was cleaned with soap and water, which was then discharged to the on-site waste water treatment facility. There was apparently a one-time use of diesel fuel to clean out one of the reactors at some time. It also appears that acetone may have been used for cleaning purposes in the laboratory.

- h. Describe the methods used to clean up spills of liquid or solid material during operations, including but not limited to:
- i. The type of materials spilled in operations
  - ii. The materials used to clean up these spills
  - iii. The methods used to clean up those spills

Response to Question 3(h): In the course of ongoing remedial work at the Wilmington facility extensive documentation has been obtained or developed regarding historical spills at the 51 Eames Street property. A number of those documents were provided to EPA as Exhibits to the Aberjona River 104(e). For EPA's convenience, one such summary of historical spills is attached hereto as **Exhibit E**. Additional information concerning historical spills at the property is contained in **Exhibit D, Attachments 2 and 5**.

During Olin's ownership of the facility spills were cleaned up in accordance with written policies. The method used depended on a number of factors, including the material spilled and the volume of the spill. Documents describing the cleanup of spills are included in **Exhibit F and G**.

- i. Provide a schematic diagram or flow chart that fully describes and/or illustrates the operations at the site.

Response to 3(i): Schematic diagrams describing manufacturing operations performed at the facility are provided in **Exhibit D, Attachment 1**.

- j. Identify all former or current employees and all other persons who have any knowledge of or information about the subject matter of any of the foregoing questions or who had any contact with Whitney Barrel Company.

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Response to Question 3(i): Given the broad scope of this question, Olin believes that virtually all of its employees may have some knowledge regarding the subject matter of the foregoing questions. Notwithstanding the foregoing, Olin believes that the individuals most knowledgeable about these matters are:

- Steve Morrow, Principal Environmental Specialist, Olin Corporation, Box 248, Charleston TN 37308, 423/336-4500;
- Don Cameron, On-Site Manager, Olin Corporation (retired).

Olin has been unable to identify any present or former employee known to have had contact with Whitney Barrel. Olin refers to its response to Question 7(a).

4. **Respondent's Wastes and Waste Streams (including By-Products)**

Note: All questions in this section refer to the period being investigated (1950-1985) unless otherwise indicated.

General Response to Question 4: As indicated in its Preliminary Statement above, Olin's response to the following question and its subparts is limited to Olin's manufacturing operations at 51 Eames Street in Wilmington, Massachusetts during the period being investigated.

- a. Complete the enclosed "Waste Survey" checking each substance present in Respondent's wastes or by-products and providing all requested information for each such substance that is checked.

Response to Question 4(a): The wastes generated at the Wilmington Facility do not correspond to the categories listed under "Substance" in ENCLOSURE E, "WASTE SURVEY." Information concerning waste types, waste volumes and disposal practices at the 51 Eames Street facility is contained in **Exhibit D, Attachments 1, 2, 5 and 6**. Additional information concerning the handling and disposal of wastes is contained in **Exhibits F - K**.

- b. For each type of waste (including by-products) from Respondent's operations, including but not limited to all liquids, sludges, and solids, provide the following information:
  - i. its physical state
  - ii. its name and chemical composition

Response to Question 4(b)(i)-4(b)(ii): See response to 4(a) and documents referred to therein.

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- iii. the approximate monthly and annual volumes of each type of waste (using such measurements as gallons, cubic yards, pounds, etc.)

Response to Question 4(b)(iii): See response to 4(a) and documents to referred to therein.

- iv. the dates (beginning & ending) during which each type of waste was produced by Respondent's operations.

Response to Question 4(b)(iv): See **Exhibit D, Attachments 1 and 2.**

- c. Describe how each type of waste was collected and stored at Respondent's operation prior to disposal/recycling/sale/transport, including:

- i. the type of container (e.g. 55 gal. Drum, tank, dumpster, etc.)
- ii. the colors of the containers
- iii. any distinctive stripes or other markings on those containers
- iv. any labels or writing on those containers (including the content of those labels)
- v. whether those containers were new or used
- vi. where each type of waste was collected/stored
- vii. if those containers were used, a description of the prior use of the containers.

Response to Question 4(c)(i)-4(c)(vii): General plant refuse was deposited in dumpsters located in the plant. Product waste was either recycled to the manufacturing process or stored in drums, labeled as to date, weight, waste material contained in the drum, and generating department, and stored in designated areas. Acid waste streams from manufacturing operations were piped to an on-site treatment facility where they were neutralized. Any spill clean-up materials were stored in steel drums and labeled as to date, weight, waste material contained in the drum, and generating department and stored in designated areas. Waste materials which were determined to be hazardous were stored in the designated hazardous waste storage area. Hazardous wastes being shipped off site were marked with DOT Shipping Names and Placards. Additional information regarding waste collection and storage is contained in **Exhibits G and H.**

On information and belief, drums used for storage of waste may have been used or reconditioned. Olin has no information about the prior use of such drums.

When Olin acquired the plant in 1980, some 193 barrels of material had been left on site by the former owners. No such barrels were shipped to Whitney Barrel.

- d. Identify (see Definitions) the person(s) who was responsible for collecting and managing each type of waste.

**Response to Question 4(d):** Olin refers to **Exhibits F and G**.

- e. For each location, identify and provide copies of all surveys or studies conducted between 1950 and 1985 about its waste management practices including but not limited to disposal, treatment, storage, recycling, or sale of wastes.

**Response to Question 4(e):** Olin refers to the documents contained in **Exhibits D and E**. Additional responsive documents are contained in **Exhibit H**.

- f. Identify all former or current employees and all other persons who have any knowledge of or information about the subject matter of any of the foregoing questions or who had contact with Whitney Barrel Company.

**Response to Question 4(f):** See responses to Questions 3(j) and 4(d).

**5. Respondent's Disposal/Treatment/Storage/Recycling/Sale of Waste (including By-Products)**

Note: All questions in this section refer to the period being investigated (1950-1985) unless otherwise indicated.

Also Note: Your response to questions in this section must refer to all locations to which Respondent sent its wastes.

**General Response to Question 5:** As indicated in its Preliminary Statement above, Olin's response to the following question and its subparts is limited to Olin's manufacturing operations at 51 Eames Street in Wilmington, Massachusetts during the period being investigated.

- a. Identify (see Definitions) all individuals who currently have and those who have had responsibility for the disposal, treatment, storage, recycling, or sale of Respondent's wastes, including, but not limited to barrels or empty barrels
- **Response to Question 5(a):** Steve Morrow has current responsibility for the disposal, treatment, storage, recycling or sale of wastes at the Wilmington facility. Mr. Morrow's identifying information is provided in the response to Question 3(j). With respect to operations during the period being investigated, Olin refers to its answers to Questions 3(j) and 4(d) and the documents referred to therein for information concerning facility-level responsibilities. During the relevant period, Olin provided corporate oversight of facility environmental compliance.

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- b. Identify (see Definitions) all individuals who currently have and those who have had knowledge of the disposal, treatment, storage, recycling, or sale of Respondent's wastes, including, but not limited to barrels or empty barrels.

Response to Question 5(b): Given the extremely broad scope of this question, Olin believes that virtually all of its employees may have some knowledge regarding the subjects referred to therein. Notwithstanding the foregoing, Olin believes that the individuals likely to be most knowledgeable about these matters are those identified in the response to Question 5(a).

- c. Identify (see Definitions) all individuals who currently have and those who have had responsibility for Respondent's environmental matters.

Response to Question 5(c): See response to 5(a).

- d. For the previous three responses, also provide each individual's:
- i. job title
  - ii. duties
  - iii. dates performing those duties

Response to Question 5(d)(i)-5(d)(iii):

Steve Morrow-Principal Environmental Specialist, responsible for environmental compliance and remediation, September 1986 to Present

Don Cameron-Site Manager, Worked in Maintenance and responsible for the site in addition to the daily operation of the groundwater pump & treat system located on the site, maintenance 1980-1986, site manager 1986-2000 (retirement)

- iv. supervisors for those duties

Response to Question d(iv): Mr. Morrow's current supervisor is Tom O'Brien, Manager, Remediation Sites, Olin Corporation, Box 248, Charleston TN 30310. On information and belief, Mr. Cameron's supervisor during the relevant period was Patrick Kane. Mr. Kane is deceased.

- v. current position or, if such individual is no longer employed by Respondent, the date of the individual's resignation

Response to Question 5(d)(iv)-5(d)(v): Mr. Morrow is currently employed by Olin. Mr. Cameron retired in 2000.

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- vi. the nature of the information possessed by such individuals concerning Respondent's waste management

Response to Question 5(d)(vi):

- Steve Morrow - General information concerning generation and disposal of wastes and environmental compliance;
- Don Cameron - Facility operations and environmental compliance from 1980 to 1985.

- e. Describe the containers used to take each type of waste from Respondent's operation, including but not limited to:
  - i. the type of container (e.g. 55 gal drum, tank, dumpster, etc.)
  - ii. the colors of the containers
  - iii. any distinctive stripes or other markings on those containers
  - iv. any labels or writing on those containers (including the content of those labels)
  - v. whether those containers were new or used
  - vi. if those containers were used, a description of the prior use of the containers

Response to Question 5(e)(i)-(vi): See response to Question 4(c). Olin also refers to the documents provided in response to Questions 5(g) and 5(o).

- f. For each type of waste describe Respondent's contracts, agreements, or other arrangements for its disposal, treatment, or recycling.

Response to Question 5(f): Between its acquisition of the facility in September 1980 and the end of the period being investigated (1985), Olin entered into written contracts with a number of Licensed Waste Disposal contractors for pickup and disposal of the various wastes generated at the 51 Eames Street facility. Copies of these contracts and related documents are provided in **Exhibit I**.

- g. Provide copies of such contracts and other documents reflecting such agreements or arrangements.

Response to Question 5(g): See **Exhibit I**.

- h. State whether Respondent sent each type of its waste, including barrels and empty barrels, for disposal, treatment, or recycling.

Response to Question 5(h): See response to Question 4(c) and documents referred to therein. As previously noted, certain process materials were recycled into the manufacturing process. Acid waste streams were neutralized on-site. Calcium sulfate sludge resulting from the neutralization of acid waste streams was periodically removed and disposed of in an on-site calcium sulfate landfill. Treated liquid waste was discharged to the MDC sewer system pursuant to an Industrial

Wastewater permit. Empty drums were sent off-site for crushing or shredding. During Olin's tenure, all drums were required by RCRA regulations to be thoroughly cleaned before being transported offsite. See also response to 5(e).

- i. Identify (see Definitions) all entities and individuals who picked up waste, including barrels, from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be call "Waste Carriers" for purposes of this information request).

Response to question 5(i): On information and belief, the following entities picked up waste or were Waste Carriers from the Wilmington site during Olin's operation of the facility:

Clean Harbors, Inc.  
P.O. Box 193  
100 Joseph Street  
Kingston MA 02364  
617-585-5111

NEWCO Waste Systems Inc.  
4626 Royal Avenue  
Niagara Falls, NY 14303  
716-285-6929

Tonawanda Tank Transport, Inc.  
1140 Military Road  
Buffalo, NY 14217  
716-434-1490

D. & J. Transportation Specialists Inc.  
107 7<sup>th</sup> Street  
N. Liverpool, NY 13088  
315-475-5989

Rollins Environmental Services  
(NJ) Inc.  
P.O. Box 221  
Bridgeport NJ 08014  
609-467-3100

Frontier Chemical Waste  
4626 Royal Avenue  
Niagara Falls, NY

Price Trucking  
P.O. Box 63  
Park Street Station South  
Buffalo, NY  
800-828-1043

Recycling Industries Inc.  
385 Quincy Avenue  
Braintree, MA  
617-808-0612

JETLINE Services, Inc  
P. O. Box 180  
Stoughton, MA 02071  
617-843-2829

Edward C. Whitney & Sons, Inc.  
888 Woburn Street  
Wilmington MA 01887  
978-658-8151

Buffalo Fuel Corporation  
2445 Alan Avenue  
Niagara Falls, NY 14303  
716-773-1921.

SCA Chemical Services, Inc.  
1550 Balmer Road  
Model City, NY 14107

0041-0029

CECOS International Inc.  
56 & Pine Avenue  
Niagara Falls, NY 14303

- j. If Respondent transported any of its wastes away from its operations, please so indicate and answer all questions related to "Waste Carriers" with reference to Respondent's actions.

Response to Question 5(j): So far as Olin is aware, Olin did not transport any of its waste away from its operation.

- k. For each type of waste specify which Waste Carrier picked it up.

Response to Question 5(k): Olin refers to the documents contained in **Exhibits I and J**.

- l. For each type of waste, state how frequently each Waste Carrier picked up such waste.

Response to Question 5(l): Olin refers to the documents contained in **Exhibits I and J**.

- m. For each type of waste state the volume picked up by each Waste Carrier (per week, month, or year)

Response to Question 5(m): See **Exhibits I and J**. As previously noted in the response to Question 4(c), the prior owner of the 51 Eames Street facility left behind some 193 barrels of material when it sold the facility to Olin. These materials were sent offsite between 1981 and 1982 by a number of licensed Waste Carriers. Additional information on the volumes of waste that were generated from manufacturing operations is contained in **Exhibit D, Attachment 1**.

- n. For each type of waste state the dates (beginning & ending) such waste was picked up by each Waste Carrier.

Response to Question 5(n): Olin refers to the documents contained in **Exhibits I and J**.

- o. Provide copies of all documents containing information responsive to the previous seven questions.

Response to Question 5(o): See **Exhibits I and J**. As noted in the Preliminary Statement, Olin understands that EPA does not require cumulative or duplicative information for offsite transport of materials for recycling or disposal at locations other than Whitney Barrel.

- p. Identify (see Definitions) all of each Waste Carrier's employees who collected Respondent's wastes and waste carriers.

Response to Question 5(p): Olin refers to the documents contained in **Exhibits I and J**.

- q. Indicate the ultimate disposal/recycling/treatment location for each type of waste.

Response to Question 5(q): Olin refers to **Exhibits I and J** and the response to Question 5(h). After a diligent review of company records, Olin has identified no documents or

information indicating that Olin sent any waste material to Whitney Barrel. Empty, rinsed barrels were sent to Edward C. Whitney & Son, Wilmington, Massachusetts, for disposal.

- r. Provide copies of all documents indicating the ultimate disposal/recycling/treatment location for each type of waste.

Response to Question 5(r): Olin refers to **Exhibits I, J** and **Exhibit D, Attachments 1-3**.

- s. Describe how Respondent managed pickups of each waste, including but not limited to:

- i. the method for inventorying each type of waste

Response to Question 5(s)(i): General information regarding the management of waste is provided in the documents attached as **Exhibit G and H**. Hazardous wastes were also managed in accordance with RCRA regulations governing inspections and holding times.

- ii. the method for requesting each type of waste to be picked up

Response to Question 5(s)(ii): Olin refers to the documents attached as **Exhibit G, I and J**.

- iii. the identity of (see Definitions) the waste carrier employee/agent contacted for pickup of each type of waste

Response to Question 5(s)(iii): Olin refers to the documents attached as **Exhibits I and J**.

- iv. the amount paid or the rate paid for the pickup of each type of waste

Response to Question 5(s)(iv): Olin refers to the documents attached as **Exhibits I and J**.

- v. the identity of (see Definitions) Respondent's employee who paid the bills

Response to Question 5(s)(v): On information and belief Rick Guiliani was an Accounting Manager during the relevant period and authorized payment to Waste Carriers. Mr. Guiliani is deceased..

- vi. the identity of (see Definitions) the individual (name or title) and company to whom Respondent sent the payment for pickup of each type of waste.

Response to Question 5(s)(vi): Olin refers to the documents attached as **Exhibits I and J**.

- t. Identify (see Definitions) the individual or organization (i.e. the respondent, the Waste Carrier, or, if neither, identify such other person) who selected the location where each of the Respondent's wastes were taken.

0041-0031

Response to Question 5(t): Decisions regarding the disposal of plant trash during the relevant period were made at the facility level. It is believed that Olin's Environmental Affairs Department participated in decisions regarding the selection of waste haulers and/or disposal locations for hazardous materials for some period of time between 1980 and 1985.

- u. State the basis for and provide any documents supporting the answer to the previous question.

Response to Question 5(u): The foregoing response is based on general corporate knowledge regarding practices during the relevant period. Olin has been unable to identify any documents responsive to this question.

- v. Identify all former or current employees and all other persons who have any knowledge of or information about the subject matter of any of the foregoing questions.

Response to Question 5(v): Olin refers to its responses to Questions 5(a) - 5(c).

#### 6. **Respondent's Environmental Reporting:**

Note: All questions in this section refer to the period being investigated (1950-1985).

General Response to Question 6: As indicated in its Preliminary Statement above, Olin's response to the following question and its subparts is limited to Olin's manufacturing operations at 51 Eames Street in Wilmington, Massachusetts during the period being investigated.

- a. Provide all Resource Conservation and Recovery Act (RCRA) Identification Numbers issued to Respondent by EPA or a state for Respondent's operations.

Response to Question 6(a):

RCRA Identification number is MAD0001403104  
 State of Massachusetts Release Tracking number is RTN-0431  
 NPDES Identification number is MA0005304

- b. Identify (see Definitions) all federal offices to which Respondent has sent or filed hazardous substance or hazardous waste information.

Response to Question 6(b):

U. S. Environmental Protection Agency  
 Water Quality Branch  
 J. F. Kennedy Federal Building  
 Boston, MA 0223 (NPDES Permit)

U. S Environmental Protection Agency  
 Region I  
 Permits Branch  
 P.O. Box 8748  
 Boston, MA 02114 (RCRA)

0041-0032

U. S Environmental Protection Agency  
 Region I  
 Sites Notification  
 Boston, MA 02203 (CERCLA)

U. S. Environmental Protection Agency  
 Waste Management Division  
 J. F. Kennedy Federal Building-Room 1903  
 Boston, MA 02023 (CERCLA 3004U Response)

- c. State the years during which such information was sent/filed.

Response to Question 6(c): On information and belief, Olin filed reports on behalf of the Eames Street facility in each year of the relevant period during which it owned the facility (1980-1985).

- d. Identify (see Definitions) all state offices to which Respondent has sent or filed hazardous substance or hazardous waste information.

Response to Question 6(d):

The Commonwealth of Massachusetts  
 Division of Water Pollution control  
 110 Tremont Street  
 Boston, MA 02108 (NPDES)

Air Quality Control Section  
 Department of Environmental Quality Engineering  
 Northeast Region  
 323 New Boston Street  
 Woburn, MA 01801 (Air Permit)

Division of Hazardous Waste  
 Department of Environmental Quality Engineering  
 One Winter Street  
 Boston, MA 02108 (Hazardous Waste Permits, Annual Report)

Office of Incident Response  
 Department of Environmental Quality Engineering  
 One Winter Street, 5th Floor  
 Boston, MA 02108 (Contingency Plan)

Sewerage Division  
 Metropolitan District Commission  
 20 Somerset Street  
 Boston, MA 02108 (Discharge to Sewer)

0041-0033

- d. State the years during which such information was sent/filed.

Response to Question 6(e): On information and belief, Olin filed reports on behalf of the Eames Street facility as required in each year of the relevant period during which it owned the facility (1980-1985).

- e. List all federal and state environmental laws and regulations under which Respondent has reported to federal or state governments, including but not limited to: Toxic Substances Control Act, 15 U.S.C §§2061 et seq., (TSCA); Emergency Planning and Community Right-to-Know Act, 42 U.S.C §§ 1101 et seq., (EPCRA); and the Clean Water Act (the Water Pollution Prevention and Control Act), 33 U.S.C. §§1251 et seq. and equivalent state law.

Response to Question 6(e):

On information and belief, Olin reported to federal and state governments under the following statutes and regulations, among others:

- CERCLA, 42 U.S.C. § 103
- Clean Air Act, 42 U.S.C. § 7401 et seq.
- Clean Water Act, 33 U.S.C. §§ 1251 et seq.; 40 CFR §§ 122, 124 (NPDES program)
- Resource Conservation and Recovery Act (“RCRA”); 40 CFR §§ 122.22(a)(1)
- M.G.L. c. 21, § 26 et seq. (Clean Waters Act)
- M.G.L. c. 21C (Hazardous Waste Management Act)
- M.G.L. c. 111F (Hazardous Substances Disclosure)

**7. Information Concerning Respondent’s Association with the Whitney Barrel Company**

Note: All questions in this section refer to the period being investigated (1950-1985).

General Response to Question 7: As indicated in its Preliminary Statement above, Olin’s response to the following question and its subparts is limited to Olin’s manufacturing operations at 51 Eames Street in Wilmington, Massachusetts during the period being investigated.

- a. Please describe Respondent’s business association with the Whitney Barrel Company.

Response to Question 7(a): Based on the documents and information reviewed by Olin in preparing this response, the sole business association between Olin’s Eames Street facility and the Whitney Barrel Company in Woburn, Massachusetts consisted of a one-time purchase of two barrels in December 1982.

- b. Did your association with the Whitney Barrel Company involve the buying of drums or other size/type of containers? Unless your answer is an absolute “NO”, please explain. Include but do not limit your response to:

- i. the dates of each pickup and delivery
- ii. the type(s) of containers
- iii. the size(s) of the containers

0041-0034

- iv. the condition of each container
- v. the contents (including but not limited to empty barrel residues) of each container including
  - 1. the name of each material
  - 2. the chemical composition of each material
  - 3. the physical state of each material (e.g., solid, sludge, liquid)
  - 4. the volume of each material
- vi. please include all documentation relating to these transactions

Response to Question 7(b): See Response to 7(a). Based on available company records, Olin purchased two 55-gallon 316 steel drums, open head. The documents do not indicate the contents of the drums purchased and it is believed they were new, empty drums. Documents relating to this transaction are included as **Exhibit K**.

- c. Did your association with the Whitney Barrel Company involve the shipping, transport or selling of drums or other size/type of containers? Unless your answer is an absolute "NO", please explain. Include but do not limit response to:
  - i. the dates of each pickup and delivery
  - ii. the type(s) of containers
  - iii. the size(s) of the containers
  - iv. the condition of each container
  - v. the contents (including but not limited to empty barrel residues) of each container including
    - 1. the name of each material
    - 2. the chemical composition of each material
    - 3. the physical state of each material (e.g., solid, sludge, liquid)
    - 4. the volume of each material
  - vi. please include all documentation relating to these transactions.

Response to Question 7(c): Based on Olin's review of available company documents and its discussions with former employees, Olin believes the answer to Question 7(c) is "No."

- d. Did your association with the Whitney Barrel Company involve the cleaning and/or reconditioning of drums or other size/type of containers? Unless your answer is an absolute "NO" please explain. Include but do not limit response to:
  - i. the dates of each pickup and delivery
  - ii. the type(s) of containers
  - iii. the size(s) of the containers
  - iv. the condition of each container
  - v. the contents (including but not limited to empty barrel residues) of each container including

0041-0035

1. the name of each material
2. the chemical composition of each material
3. the physical state of each material (e.g., solid, sludge, liquid)
4. the volume of each material

vi. please include all documentation relating to these transactions.

Response to Question 7(d): Based on Olin's review of available company documents and its discussions with former employees, Olin believes the answer to Question 7(d) is "No."

- e. Did the Whitney Barrel Company ever perform any other service for you or your company? Unless an absolute "NO", please explain. Include but do not limit your response to:
- i. the type of service(s)
  - ii. the frequency of the service(s)
  - iii. the date(s) of service(s)
  - iv. please include any documentation relating to these transactions

Response to Question 7(e): Based on Olin's review of available company documents and its discussions with former employees, Olin believes the answer to Question 7(e) is "No."

- f. Did Respondent ever pick up materials from other parties which were taken directly or indirectly to the Whitney Barrel Company (to be referred to as "customers" for purposes of this Information request)? Unless your answer is an absolute "NO", please explain.

Response to Question 7(f): Based on Olin's review of available company documents and its discussions with former employees, Olin believes the answer to Question 7(f) is "No."

- g. Identify (see Definitions) all persons and entities from whom Respondent picked up materials which were taken directly or indirectly to the Whitney Barrel Company.

Response to Question 7(g): See response to Question 7(f).

- h. In addition to providing a list that identifies all such customers, provide for each pickup and delivery of materials to the Whitney Barrel Company:
- i. the dates of each pickup and delivery
  - ii. the type of container(s)
  - iii. the size of container(s)
  - iv. the condition of each container(s)
  - v. for each customer's materials taken to the Whitney Barrel Company describe:
    1. the nature of each material
    2. the chemical composition of each material
    3. the physical state of each material (e.g., solid, liquid)
    4. the volume of each material

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- vi. please include all documentation relating to your pickup and delivery of materials to the Whitney Barrel Company

Response to Question 7(h): See response to Question 7(f).

- i. Identify (see Definitions) all former or current employees and all other persons who have any knowledge of or information about the subject matter of any of the foregoing questions or who had contact with Whitney Barrel Company.

Response to Question 7(i): Olin has been unable to identify any individual with knowledge regarding contacts with Whitney Barrel Company.

## 8. Information About Others

- a. If you have information concerning the operation of the Site or the source, content or quantity of materials placed/disposed at the Site which is not included in the information you have already provided, provide all such information.

Response to Question 8(a): Olin has identified no other information concerning the operation of the Whitney Barrel Site or the source, content or quantity of materials disposed of at the Whitney Barrel Site.

- b. If not already included in your response, if you have reason to believe that there may be persons, including persons currently or formerly employed by Respondent, who are able to provide a more detailed or complete response to any of these questions or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.

Response to Questions 8(b): Olin refers to **Exhibit B**, which identifies the former owners and operators of the Site. Olin notes that, in the course of litigation it brought against those former owners and operators, the parties exchanged during discovery substantial volumes of documents and deposition testimony relating to historical operations at the Site. Olin has re-examined materials produced by parties in litigation as part of its ongoing Chapter 21E assessment activities. Olin is not aware of any individual with information that would materially change any of the foregoing responses to questions in this Request.

- c. If not already provided, identify all persons, including Respondent's current and former employees, who have knowledge or information about the generation, use, purchase, treatment, storage, disposal, placement or other handling of materials at, or transportation of materials to, the Site.

Response to Question 8(c): See response to Question 7(i).

## 9. Compliance with This Request

- a. Describe all sources reviewed or consulted in responding to this request, including but not limited to:
  - i. the names of all individuals consulted

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- ii. the current job title and job description of each individual consulted
- iii. the job title and job description during the period being investigated of each individual consulted
- iv. whether each individual consulted is a current or past employee of Respondent

Response to Question 9(a)(i.-iv): Individuals consulted in responding to this request include but are not limited to

- Steve Morrow, Principal Environmental Specialist (1986-present), Olin Corporation, Box 248, Charleston TN 37308, 423/336-4500;
  - Allan Peirce, On-Site Manager (1996-present), Olin Corporation, 51 Eames Street, Wilmington, MA 01887;
  - Don Cameron (retired 2000), maintenance (1980-86), On-Site Manager (1986-2000), Olin Corporation (51 Eames Street facility),
  - Don Knight (former employee), Treatment Plant Operator during period being investigated, Olin Corporation (51 Eames Street facility),
  - June Plumer (former employee), Purchasing Agent during period being investigated, Olin Corporation (51 Eames Street facility),
  - Terry Printich (former employee), Administrative Assistant during period being investigated, Olin Corporation (51 Eames Street facility),
  - Tom O'Brien, Manager, Remediation Sites, Olin Corporation, Box 248, Charleston TN, 423/336-4500;
  - Lorraine Miller, Principal Environmental Specialist (present, employed as a chemist by Olin between 1973 and 1986), Olin Corporation, Box 248, Charleston TN, 423/336-4500.
- v. the names of all divisions or offices of Respondent for which records were reviewed
  - vi. the nature of all documents reviewed
  - vii. the locations where those documents reviewed were kept prior to review
  - viii. the location where those documents reviewed are currently kept

Response to Question 9(a)(v)-(viii): As discussed in the preliminary statement, Olin reviewed documents and information concerning the 51 Eames Street site in Wilmington, Massachusetts. Sources reviewed or consulted in responding to this request include but are not limited to records in Olin's corporate records archives, its Law Department, and its Environmental Remediation Group records center. The nature of the documents reviewed includes but was not limited to contracts, waste disposal records, and facility documents. Prior to review, these documents were stored in commercial records storage facilities. The reviewed records are currently either in the custody of Olin Corporation or have been returned to commercial records storage.

0041-0038

**CERTIFICATION OF RESPONSES TO REQUEST**

This response is not made on the basis of personal knowledge unless otherwise indicated and was prepared by or with the assistance of agents, representatives, and employees of Olin Corporation or others believed to have relevant information, and on the advice of counsel, which advice was relied upon herein. The answers set forth herein, subject to inadvertent or undiscovered errors or omissions, are based on and therefore necessarily limited by the records and information still in existence, currently recollected, thus far discovered in the course of the preparation of this response, and currently available to the undersigned. Olin Corporation reserves the right to supplement this response in the event that it locates additional information which makes such supplementation appropriate.



OK  
#12

Curt M. Richards  
V.P. Environment, Health & Safety

EXHIBIT B

**Prior Owners of 51 Eames Street Site**

1953-1964

Operations were commenced at the site in 1953 by National Polychemicals, Inc. ("NPI"). NPI operated the site as a separate corporation until 1959 when it became a wholly-owned subsidiary of American Biltrite Rubber Company ("ABR"). Prior to selling the property in 1964, ABR assumed the liabilities of NPI. The successors to ABR are:

American Biltrite, Inc.  
57 River Street  
Wellesley Hills, MA 02181-2097

The Biltrite Corporation  
Two University Office Park  
51 Sawyer Road  
Waltham, MA 02454-9045

1964-1968

Fisons Ltd. ("Fisons") acquired NPI from ABR in 1964 and ran it first as a subsidiary, until 1966, and then as a subsidiary of a subsidiary, until 1968. During this period, another subsidiary of Fisons, Patco Products, Inc. ("Patco") constructed and operated a manufacturing facility for lawn fertilizer at the Wilmington site. The successors to Fisons/Patco are:

Nor-Am Argo, LLC  
340 Changebridge Road  
Montville, NJ 07045-1000

Rhone-Poulenc Rorer Limited<sup>1</sup>  
RPR House, 50 Kings Hill Avenue  
Kings Hill, West Malling  
Kent, ME19 4TA, England

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<sup>1</sup> Although Rhone-Poulenc acquired Fisons in 1995, it is not clear whether this company is the present successor to the liabilities associated with the 51 Eames Street site, due to a number of intervening and subsequent corporate transformations and acquisitions/sales. Additional information will be provided if it becomes known to Olin.

1968-1980

Stepan Chemical Company ("Stepan") purchased NPI in 1968, operating the facility first as a subsidiary and in 1971 merging NPI into Stepan. Stepan sold the property to Olin in 1980. The successor to Stepan Chemical Company is:

Stepan Company  
22 W. Frontage Road  
Northfield, IL 60093

Other than as the most recent owner in the chain of ownership of the Wilmington Site, Olin has no relationship with any of the companies discussed above.

EXHIBIT C

T-243 P. 028/035 F-275  
 +2037503018  
 FIDUCIARY LAW DEPARTMENT  
 14-90  
 01-05-2004

WELLS G & H  
 ENCLOSURE F- CONSTITUENT LIST

Petroleum Hydrocarbons

C11 - C22 Aromatic Hydrocarbons	C9 - C10 Aromatic Hydrocarbons
C19 - C36 Aliphatic Hydrocarbons	C9 - C12 Aliphatic Hydrocarbons
C5 - C8 Aliphatic Hydrocarbons	C9 - C18 Aliphatic Hydrocarbons

PROCESSING OIL

X

Herbicides

2,4,5-T (2,4,5-trichlorophenol)	2,4-D (2,4-dichlorophenoxyacetic acid)
2,4,5-TP (Silvex) (alpha-(2,4,5-trichlorophenoxy)propionic acid)	2,4-DB (magnesium bis(2,3-dibromopropyl)phosphate)

Metals

Aluminum	Antimony
Arsenic	Barium
Beryllium	Boron
Cadmium	Calcium
Chromium X	Hexavalent Chromium X
Cobalt	Copper
Cyanide	Iron
Lead	Lithium
Magnesium	Manganese
Mercury	Molybdenum
Nickel	Phosphorus

Potassium	Selenium
Silica	Silver
Sodium	Strontium
Thallium	Tin
Titanium	Vanadium
Zinc	

**Polychlorinated Biphenyl (PCB) Aroclors**

Aroclor 1016	Aroclor 1221
Aroclor 1232	Aroclor 1242
Aroclor 1248	Aroclor 1254
Aroclor 1260	

**Polychlorinated Biphenyl (PCB) Congeners**

PCB 105	PCB 114
PCB 118	PCB 123
PCB 126	PCB 156/157
PCB 157	PCB 167
PCB 169	PCB 170
PCB 189	PCB 193/180
PCB 77	PCB 81

**Pesticides**

4,4'-DDD (1,1-bis(4-chlorophenyl)-2,2-dichloroethane)	4,4'-DDE (2,2-bis(p-chlorophenyl)-1,1-dichloroethylene)
4,4'-DDT (1,1-bis(4-chlorophenyl)-2,2,2-trichloroethane)	Aldrin

a-BHC	b-BHC
d-BHC	g-BHC
BHC	Chlordane
Dieldrin	Endosulfan
Endosulfan I	Endosulfan II
Endosulfan sulfate	Endrin
Endrin aldehyde	Endrin ketone
Heptachlor	Heptachlor epoxide
Methoxychlor	a-Chlordane
g-Chlordane	Toxaphene

**Semivolatile Organic Compounds (SVOCs)**

1,1'-Biphenyl	Benzo(b)Fluoranthene
1,2,4-Trichlorobenzene	Benzo(g,h,i)perylene
1,2-Dichlorobenzene	Benzo(k)Fluoranthene
1,3-Dichlorobenzene	Benzoic acid
1,4-Dichlorobenzene	Benzyl alcohol
2,2'-Oxybis(1-Chloropropane)	Bis(2-chloroethoxy) methane
2,4,5-Trichlorophenol	Bis(2-chloroethyl) ether
2,4,6-Trichlorophenol	Bis(2-chloroisopropyl) ether
2,4-Dichlorophenol	Bis(2-ethylhexyl) phthalate
2,4-Dimethylphenol	Butyl benzyl phthalate
2,4-Dinitrophenol	Caprolactam
2,6-Dinitrotoluene	Carbazole
2-Chloronaphthalene	Chrysene
2-Chlorophenol	Cresol
2-Methylnaphthalene	Dibenz(a,h) anthracene
2-Methylphenol	Dibenzofuran

2-Nitroaniline	Diethyl phthalate	
2-Nitrophenol	Dimethyl phthalate	
3,3'-Dichlorobenzidine	Di-n-butyl phthalate	
3-Nitroaniline	Di-n-octyl phthalate	X
4,6-Dinitro-2-methylphenol	Fluoranthene	
4-Bromophenyl phenyl ether	Fluorene	
4-Chloro-3-Methylphenol	Hexachlorobenzene	
4-Chloroaniline	Hexachlorocyclopentadiene	
4-Chlorophenyl phenyl ether	Hexachloroethane	
4-Methylphenol	Indeno(1,2,3-cd)pyrene	
4-Nitroaniline	Isophorone	
4-Nitrophenol	Naphthalene	
Acenaphthene	Nitrobenzene	
Acenaphthylene	N-Nitrosodi-n-propylamine	
Acetophenone	N-Nitrosodiphenylamine	X
Aniline	p-Chlorotoluene	
Anthracene	Pentachlorophenol	
Atrazine	Phenanthrene	
Benzo(a)Anthracene	Phenol	X
Benzo(a)Pyrene	Pyrene	

**Volatile Organic Compounds (VOCs)**

1,1,1-Trichloroethane	Chloroform
1,1,2,2-Tetrachloroethane	Chloromethane
1,1,2-Trichloro-1,2,2-trifluoroethane	cis-1,2-Dichloroethene
1,1,2-Trichloroethane	cis-1,3-Dichloropropene
1,1-Dichloroethane	Cyclohexane



17543 1.033/033 17543 1.033/033

Bromobenzene	Tetrachloroethene
Bromochloromethane	Toluene X
Bromodichloromethane	trans-1,2-Dichloroethene
Bromoform	trans-1,3-Dichloropropene
Bromomethane	trans-1,4-Dichloro-2-butene
Carbon disulfide	Trichloroethene
Carbon tetrachloride	Vinyl Acetate
Chlorobenzene	Vinyl chloride
Chlorodibromomethane	Xylenes (total)
Chloroethane	

ATTACHMENT 2

Stepan

Telephone 312 4 500

F. Wilson  
1983-Gen  
cc 368

ENVIRONMENTAL DISCLOSURE

JULY 23, 1980

In accordance with the requirements of Section 3.05 and 3.06 of the Agreement of Purchase and Sale between Olin and Stepan Chemical Company, the attached disclosure sets forth the pollution litigation and administrative proceedings, manufacturing processes and chemical waste disposal with regard to the Polychem (Wilmington) plant which occurred subsequent to Stepan's purchase of the plant late in 1968. In addition, this same type of information with regard to processes and waste disposal practices, which occurred prior to Stepan's ownership, are shown where they are known.

The Corporate and Plant Management personnel who have reviewed these matters and prepared the enclosure are:

- Charles P. Riley, Jr. - Corporate Director of Manufacturing and Engineering
- Ronald J. McBrien - Wilmington Plant Manager
- Walter Beck - Group Leader, Corporate Research and formerly Polychem Technical Manager

WWM:gb

OW 091249

JULY 23, 1980

Exhibit 3.06Environmental Disclosure\*1. Suits

Commonwealth of Massachusetts vs. Stepan Chemical Co., Inc. Suffolk Superior Court (served April 22, 1980) cites violation of the Massachusetts Hazardous Waste Management Act and violation of the Massachusetts Clean Waters Act in the storage and disposal of hazardous wastes.

In a joint meeting on April 30, 1980 at the Boston office of Sullivan and Worcester, representatives of Olin, Stepan, the Attorney General's office, and the Division of Water Pollution Control discussed the disposition of the above court action. It was agreed between the representative of the Attorney General and the representative of the Division of Water Pollution Control that if Olin Corporation purchased the Stepan, Wilmington plant site, the following would apply:

- a.) Olin would have 12-18 months for an engineering study to define pollution problems and to suggest remedies.
- b.) There would be no prosecution by the State during this period.
- c.) Olin could expect to expand operations at the site.

The Attorney General and Stepan's counsel have jointly applied for a two month extension of the court action to accomodate Olin's decision on purchase of the property.

The seller has no knowledge of any other suit, threatened suit, actions, proceedings or claims under any applicable federal, state or local law or other environmental matters.

2. Manufacturing Processes Conducted on Wilmington Site, Sellers' Best Knowledgea.) Opex - (Dinitrosopentamethylenetetramine)

Raw materials: Hexamethylenetetramine  
 Sodium nitrate-nitrite  
 Hydrochloric acid

Processing oil - Ammonia

Product: Dinitrosopentamethylenetetramine (solid)

By-products in waste: ✓ Sodium chloride  
 ✓ Sodium nitrite nitrate  
 ✓ Formaldehyde  
 ✓ Processing oil - Ammonium Chloride

Process operated: 1953-1980

\*All information prior to Stepan's purchase of plant in 1968 is based on knowledge of Ron McBrien and Charles P. Riley, Jr. Stepan has not made any investigation with regard to matters before it acquired the plant in 1968.

OW 091250

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Exhibit 3.06  
Environmental Disclosure

f.) Actafoam R-3

Raw materials: 2-ethylhexoic acid  
Zinc oxide  
Dioctyl phthalate  
~~Sodium oleate~~ Potassium oleate

Product: Liquid Azodicarbonamide activator

By-products in waste: None

Process operated: 1963-1980

g.) Nytox Pap - (Alkylated phenol)

Raw materials: Nonyl phenol  
Dinonyl phenol  
Formaldehyde

Product: Liquid Alkylated phenol

By-products in waste: None

Process operated: 1971-1980

h.) Nitropore SPT - (5-phenyltetrazole)

Raw materials: Benzonitrile Dimethyl Formamide  
Sodium azide  
Sodium nitrite  
Ammonium chloride  
Hydrochloric acid

Product: 5-phenyltetrazole (solid)

By-products in waste: Sodium chloride Dimethyl Formamide  
Sodium nitrate Benzonitrile

(produced 1973-1980, limited quantities 24,000 lbs./yr.)

i.) Nitropore OT - (4,4' oxybisbenzenedisulfonylhydrazide)

Raw materials: Diphenyl oxide  
Chlorosulfonic acid Ammonia  
Hydrazine

Product: 4,4' oxybisbenzenedisulfonylhydrazide

By-products in waste: Sulfuric acid  
~~Hydrochloric acid~~ Ammonium Chloride

Process operated: 1969-1975 (Hydrochloric acid scrubbed in water and sold).

j.) Nytox ADP - (Dioctyl Diphenylamine)

Raw materials: Diphenylamine  
Diisobutylene  
Aluminum hydroxide Aluminum chloride  
~~Sodium chloride~~  
Sodium hydroxide

Exhibit 3.06  
Environmental Disclosure

Product: Dioctyldiphenylamine  
 By-products in waste: Aluminum hydroxide  
                                   Sodium chloride            Sodium hydroxide  
 Process terminated in 1971. (Operated 1962-1971)

k.) Phenolic and Urea Formaldehyde Resins

Raw Materials: Phenol  
                                   Urea  
                                   Formaldehyde  
 Products: Solid and liquid resins  
 By-products in waste: Phenol  
                                   Formaldehyde  
 Process operated 1961-1967

l.) Phthalate Plasticizers - (dioctyl phthalate, dibutyl phthalate)

Raw materials: Phthalic anhydride  
                                   2-ethylhexanol  
                                   Butyl alcohol  
 Products: Liquid plasticizers  
 By-products in waste: None  
 Process operated: 1955-1961

m.) Wiltrol N - (N-Nitrosodiphenylamine)

Raw materials: Diphenylamine  
                                   Sodium nitrite  
                                   Sulfuric acid  
 Product: N-Nitrosodiphenylamine (solid)  
 By-products in waste: Sodium nitrite  
                                   Sodium sulfate  
 Process operated: 1965-1967

3. Chemical Waste Disposal

To the seller's best knowledge, chemical manufacturing commenced on the Wilmington plant site around 1953. No waste treatment facility or sewer was included in the original plant facilities. The main plant effluents were discharged to a small man-made pond on the west side of the property which flowed to a brook bisecting the property. The brook exited the property at the east side along the railroad right of way.

Strong acid wastes were conducted separately to unlined man-made lagoons on the south side of the operating plant buildings.

\* Small quantities of miscellaneous materials were manufactured at various times which had no by-product wastes.

OW 091253

0041-0114

In 1969, Stepan Chemical Company, Inc. and the Division of Water Pollution Control of the Commonwealth of Massachusetts entered into a consent order whereby Stepan was to build a waste treatment plant and the effluents from the treatment plant would be discharged to a Metropolitan District Commission sewer which was to be extended to the immediate area of the plant. Stepan was allowed to continue to discharge chemical wastes in the same manner until the treatment plant was completed. In 1970, with the completion of the treatment plant construction, Stepan was requested to operate the plant and discharge the treated wastes through its property until the sewer construction was complete. The sewer was finished in 1972 and approval was granted to Stepan to discharge the effluents from the treatment plant into the sewer by the Metropolitan District Commission.

The Stepan treatment facility neutralizes sulfuric acid and sulfate wastes with a lime system. The resulting calcium sulfate by-product is separated from the effluent by settling in vinyl lined lagoons. The Department of Public Health of the Commonwealth of Massachusetts approved the construction of a landfill on the Stepan property for the disposal of the calcium sulfate by-products.

The seller has no knowledge of chemical or other dumping on the plant site during its ownership by its own personnel or third parties except as described previously with the discharge of operating wastes. The seller has no knowledge of chemical or other dumping on the property in prior periods.

CPR, Jr./img

OW 091254

\*\* TOTAL PAGE.07 \*\*

0041-0115

# ATTACHMENT 3

# RAW MATERIALS

Acetone  
Acryloid K-120n  
Aluminum chloride  
Anhydrous ammonia  
Aniline HCL salt  
Antifoam 60  
Aqua ammonia  
Aquarex-L  
Arquad 25 75  
Arquard 2 ht 75 varisoft  
Bentone 27  
Bentone 38  
Boric acid  
Butanol  
n-butyl aceate  
cab-o-cil  
Calcium searate  
C S A  
D i b  
Dinonylphenol  
D O P  
Liquid DPA  
DPO  
Deoderant 1056  
Ethomeen S-12  
2-ethylhexoic acid  
Ethylene glycol  
Santicizer 722  
Liquid Nitrogen  
Calcium Carbonate  
Darvan-L1  
Fare rapeseed  
Fast spermoil  
Liq. Formalin  
Glycerine  
Aerosil 380  
Vikoflex 71710  
Nurostabe V144  
Potassium Stearate  
P-TSA  
Benzonitrile  
Dimethylformamide  
Ammonium Chloride  
Sodium Azide

## RAW MATERIALS

Calcium Oxide  
Hydrogen Peroxide  
Calcium Chloride  
Barium Chloride  
Sodium Dicarboxate  
Dimethyl carbonate  
Methanol  
N-butanol  
Benzophenone  
Adipic Acid  
Heptane  
Formamide  
Soda Ash  
Hydrazine 64%  
Hi-sil 233  
Nedex lead octate  
100% liquid hexa  
Maleic anhydride  
Mineral spirits  
monohydrazine sulfate  
Natrosol  
Nurosperse 657  
Oxalic acid  
Paraformaldehyde powder  
Phthalic anhydride  
999 salt  
Satocel FRC  
Silica  
Sodium chlorate solid  
Sodium nitrite  
sodium sulfite  
7AT soft  
Stantone 12PCOL yel  
Stantone 90PCOL black  
Sun Par 120  
Tall oil liqro  
Trancoa 375B  
#2 Bordens Urea Form  
Uformite MM57  
Zinc stearate  
hexamine granular  
ice  
Liquid caustic  
microcel E

0041-0118

# RAW MATERIALS

Mineral oil  
mono ethanolmine  
Muriatic acid  
Nonyl phenol  
415 oil  
Paraplex G-62  
PCL3  
potassium oleate  
Safe 7MT  
Shellflex 212  
Sodium bromide  
Sodium chlorate liq  
Sodium stearate  
sodium acetate  
Stantone 10PCOL white  
Stantone 26PCOL red  
Sulfuric acid  
Styreene  
Toluene  
T.I.A. Tr. Isopropalamine  
Prilled Urea  
Zinc Oxide

# ATTACHMENT 4

## TECHNICAL BULLETINS

Opex 40  
Kempore 125  
Kempore  
Kempore Dispersions  
Kempore SDA-200  
Kempore R-125  
Kempore SD-125  
Cellular Vinyl Coated Fabrics  
Pigmentation of Kempore  
Actafoam R-3  
RIA NC  
RIA 66  
Antidust  
Antidust - 1060  
Acetone  
FI-Line' Sensitizers  
Tetra-Phen S-201  
Tetra -Flex Resins  
Poly-Cone  
Poly-Cone 125X  
Poly-Cone Emulsions  
Poly-Cone 200X  
Poly-Cone 1000  
Poly-Zole AZDN  
Poly-Sperse AP-2  
Poly-Phen  
Wiltrol-P  
Wiltrol-N  
Wytox  
Wytox-ADP  
Wytox-BHT  
Wytox 355  
Wytox 438  
NPI 201  
NPI 222  
NPP 202  
Dee-Tac NP-27  
Dee-Tac 2000  
Dee-Tac NP-27  
Synthetic Resins

# ATTACHMENT 6

**Constituents Found in "Business Records and Correspondence" in Geomega's Files**  
(Shaded records denote existing PCOCs)

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Oiln	Reference	On existing PCOC List	CAS#
#6 oil		Unknown	Unknown	Oils used at Wilmington	N	
1,1'Azobisformamide		Unknown	Unknown	NP Wilmington List	N	
1,2 Dichloroethane		Unknown	Unknown	OW 023181	N	
1,2,4 Triazole		Product	Unknown	Wilmington Finished Goods	N	
1-Nitropropane		Unknown	Unknown	OW 373720 Stepan Technical Information	N	
2,6 di-tert-butylphenol		Unknown	Unknown	OW 797568	N	
2,6,B		Unknown	Unknown	OW 797361	N	
201-C Resin		Product	Pre	OW 373719-M Production Summary	N	
201-F Resin		Product	Pre	Wilmington Finished Goods	N	
202-C Resin		Product	Pre	OW 373719-M Production Summary	N	
202-F Resin	cashew nut oil	Product	Pre	OW 373719-M Production Summary	N	
218-C Resin		Product	Pre	OW 373719-M Production Summary	N	
218-F Resin		Product	Pre	OW 373719-M Production Summary	N	
222-P Resin		Product		OW 1285-1339	N	
2-ethylhexanol		Raw	Pre	Table 2.2 from CSA	Y	104-76-7
2-ethylhexoic acid	Octanoic acid	Raw	Pre	OW 021018 List of Raw materials	Y	00149-57-5
2-MT Lever		Product	Pre	AB 04322 Unit Summary	N	
2-nitrophenol		Unknown	Unknown	OW 023180 Olin memo	N	
3,3-thiodipropionic acid		Raw	Unknown	OW 005215	N	
3-Amino 1,2,4 Triazole		Product	Unknown	OW 797474	N	
4,4-oxylisbenzenedisulfonylhydrazide		Product	Pre	Table 2.2 from CSA	Y	
4-Amino-1,2,4 Triazole		Coproduct	Unknown	OW 797464	N	
4-aminourazole		Unknown	Unknown	OW 023366 Olin	N	
598 Oil		Unknown	Unknown	OW 1285-1339	N	
5-Aminotetrazone		Unknown	Unknown	OW 797339	N	
5-Phenyltetrazole	Expandex 5-PT	Product	Pre	Wilmington Finished Goods	Y	18039-42-4
Accel MBTS		Product	Pre	AB 04322 Unit Summary	N	
Acetane	acetone filtrate	Unknown	Unknown	Wilmington Raw Materials sheet 2	Y	00067-64-1
acetone filtrate	acetone				N	
Acetone Semicarbazone		Product	Unknown	Wilmington Finished Goods	N	
Acetonitrile		Unknown	Unknown	OW 373720 Stepan Technical Information	N	
Acrylic Resins		Raw	Unknown	Table 2.2 from CSA	Y	
Acryloid K-120N		Unknown	Unknown	Wilmington Raw Materials sheet 2	N	
Actafoam F-2 paste		Product	Unknown	Wilmington Finished Goods	N	
Actafoam F-2 powder		Product	Unknown	Wilmington Finished Goods	N	
Actafoam R-1		Product	Unknown	OW 005211 Olin memo	N	
Actafoam R-10		Product	Unknown	OW 567715 Olin ltr	N	
Actafoam R-3		Product	Unknown	Wilmington Finished Goods	N	
Actafoam R-5		Product	Unknown	OW 005211 Olin memo	N	

0041-0136

0041-0137

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Actafoam XR-16		Product	Unknown	Wilmington Finished Goods	N	
Actafoam XR-34		Product	Unknown	Wilmington Finished Goods	N	
Additive W		Product	Unknown	Wilmington Finished Goods	N	
Adipic Acid	Hexanedioic acid; 1,4-butane-dicarboxylic	Unknown	Unknown	OW 003469 Olin Memo	Y	00124-04-9
Adipic dihydrazide		Product	Unknown	Wilmington Finished Goods	N	
Aerosol M-35		Product	Pre	AB 04322 Unit Summary	N	
Alkyl Phenol					Y	68565-24-8
Alkylated diphenylamine		Unknown	Unknown	NP Wilmington List	N	
Aluminum		Waste	Unknown	GEO 25377 Deposition Exhibit	Y	7429-90-5
Aluminum Chloride		Raw	Pre	Table 2.2 from CSA	Y	07446-70-0
Aluminum Hydroxide		Waste/Byproduct	Pre	Table 2.2 from CSA	Y	21645-51-2
Aminoguanidine Bicarbonate	AGB	Unknown	Unknown	OW 797339	N	
Ammonia		Raw	Pre	OW 021018 List of Raw materials	Y	7664-41-7
Ammonium Chloride		Raw & Waste/Byproduct	Pre	Table 2.2 from CSA	Y	12125-02-9
Ammonium Hydroxide		Raw	Unknown	OW 021018 List of Raw materials	Y	01336-21-6
Ammonium salts of Alkylphosphate	Aquarex L, Anionic surfactant	Raw	Unknown	OW 008200 Olin Memo	Y	
Ammonium Sulfate		Waste/Byproduct	Pre	Table 2.2 from CSA	Y	7783-20-2
Ammonium Thiocyanate	Ammonium sulfoyanate	Unknown	Unknown	OW 797273	Y	01762-95-4
Anhydrous Ammonia	ammonia	Raw	Unknown	OW 005200 Olin Memo	N	
Aniline	aminobenzene	Unknown	Unknown	OW 1285-1339	Y	00062-53-3
Antidust 1060		Product	Unknown	Wilmington Finished Goods	N	
Antidust 1060N		Product	Pre	AB 04322 Unit Summary	N	
Aquard 25;75		Unknown	Unknown	OW 005200 Olin Memo	N	
Asbestos		Waste	Unknown	OW 021899 Annual Report	Y	1332-21-4
AZDN FF		Product	Unknown	Wilmington Finished Goods	N	
AZDN LC dry		Product	Unknown	Wilmington Finished Goods	N	
AZDN Lm dry		Product	Unknown	Wilmington Finished Goods	N	
Azobisisobutyronitrile		Unknown	Unknown	OW 005200 Olin Memo	N	
Azodicarbonamide	Kempore	Raw & Product	Pre	Table 2.2 from CSA	Y	123-77-3
azone		Unknown	Unknown	OW 023366 Olin	N	
Barium azocarbonate	Expandex 177	Product	Unknown	OW 006285 Olin	N	
Barium Chloride		Unknown	Unknown	Wilmington Raw Materials sheet 2	Y	10361-37-2
Barium oxide		Raw	Unknown	OW 022668	N	
Bentone		Raw	Unknown	Table 2.2 from CSA	Y	
Benzaldehyde		Unknown	Unknown	OW 795562	Y	00100-52-7

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Benzene	Benzo	Waste	Unknown	OW 021839 Annual Report	Y	00071-49-2
Benzene-sulfonyl-hydrazide	4,4-Oxybis				Y	80-51-3
Benzonitrile	cyanobenzene, phenyl cyanide	Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	100-47-0
Benzophenone	diphenyl ketone	Unknown	Unknown	OW 098469 Olin Memo	Y	00119-61-9
Benzophenone Hydrazone		Product	Unknown	Wilmington Finished Goods	N	
BHC		Pesticide	Unknown	Sheet on Pesticides at Olin (In 2nd big box)	N	
Bichromate		Unknown	Unknown	OW 1285-1339	N	
Bis(2-ethylhexyl) phthalate	Dioctyl phthalate, DOP, di(2-ethylhexyl) phthalate	Raw & Product	Pre	Table 2.2 from CSA	Y	00117-81-7
Borden's B-38		Unknown	Unknown	OW 1285-1339	N	
Boric Acid	Boracic acid; orthoboric acid; borofax	Unknown	Unknown	Wilmington Raw Materials sheet 2	N	
Butanol	see also butyl alcohol, n-butanol	Raw	Unknown	OW 021018 List of Raw materials	N	
Butyl alcohol	see also butanol, n-butanol	Raw	Pre	Table 2.2 from CSA	Y	00071-36-3
Butylacetate		Raw	Unknown	Table 2.2 from CSA	Y	00105-46-4
Cabosil		Unknown	Unknown	OW 1285-1339	N	
Cadmium octate		Raw	Unknown	OW 005200 Olin Memo	N	
Cadmium oxide		Raw	Unknown	OW 005211 Olin memo	Y	01306-19-0
calcium		Unknown	Unknown	Severn Trent Results 1998	N	
Calcium Carbonate		Unknown	Unknown	OW 009953 NP letter	Y	471-34-1
Calcium Chloride		Unknown	Unknown	OW 009953 NP letter	Y	10043-52-4
Calcium Oxide		Unknown	Unknown	OW 667715 Olin ltr	Y	1305-78-8
Calcium oxybisbenzene sulfonate		Unknown	Unknown	OW 009953 NP letter	N	
Calcium Silicate	Microcel-E	Unknown	Unknown	OW 005200 Olin Memo	Y	1344-95-2
Calcium Stearate		Raw	Unknown	OW 005200 Olin Memo	Y	1592-23-0
Carbohydrazide	1,3-diaminourea; carbazide	Product	Unknown	Wilmington Finished Goods	Y	497-18-7
Carbon Black		Product	Pre	AB 04322 Unit Summary	N	
carbon dioxide		Unknown	Unknown	OW 1285-1339	N	
carbon disulfide		Unknown	Unknown	OW 798061	N	
Carboxymethylcellulose		Unknown	Unknown	OW 005200 Olin Memo	N	
Cashew nut oil		Raw	Unknown	OW 005200 Olin Memo	N	
Caustic soda flake		Unknown	Unknown	OW 1285-1339	N	
Chlordane		Pesticide	Unknown	Sheet on Pesticides used at Olin	N	
Chlorine		Raw	Pre	Table 2.2 from CSA	Y	07782-60-5
Chlorosulfonic acid		Raw	Pre	Table 2.2 from CSA	Y	07790-04-5

0041-0138

0041-0139

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Oilin	Reference	On existing PCOC List	CAS#
Cho-ox 4	Thibisbenzaldehydepropanyl hydrazone	Unknown	Unknown	OW 797563	N	
chrome sulfate		Waste/Byproduct	Unknown	Table 4-14	N	
Chromium		Unknown	Unknown	Phase I Site Inspection (2nd)	N	
Cirasol oil		Unknown	Unknown	Oils used at Wilmington	N	
CNSL		Unknown	Unknown	OW 1285-1339	N	
copper		Unknown	Unknown	OW 023182	N	
COS-60		Product	Unknown	Wilmington Finished Goods	N	
CSA		Unknown	Unknown	Wilmington Raw Materials sheet 2	N	
Cumarone Resin		Product	Pre	AB 04322 Unit Summary	N	
cyanide	see hydrogen cyanide	Waste	Unknown	OW 030048 waste report	N	
Cyanox flakes		Product	Unknown	Wilmington Finished Goods	N	
Cyanox powder		Product	Unknown	Wilmington Finished Goods	N	
Cyclohexanol		Waste	Unknown	OW 021839 Annual Report	N	
Darvan-L		Raw	Unknown	Wilmington Raw Materials sheet 2	N	
Darvanol		Raw	Unknown	OW 021018 List of Raw materials	N	
Daxad		Unknown	Unknown	OW 1285-1339	N	
DDD		Pesticide	Unknown	Sheet on Pesticides at Olin	N	
DDE		Pesticide	Unknown	Sheet on Pesticides at Olin	N	
DDT		Pesticide	Unknown	Sheet on Pesticides at Olin	N	
dedusting oil		Unknown	Unknown	Oils used at Wilmington	N	
Deetac	NP 27	Product	Unknown	Wilmington Finished Goods	N	
Deodorant 1056		Raw	Unknown	Wilmington Raw Materials sheet 2	N	
Di(2-ethylhexyl)phthalate	bis(2-ethylhexyl)phthalate, DOP, dioctyl phthalate	Product	Unknown	National Polychemicals, Inc.	N	
Di(C7-9-11 Alkyl) phthalate	1,2-benzenedicarboxylic acid, Santicizer 711	Raw	Unknown	OW 021018 List of Raw materials	Y	39393-37-8
DIB		Unknown	Unknown	OW 005211 Olin memo	N	
dicarboxyhydrazide amide		Unknown	Unknown	OW 023366 Olin	N	
Dihydrazide		Unknown	Unknown	OW 797561	N	
Dihydrazine sulfate		Unknown	Unknown	HP 00654 K-1 operating	N	
Dilsobutylene	2,2,4 trimethylpentene	Raw	Pre	Table 2.2 from GSA	Y	25167-70-8
Dimethyl Carbonate		Unknown	Unknown	OW 008200 Olin Memo	Y	616-38-6
Dimethyl Formamide		Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	
Dimethylphenol				ltr from Stepan	N	
Di-n-butyl phthalate		Product	Pre	Table 2.2 from GSA	Y	00084-74-2
Dinitrosopentamethylenetetramine	Opex	Product	Pre	Table 2.2 from GSA	Y	101-25-7
Di-nonylphenol	2,4 dinonylphenol, DVP	Raw	Pre	OW 021018 List of Raw materials	Y	
Dioctyl Diphenylamine		Unknown	Unknown	BO 000006	Y	
Dioctylphthalate		Unknown	Unknown	OW 210384 Olin Memo		
Diphenylamine		Raw	Pre	Table 2.2 from GSA	Y	00122-39-4

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
diphenyl methanol		Unknown	Unknown	OW 023366 Olin	N	
Diphenyl oxide	DPO??	Raw	Pre	Table 2-2 from GSA	Y	
diphenyl-4-4'disulfonyl		Unknown	Unknown	OW 797589	N	
diphenyl-4-4'disulfonyl		Unknown	Unknown	OW 797589	N	
DMTDH		Unknown	Unknown	OW 797562	N	
DMTDP	Dimethyl thiodipropionate	Unknown	Unknown	OW 797562	N	
DOEMEGAN		Unknown	Unknown	OW 797605	N	
Drakeol #35 oil		Unknown	Unknown	OW 005200 Olin Memo	N	
Elten		Product	Pre	AB 04322 Unit Summary	N	
Endosulfan		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Endrin		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Endrin Ketone		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Etheneen		Unknown	Unknown	OW 005200 Olin Memo	N	
Ether		Unknown	Unknown	OW 797581	N	
Ethyl acetate	Ethyl Elhanoate, Acetic Ester	Unknown	Unknown	OW 000046 waste report	Y	00141-78-6
Ethyl Acetoacetate		Unknown	Unknown	OW 373720 Stepan Technical Information	N	
Ethylene glycol	1,2-Thanediol	Unknown	Unknown	OW 005200 Olin Memo	N	
Ethylene oxide		Unknown	Unknown	OW 797613	N	
Fast Spermoil		Raw	Unknown	Oils used at Wilmington	N	
Fatty amines		Raw	Unknown	Table 2-2 from GSA	Y	
Ficel AC3F		Product	Unknown	Wilmington Finished Goods	N	
Ficel CRA		Product	Unknown	Wilmington Finished Goods	N	
FI-Guard		Unknown	Unknown	3000105 1964 ltr	N	
Fisons DNPT 80		Unknown	Unknown	Technical News FL-13085	N	
Formaldehyde		Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	00050-00-0
Formamide	Methanamide, carbamaldehyde	Unknown	Unknown	OW 005200 Olin Memo	N	
Formic acid		Unknown	Unknown	OW 1285-1339	N	
Fransil 251		Product	Pre	AB 04322 Unit Summary	N	
Glycerine	Glycerol, 1,2,3-propanetriol	Raw	Unknown	OW 021018 List of Raw materials	Y	00056-81-5
Glycol Ethers	glycol monethyl ether	Unknown	Unknown	OW 005200 Olin Memo	Y	00110-80-5
Hardener	S-7087	Product	Unknown	Wilmington Finished Goods	N	
HBr	Anhydrous hydrobromic acid??	Unknown	Unknown	OW 005211 Olin memo	N	
HCL AQ		Waste/Byproduct	Unknown	Table 4-14	N	
Heavy White Oil		Raw	Unknown	OW 021018 List of Raw materials	N	
Heptachlor		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Heptachlor epoxide		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Hexamethylenetetramine	Hexamine, Methenamine	Raw	Pre	Table 2-2 from SCA	Y	100-97-0
Hexane		Raw	Unknown	OW 021018 List of Raw materials	N	
Hexylene Glycol		Raw	Unknown	OW 021018 List of Raw materials	Y	00107-41-5

0041-0140

0041-0141

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Oiln	Reference	On existing PCOC List	CAS#
Hisil 233		Unknown	Unknown	OW 567715 Olin ltr	N	
Hydrazine	see hydrazine hydrate	Raw & Product	Pre	OW 021018 list of Raw materials	Y	00302-01-2
hydrazine hydrate	see hydrazine	Unknown	Unknown	OW 797586	N	
Hydrazodicarbonamide	Urazole; 1,2,4-triazolidine, 3,5-dione; bicarbaminide				Y	3232-84-6
Hydrochloric acid		Raw & Waste/Byproduct	Pre	OW 021018 list of Raw materials	Y	07647-01-0
Hydrogen Cyanide in Aq. Solution	Cyanide	Waste	Unknown	OW 030048 waste report	Y	00057-12-5
Hydrogen Peroxide		Unknown	Unknown	Wilmington Raw Materials sheet 2	Y	07722-84-1
Indupol H-100		Unknown	Unknown	OW 1285-1339	N	
Indusoil		Unknown	Unknown	HP 00548	N	
Inks		Unknown	Unknown	OW 005200 Olin Memo	N	
Iron		Unknown	Unknown	Severn Trent Results 1998	N	
Isooctyl alcohol		Raw	Unknown	BIOP HP 00615	N	
Isophthalic acid	1,3-Benzenedicarboxylic acid				Y	121-91-5
Kempore "B"		Product	Unknown	OW 1285-1339	N	
Kempore 117		Product	Unknown	OW 1285-1339	N	
Kempore 125		Product	Pre	AB 04322 Unit Summary	N	
Kempore 125A		Product	Unknown	OW 009047	N	
Kempore 125FF		Product	Unknown	Wilmington Finished Goods	N	
Kempore 125HS		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 125LP		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 125-MC		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 150		Product	Pre	AB 04322 Unit Summary	N	
Kempore 200		Product	Pre	Wilmington Finished Goods	N	
Kempore 200FF		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 200MC		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 60		Product	Unknown	Wilmington Finished Goods	N	
Kempore 60/14		Product	Unknown	Wilmington Finished Goods	N	
Kempore 60/14 MC		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 60/14 XL		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 60/14FF		Product	Unknown	OW 567715 Olin ltr	N	
Kempore 80					N	
Kempore BA-101		Product	Unknown	OW 1285-1339	N	
Kempore HDCA		Product	Unknown	OW 567715 Olin ltr	N	
Kempore HDCI		Product	Unknown	OW 025792	N	
Kempore K-1		Product	Unknown	HP00653 Operating procedure	N	
Kempore R-125		Product	Unknown	AB 04322 Unit Summary	N	
Kempore SD-125		Product	Pre	Wilmington Finished Goods	N	
Kempore SD-150		Product	Pre	OW 373719-M Production Summary	N	
Kempore SD-200		Product	Pre	Wilmington Finished Goods	N	
Kempore SD-200/EPO		Product	Unknown	Wilmington Finished Goods	N	
Kempore SD-60		Product	Pre	Wilmington Finished Goods	N	

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Kempore SDA-200		Product	Unknown	Wilmington Finished Goods	N	
Kempore UD					N	
KSP		Unknown	Unknown	OW 1285-1339	N	
K-tert-butoxide		Unknown	Unknown	OW 797580	N	
L-115 Resin		Product	Unknown	OW 1285-1339	N	
L-118-A Resin		Product	Unknown	OW 1285-1339	N	
L-119 Resin		Product	Unknown	OW 1285-1339	N	
L-303 Resin		Unknown	Unknown	OW 1285-1339	N	
lauryl alcohol		Byproduct	Unknown	OW 006285 Olin	N	
Lead octate		Raw	Unknown	OW 005200 Olin Memo	N	
LiH		Raw	Unknown	OW 797361	N	
Lime slurry	Lime	Raw	Unknown	OW 021018 List of Raw materials	N	
Liqro		Unknown	Unknown	Olin 1983 Aug. 30 memo	N	
Liquid DPA		Raw	Unknown	OW 1285-1339	N	
Magnesia 30-C		Product	Pre	AB 04322 Unit Summary	N	
Magnesia 5		Product	Pre	AB 04322 Unit Summary	N	
Magnesium		Unknown	Unknown	Severn Trent Results 1998	N	
Maleic anhydride		Raw	Unknown	Table 2.2 from CSA	Y	00108-31-6
Manganese		Unknown	Unknown	Severn Trent Results 1998	N	
Maple Resin		Product	Pre	AB 04322 Unit Summary	N	
MEA		Raw	Unknown	OW 005211 Olin memo	N	
melathane		Product	Unknown	Wilmington Finished Goods	N	
Mercury		Unknown	Unknown	OW 023161	Y	07439-97-6
Methanol	alcohol	Raw	Unknown	OW 021018 List of Raw materials	Y	00067-56-1
Methoxychlor		Pesticide	Unknown	Sheet on Pesticides at Olin (in 2nd big box)	N	
Methyl acrylate		Unknown	Unknown	OW 797578	N	
methyl carbazate		Unknown	Unknown	OW 797586	N	
Methyl Ethyl Ketone	2-Butanone	Unknown	Unknown	OW 373720 Stepan Technical Information	Y	00078-93-3
methyl glucoside		Unknown	Unknown	OW 797579	N	
Mineral Oil, Mineral Seal Oil		Raw	Unknown	OW 021018 List of Raw materials	Y	
Mineral Spirits		Raw	Unknown	OW 021018 List of Raw materials	Y	08030-30-6
Mixture of Silicone and Emulsions	CNC Antifoam 100	Raw	Unknown	OW 021018 List of Raw materials	Y	
Monochlorourea		Unknown	Unknown	OW 793233	N	
Monoethanolamine	2-aminoethanol	Raw	Unknown	OW 021018 List of Raw materials	Y	00141-43-5
Monohydrazine		Unknown	Unknown	OW 1285-1339	N	
monohydrazine sulfata	MHS	Unknown	Unknown	HP 00654 K-1 operating	N	
Morpholine		Unknown	Unknown	OW 373720 Stepan Technical Information	Y	00110-91-8
Muriatic acid		Raw	Unknown	OW 005200 Olin Memo	N	

0041-0142

0041-0143

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
N,N-Dimethylformamide	DMF	Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	00068-12-2
Napoi		Product	Unknown	Wilmington Finished Goods	N	
Natrasol		Unknown	Unknown	OW 005200 Olin Memo	N	
NBA		Raw	Unknown	OW 797361	N	
n-butanol	see also butanol, butyl alcohol	Unknown	Unknown	OW 093469 Olin Memo	N	
NC 1978		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 3363		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 4676		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 4780		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 5016		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 5651		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 6583		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NC 6627		Unknown	Unknown	BDG 011360 Fisons Corporations	N	
NEV Paradine #2 Resin		Product	Pre	AB 04322 Unit Summary	N	
NEV R-16 Resin		Product	Pre	AB 04322 Unit Summary	N	
NEV R-29 Resin		Product	Pre	AB 04322 Unit Summary	N	
N-Heptane	Heptane	Raw	Unknown	OW 005200 Olin Memo	Y	00142-82-5
Nitric Acid					Y	07697-37-2
Nitrogen		Unknown	Unknown	OW 009660	Y	7727-37-9
nitrogen trichloride		Unknown	Unknown	B06000004 Fisons Limited	N	
Nitropore ATA		Product	Unknown	Wilmington Finished Goods	N	
Nitropore OT		Product	Pre	Table 2.2 from CSA	N	
Nitropore RP-10		Product	Unknown	OW 567715 Olin Itr	N	
N-Nitrosodiphenylamine	Willtron-N	Product	Pre	Table 2.2 from CSA	Y	00086-30-6
Nonylphenol		Raw	Pre	OW 021018 List of Raw materials	Y	25154-52-3
Nopco 1444-B		Unknown	Unknown	Deposition Exhibit 1979 date	Y	25154-52-3
NP061 Resin		Product	Unknown	OW 1285-1339	N	
NPH-15		Unknown	Unknown	OW 1285-1339	N	
NPI-11		Product	Unknown	Wilmington Finished Goods	N	
NPS-201C		Product	Unknown	Wilmington Finished Goods	N	
NP-SAL-1		Raw	Unknown	HP 00527	N	
Nuostabe V1444		Raw	Unknown	OW 021018 List of Raw materials	N	
Nurothane		Unknown	Unknown	OW 1285-1339	N	
OBSA		Unknown	Unknown	OW 797589	N	
OBSH	4-4'oxybisbenzenedisulfonyl hydrazide; Nitropore OBSH	Product	Unknown	Wilmington Finished Goods	N	
Octadecanol		Raw	Unknown	OW 797361	N	

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Oleic acid		Raw	Unknown	Poly Brite HP 00562	N	
Opex	Product A; dinitrosopentamethylene tetramine	Product	Pre	OW 373719-M Production Summary	N	
Opex 100		Product	Unknown	Wilmington Finished Goods	N	
Opex 40		Product	Pre	AB 04322 Unit Summary	N	
Opex 42		Product	Unknown	Wilmington Finished Goods	N	
Opex 80		Product	Unknown	Wilmington Finished Goods	N	
Opex 93		Product	Unknown	Wilmington Finished Goods	N	
Opex PL-80		Product	Pre	AB 04322 Unit Summary	N	
Opex SBA		Product	Unknown	OW 1285-1339	N	
Opex-4X		Product	Unknown	HP 00527	N	
Opex-RPC		Product	Unknown	AB 04322 Unit Summary	N	
Opex-XBA		Product	Unknown	AB 04322 Unit Summary	N	
Oxalic acid	Ethanedioic acid	Raw	Unknown	OW 005200 Olin Memo	N	
Oxalic Dihydrate	Semioxamizide, Aminooxocetic acid, hydrazide, oxamic acid hydrazide				Y	515-96-8
Oxybisbenzenesulfonyl chloride	OBSC	Product	Unknown	Wilmington Finished Goods	N	
Para-Toluene Sulfonic Acid water	PTSA	Raw	Unknown	OW 005200 Olin Memo	Y	6192-52-5
Paraformaldehyde	Paraform	Raw	Unknown	OW 005200 Olin Memo	Y	30525-89-4
Paraplex		Unknown	Unknown	Deposition Exhibit 1979 date	N	
PBNA	NP-20; 20-N	Product	Pre	AB 04322 Unit Summary	N	
PC oil		Unknown	Unknown	Oils used at Wilmington	N	
Phenol		Raw & Waste/Byproduct	Pre	Table 2.2 from CSA	Y	00108-95-2
Phenol formaldehyde Resin		Product	Pre	Table 2.2 from CSA	N	
Phosphorus Trichloride		Raw	Pre	OW 021018 List of Raw materials	Y	07719-12-2
Phthalate Ester		Unknown	Unknown	OW 567719	N	
Phthalic Anhydride	Phthalandione; Willrot P	Unknown	Unknown	OW 005200 Olin Memo	Y	00085-44-9
Poly brite 600		Product	Pre	AB 04322 Unit Summary	N	
Poly Brite PE 20		Product	Pre	AB 04322 Unit Summary	N	
Poly Brite W10		Product	Pre	AB 04322 Unit Summary	N	
Poly Sperser AP-2		Product	Pre	AB 04322 Unit Summary	N	
Poly Sperser AP-300		Product	Pre	AB 04322 Unit Summary	N	
Poly Sperser LC-20		Product	Pre	AB 04322 Unit Summary	N	
Poly Sperser R-100		Product	Pre	AB 04322 Unit Summary	N	
Poly-BUT 66-6		Unknown	Unknown	OW 1285-1339	N	

0041-0144

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
polychlorinated biphenyls		Waste	Unknown	OW 030047	N	
Polycone 1000		Product	Pre	AB 04322 Unit Summary	N	
Polycone 100X		Product	Pre	AB 04322 Unit Summary	N	
Polycone 125X		Product	Pre	AB 04322 Unit Summary	N	
Polycone 2000		Product	Pre	AB 04322 Unit Summary	N	
Polycone 500		Product	Pre	AB 04322 Unit Summary	N	
Polycone 5000		Product	Pre	OW 373719-M Production Summary	N	
Polycone Le 46 150x		Product	Unknown	Wilmington Finished Goods		
Polycone M-35 oil		Product	Pre	AB 04322 Unit Summary	N	
Polycone ORG 22		Product	Pre	AB 04322 Unit Summary	N	
Polycone XSP		Product	Pre	AB 04322 Unit Summary	N	
Polyethylene		Waste	Unknown	OW 021839 Annual Report	N	
Poly-Lube		Product	Unknown	Unit Summary???	N	
Polymag 500		Product	Pre	AB 04322 Unit Summary	N	
polymeric alkylated phenol		Waste	Unknown	OW 030046 Waste Report	N	
Polymyke		Product	Pre	AB 04322 Unit Summary	N	
PolyPeg E		Product	Unknown	Wilmington Finished Goods	N	
Polyphen 188					N	
Polyphen L-305		Product	Unknown	OW 1285-1339	N	
Polyphen S-201-C		Product	Pre	AB 04322 Unit Summary	N	
Polyphen S-202-C		Product	Pre	AB 04322 Unit Summary	N	
Polyphen S-202-F		Product	Pre	AB 04322 Unit Summary	N	
Polyurethane		Unknown	Unknown	OW 1285-1339	N	
Polyzole		Product	Unknown	Wilmington Finished Goods	N	
potassium		Unknown	Unknown	Severn Trent Results 1998	N	
Potassium bromate		Reagent	Unknown	OW 798168	N	
Potassium bromide		Reagent	Unknown	OW 798168	N	
Potassium F-80		Unknown	Unknown	ltr from Stepan	N	
Potassium hexoate		Raw	Unknown	OW 005200 Olin Memo	N	
Potassium Hydroxide		Raw	Unknown	OW 005241 Olin memo	Y	01310-58-3
Potassium octate		Raw	Unknown	OW 005200 Olin Memo	N	
Potassium oleate		Raw	Pre	OW 021018 List of Raw materials	Y	
Potassium Stearate		Raw	Unknown	OW 005200 Olin Memo	Y	593-29-3
Processing oil		Raw & Waste/Byproduct	Pre	Table 2.2 from CSA	N	
propionic hydrazine		Unknown	Unknown	OW 797564	N	
PVC		Unknown	Unknown	OW 1285-1339	N	
Pyridine		Unknown	Unknown	OW 373720 Stepan Technical Information	N	
Rapeseed oil		Unknown	Unknown	Wilmington Raw Materials sheet 2	N	
Reclaim oil NEV-LX-859		Product	Pre	AB 04322 Unit Summary	N	
RIA CS		Product	Unknown	Wilmington Finished Goods	N	
RIA G-62		Product	Unknown	OW 1285-1339	N	
RIA NC		Product	Pre	Wilmington Finished Goods	N	
RIA PL-66		Product	Pre	AB 04322 Unit Summary	N	

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Oil	Reference	On existing PCOC List	CAS#
RIA X-66		Product	Pre	AB 04322 Unit Summary	N	
Rilsan		Unknown	Unknown	Miscellaneous Paper	N	
RP-3		Product	Unknown	Wilmington Finished Goods	N	
RPC		Unknown	Unknown	Written sheet 1997	N	
Rubber Process Oil #415		Raw	Unknown	OW 021018 List of Raw materials	N	
S 6150		Product	Unknown	Wilmington Finished Goods	N	
S 7554		Product	Unknown	Wilmington Finished Goods	N	
S 7613		Product	Unknown	Wilmington Finished Goods	N	
S 7614		Product	Unknown	Wilmington Finished Goods	N	
S 7615		Product	Unknown	Wilmington Finished Goods	N	
S 7707		Product	Unknown	Wilmington Finished Goods	N	
S 7708		Product	Unknown	Wilmington Finished Goods	N	
S 7842		Product	Unknown	Wilmington Finished Goods	N	
Santicizer 722		Raw	Unknown	Wilmington Raw Materials sheet 2	N	
Santocel	Silica aerogel	Raw	Unknown	Table 2.2 from CSA	Y	63231-67-4
Sebacic dihydrazide		Product	Unknown	Wilmington Finished Goods	Y	925-83-7
Semicarbazide hydrochloride		Unknown	Unknown	OW 023366 Olin	N	
Semicarbazide solution		Product	Pre	Table 2.2 from CSA	N	
Semi-gloss	S-7268	Product	Unknown	Wilmington Finished Goods	N	
Silica		Raw	Unknown	OW 005200 Olin Memo	N	
Silicon Dioxide	Sand; Aerosil 380	Unknown	Unknown	OW 56715 Olin ltr	Y	7631-86-9
Silicone	Polycone	Raw	Unknown	Table 2.2 from CSA	Y	
Soda ash		Raw	Unknown	Wilmington Raw Materials sheet 2	N	
sodium		Unknown	Unknown	Severn Trent Results 1998	N	
Sodium acetate		Raw	Unknown	OW 005200 Olin Memo	N	
Sodium Azide		Raw	Pre	Table 2.2 from CSA	Y	26628-22-8
Sodium Bicarbonate/Sodium Carbonate		Raw	Unknown	OW 005200 Olin Memo	Y	144-55-8/497-19-8
sodium bichromate		Unknown	Unknown	HP 00269	N	
Sodium Bromide		Raw & Waste/Byproduct	Pre	Table 2.2 from CSA	Y	7647-15-5
Sodium Chlorate	Soda Chlorate	Raw	Pre	OW 021018 List of Raw materials	Y	07775-09-9
Sodium Chloride		Waste/By-product	Pre	Table 2.2 from CSA	Y	7647-14-5
Sodium dicarbonate		Raw	Unknown	Wilmington Raw Materials sheet 2	N	
Sodium Dichromate		Unknown	Unknown	HP 00663 Product K-1 operating procedure	Y	10588-01-9
Sodium Hydroxide Liquid/Flake	Soda Lye Solution	Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	1310-73-2
Sodium Hypochlorite		Raw	Unknown	OW 006285 Olin	Y	07681-52-0
sodium lauryl sulfate		Unknown	Unknown	OW 797561	N	

0041-0146

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Sodium Nitrate		Waste/By-product	Pre	Table 2.2 from CSA	Y	7631-99-4
Sodium Nitrite		Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	07632-00-0
Sodium Stearate		Raw		OW 005200 Olin Memo	Y	822-16-2
Sodium Sulfite/Sulfate		Waste/By-product	Pre	Table 2.2 from CSA	Y	7757-83-1 7757-82-6
Soybean Oil Epoxide	Vikoflex	Unknown	Unknown	OW 021018 List of Raw materials	Y	
Stearate		Unknown	Unknown	OW 1285-1339	N	
Styrene	Ethylbenzene, styro, styrolene, cinnamene, cinnamol, phenylethylen, vinyl benzene	Unknown	Unknown	OW 1285-1339	N	
Styrene butadiene rubber	SBR	Unknown	Unknown	Excerpt from Riley Deposition	N	
Sulfuric Acid		Raw & Waste/Byproduct	Pre	OW 021018 List of Raw materials	Y	07664-93-9
Sunpar 120		Raw	Unknown	OW 021018 List of Raw materials	N	
Sunthen 410 oil		Unknown	Unknown	Oils used at Wilmington	N	
SWS 233	silicon emulsion	Raw	Unknown	OW 021018 List of Raw materials	N	
Sytox ADP	DODPA, Lestane, dioctyldiphenylamine, ADP-F	Product	Pre	Wilmington Finished Goods	N	
Tall oil	Liqrene	Unknown	Unknown	Oils used at Wilmington	N	
TBA		Unknown	Unknown	OW 797580	N	
TBR		Unknown	Unknown	OW 1285-1339	N	
Tetraflex DBP		Product	Pre	AB 04322 Unit Summary	N	
Tetraflex DIDP		Product	Pre	AB 04322 Unit Summary	N	
Tetraflex DOP		Product	Pre	AB 04322 Unit Summary	N	
Tetraflex R-122		Product	Pre	AB 04322 Unit Summary	N	
Tetraflex RS-10		Product	Pre	AB 04322 Unit Summary	N	
Tetraphen 201-C		Unknown	Unknown	AB03289 NP	N	
Tetraphen 201-P		Unknown	Unknown	AB03289 NP	N	
Tetraphen 218 I		Unknown	Unknown	AB03295 NP	N	
Tetraphen 218 P		Unknown	Unknown	AB03295 NP	N	
Tetraphen S-201-F		Unknown	Unknown	AB03289 NP	N	
Tetraphen 218 C		Unknown	Unknown	AB03295 NP	N	
Thiosemicarbazide		Unknown	Unknown	OW 797273	N	
Titanium Dioxide	R-66	Product	Pre	AB 04322 Unit Summary	N	
TMTD		Product	Pre	AB 04322 Unit Summary	N	
Toluene		Raw	Unknown	Table 2.2 from CSA	Y	00108-88-3
Toluene Diisocyanate		Unknown	Unknown	Lab Record Book H57701	N	
Toluol		Unknown	Unknown	OW 005200 Olin Memo	N	
Trancoa 375 B		Unknown	Unknown	OW 1285-1339	N	
Trichloroethylene		Unknown	Unknown	Severn Trent Results 1998	N	

0041-0147

Potential Contaminant of Concern	Common Names	Raw, Product, Waste, Unknown, By-product	Pre- or Post-Olin	Reference	On existing PCOC List	CAS#
Triethanolamine		Raw	Unknown	OW 373732	Y	102-71-6
Trisopropanolamine		Unknown	Unknown	OW 005211 Olin memo	N	
Triphenyl phosphite		Unknown	Unknown	BDG 000007, Fisons limited	N	
Trivalent chromium		Unknown	Unknown	OW 373643	N	
Ucon 50 HB5100		Unknown	Unknown	OW 373732	N	
Ufamite MM-67		Raw	Unknown	Table 2.2 from CSA	Y	
Urea	Carbamide	Raw & Waste/Byproduct	Pre	Table 2.2 from CSA	Y	00057-13-6
Urea formaldehyde Resin		Product	Pre	Table 2.2 from CSA	N	
vanadium		Unknown	Unknown	Phase I Site Inspection (2nd)	N	
Wiltrol N	N-NDPA; n-nitrosodiphenylamine	Product	Unknown	Wilmington Finished Goods	N	
Wiltrol P	phthalic anhydride	Product	Pre	AB 04322 Unit Summary	N	
Wytox 312	TNPP, trisnonylphenylphosphite	Product	Pre	Wilmington Finished Goods	Y	26523-78-4
Wytox 312-S		Product	Unknown	OW 567715 Olin ltr	N	
Wytox 320	alkaryl phosphite	Product	Unknown	OW 567716	N	
Wytox 345/355/438	Polymeric phosphite	Product	Unknown	Wilmington Finished Goods	N	
Wytox 438-S		Product	Unknown	OW 567715 Olin ltr	N	
Wytox 540		Product	Unknown	Wilmington Finished Goods	N	
Wytox 604		Product	Unknown	Wilmington Finished Goods	N	
Wytox 604IMS		Product	Unknown	OW 567715 Olin ltr	N	
Wytox ADP		Product	Unknown	Location of Acid Pits Figure	N	
Wytox BHT	butylated hydroxytoluene	Product	Unknown	JMW03455 Minutes	N	
Wytox LT	Diaurylthiopropionate	Product	Unknown	JMW03455 Minutes	N	
Wytox NPD-J-S		Product	Unknown	OW 567715 Olin ltr	N	
Wytox PAP	alkylated phenol	Product	Pre	Wilmington Finished Goods	N	
Wytox PAP-S		Product	Unknown	OW 567715 Olin ltr	N	
Wytox PAPSE	self-emulsifying polmeric hindered phenol	Product	Unknown	OW 567715 Olin ltr	N	
Wytox PDA	polmeric hindered phenol	Product	Unknown	Wilmington Finished Goods	N	
Wytox PMW		Product	Unknown	Wilmington Finished Goods	N	
Xylene	dimethylbenzene	Solvent	Unknown	OW 797811	Y	01330-20-7
Zinc hexoate		Raw	Unknown	OW 005200 Olin Memo	N	
Zinc octate		Raw	Unknown	OW 005200 Olin Memo	N	
Zinc Oxide		Raw	Pre	Table 2.2 from CSA	Y	1314-13-2
Zinc Stearate		Raw	Unknown	OW 005200 Olin Memo	Y	557-0501

0041-0148

**THIS SHIPPING ORDER** must be legibly filled in, in ink, in indelible pencil or in Carbon, and retained by the agent RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Shipping Order.

AT <b>066</b>	DATE <b>10/19/83</b>	PAGE DO NOT SUBMIT FREIGHT BILL WITHOUT THIS NUMBER
ROUTE <b>WILMINGTON</b>	VEHICLE NO.	SHIPPER'S NO. <b>066-MDT</b>
CONSIGNEE TO <b>WILL CALL</b>		

CONSIGNEE TO  
**WHITNEY BARRELL**  
**WOBURN, MA**

CUSTOMER'S ORDER NO.  
*Release # 71227*

FOR CHEMICAL EMERGENCY:  
SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL:  
CHEMTREC-DAY OR NIGHT:  
800-424-9800

FREIGHT CHARGES ARE	IF CHARGES ARE PREPAID MAIL PREPAID FREIGHT BILL TO: OLIN CORPORATION 120 LONG RIDGE ROAD, P.O. BOX 876 STAMFORD, CT, 06904-0876 ACCOUNTS PAYABLE	CARRIER INSTRUCTIONS SEE BELOW	*If the shipment moves between ports by a carrier by water, the bill requires that the bill of lading state whether it is "carrier's or shipper's weight."  Note: Where the note is dependent on released value the agreed or declared value of the property is hereby stated by the shipper to be not exceeding 100 CENTS PER POUND OR ANY OTHER UNIT AUTHORIZED BY PRO-C-222	OLIN CORPORATION (SIGNATURE OF COMMISSIONER)	The shipment is correctly described. Gross weights of the shipment are correct as shown herein and subject to verification by the governing Weighing and Inspection Bureau.  OLIN CORPORATION (SIGNATURE OF COMMISSIONER)
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NO. OF PACKAGES	KIND OF PACKAGE	DESCRIPTION OF ARTICLES, SPECIAL MARKS, AND EXCEPTIONS	WEIGHT	CLASS OR RATE
144		EMPTY PCL, DRUMS - TRIPLE LINED	50	

*NOTE: Please change name to read same as information verifying contract as different company completely*

*Diane Weiss*

0041-1052

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

**2** OLIN CORPORATION, Shipper  
Per *M. D. Rowland*

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

EXHIBIT K



No. 09267

**PURCHASE ORDER**

(BUYER'S)

REQUISITION NO.

DATE OF ORDER

TO

**Whitney Barrel Co.**  
 P. O. Box 755  
 Houston, TX. 01801

**IMPORTANT READ ALL INSTRUCTIONS, TERMS AND CONDITIONS ON FACE AND REVERSE SIDES.**

**BUYER'S ORDER NUMBER MUST APPEAR ON ALL PACKAGES, SHIPPING DOCUMENTS, INVOICES AND CORRESPONDENCE. QUANTITY, UNITS AND BUYER'S CODE NUMBER AS SHOWN BELOW MUST APPEAR ON INVOICES AND PACKING LISTS.**

DELIVER TO

**Mr. [Name]**  
**Olin Corporation - Chemicals Group**  
 51 Kansas Street  
 Wilmington, DE. 01887-3300

**MAIL INVOICES IN TRIPPLICATE AND PROOF OF SHIPMENT TO ACCOUNTING DEPARTMENT AT**

**51 Kansas Street Wilmington, DE. 01887-3300**

SHIP VIA <b>TRUCK</b>	SELLER'S QUOTE NO. OR DATE <b>12/27/78</b>	DELIVERY DATE <b>12/27/78</b>
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F.O.B. <b>Delivered</b>	TERMS <b>Net 30 Days</b>	FOR RESALE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
----------------------------	-----------------------------	---

ITEM	QUANTITY	UNIT	BUYER'S CODE NO.	DESCRIPTION	PRICE	ACCOUNTING CHARGE NO.
<b>Continuing order placed by the undersigned and accepted by your bank in telegram dated 12/27/78. In New England.</b>						
<b>1</b>	<b>2</b>	<b>ea</b>		<b>25 gal. 215 stainless steel drums open head</b>	<b>250.00/ea</b>	
<b>total net</b>					<b>500.00</b>	

**INSTRUCTIONS TO SELLER:**

This Purchase Order is issued subject to and expressly conditional on your acceptance of all terms and conditions on the face and on the reverse side hereof and any supplemental conditions attached hereto.

*Donald T. Grant*

BY **Donald T. Grant (Buyer)**  
**OLIN CORPORATION**

ACCOUNTS PAYABLE

US EPA ARCHIVE DOCUMENT



No. 09267

PARTIAL	<b>RECEIVING REPORT</b>	COMPLETE	NO. 2

REQUISITION NO.

DATE OF ORDER

TO •  
 • **Wetmore Special Co.**  
 • **P.O. Box 285**  
 • **Wilmington, N.C. 28403**

**138232**

**12/27/62**

DELIVER TO •  
 • **Jim Martucci**  
 • **Olin Corporation-Chemicals Group**  
 • **51 Zanes Street**  
 • **Wilmington, N.C. 28407-3393**

TRANSPORTATION CO.	PREPAID	COLLECT
CAR INITIALS AND NO.	NO. PACKAGES	
ACCOUNTING DEPARTMENT		
<b>51 Zanes Street Wilmington, N.C. 28407-3393</b>		

SHIP VIA <b>truck</b>	SELLER'S QUOTE NO. OR DATE <b>12/27/62</b>	DELIVERY DATE <b>12/28/62</b>
F.O.B. <b>collected</b>	TERMS <b>net 30 days</b>	FOR RESALE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

RECEIVED	ITEM	QUANTITY	UNIT	BUYER'S CODE NO.	DESCRIPTION	PRICE	ACCOUNTING CHARGE NO.
					<p><b>Confirming order placed by the undersigned and accepted by your Jack in telegram dated 12/27/62. Do not duplicate.</b></p>		<b>944-423-642</b>
	<b>1</b>	<b>2</b>	<b>ea</b>		<b>55 gal. 316 stainless steel drum open head</b>	<b>\$159.50/ea</b>	
					<b>total net</b>	<b>309.00</b>	

GROSS	RECEIVED BY <b>Jim Martucci</b>	DATE	INSPECTED BY <b>James E. Court (checked)</b>	DATE
TARE	REJECTED ITEMS (SHOW ITEM NO. AND EXPLAIN ON REVERSE SIDE)			
NET				

RECEIVING - ACCOUNTING

**WHITNEY BARREL CO. INC.**

Complete Drum Reconditioning

Established 1898

All Types of Steel Drums-Fibre Barrels-Purchases-Sales

256 Salem Street Woburn, Mass. 01801

Phone 933-4520 - 21

*Joan Sullivan*

CUSTOMER'S ORDER NO. <i>09267</i>		PHONE		DATE <i>12-31-82</i>	
NAME <i>OLIN CORP.</i>					
ADDRESS <i>51 Essex St. Woburn, Mass 01887</i>					
SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MOSE. RETD.
<i>2 55 gal. S.S. Woburn</i>					
<i>Del.</i>					
<i>Att: Jim Montecchi</i>					
RECEIVED BY <i>M. Mancione</i>					TAX
TOTAL					

All claims and returned goods MUST be accompanied by this bill.

0414

PRODUCT 6103 **NEBS** Inc. Woburn, Mass. 01850

*Thank You*





**CHASE REQUISITION**

0, R 183

**NOTE:** Do not use this form for materials which can be procured by Release Order Form OC-216A.

MOT

REQUISITION NUMBER:

WI 324040

**IMPORTANT:** OUTLINE AREA FOR USE OF PURCHASING DEPARTMENT ONLY.

CHECK SUCCESSFUL BIDDER

WHITNEY BARREL  
Woburn St  
Wilmington, MA

P.O. DATE 10-31-86	P.O. NUMBER WI 324040
BUYER <i>James P. Clemon</i>	
CONFIRMING <input type="checkbox"/> PHONE <input type="checkbox"/> VERBAL	WITH (SELLER'S REPRESENTATIVE)
MAIL INVOICES TO ACCOUNTING DEPARTMENT AT ③	

SHIP TO OR DELIVER TO	BLDG. OR ROOM NO.	DEPARTMENT ④	TO BE CHECKED BY ⑤
SHIP TO	SHIP VIA <i>truck</i>	SELLER WILL SHIP	
	F.O.B. <i>delivered</i>	QUANTITY TOLERANCE ⑥	
	SELLER'S QUOTE NO. OR DATE -	DELIVERY DATE - SPECIFY ⑦ <i>W/O 11/3/86</i>	
	TERMS <i>Ref 30</i>	⑧ FOR RESALE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

- INDICATE BELOW:**
- 1. INSTRUCTIONS FOR INSPECTION IF REQUIRED AT SUPPLIER'S PLANT OR OUR PLANT.
  - 2. ADDITIONAL COPIES OF PURCHASE ORDER IF REQUIRED.
  - 3. ADDITIONAL CERTIFICATION COPY OF RECEIVING REPORT IF REQUIRED.

QUANTITY	UNIT	BUYER'S CODE NO.	DESCRIPTION	PRICE	ACCOUNTING CHARGE NO. ⑨
50	EA		RECONDITIONED OPEN HEAD 55 GAL DRUMS	183-002-F30 13. <sup>50</sup> / <sub>ea</sub>	
			ASAP		
			TOTAL \$ 675. <sup>00</sup>		

0041-1289

REQUISITIONER <i>W. W. CAMPBELL</i>	DATE <i>11/1/86</i>	APPROVED - TYPE NAME AND SIGN <i>[Signature]</i>	DATE <i>10/31/86</i>
--	------------------------	---	-------------------------

October 21, 2005

**By Hand**

Martha Bosworth  
Enforcement Coordinator  
U.S. Environmental Protection Agency  
Office of Site Remediation and Restoration (HBS)  
One Congress Street, Suite 1100  
Boston, MA 02114  
ATTN: Wells G&H Case Team

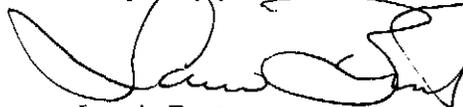
Re: Supplemental Request for Information Pursuant to Section 104 of  
CERCLA in relation to the former Whitney Barrel Company at the  
Wells G&H Superfund Site in Woburn, Massachusetts

Dear Ms. Bosworth:

On behalf of Olin Corporation, I am pleased to enclose Olin's response to EPA's 104(e) Supplemental Request for Information dated August 16, 2005, pertaining to Whitney Barrel Company. Olin submits this supplemental response in accordance with Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), as amended, and Section 3007 of RCRA, 42 U.S.C. § 6927, and in accordance with the extension of time as confirmed in a letter dated September 16, 2005, from Laurie Burt to Martha Bosworth (attached).

Please do not hesitate to call me if you have any questions.

Very truly yours,



Laurie Burt

cc: Curtis M. Richards (by mail, w/enclosure)

B3111847.1

0041-1304

September 16, 2005

Laurie Burt  
Boston Office  
617.832.1111  
lburt@foleyhoag.com

Martha Bosworth  
Enforcement Coordinator  
U.S. Environmental Protection Agency  
Office of Site Remediation and Restoration (HBS)  
One Congress Street, Suite 1100  
Boston, MA 02114

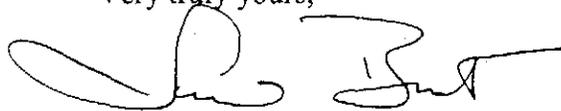
Re: Section 104(e) Supplemental Request for Information in relation to the former Whitney Barrel Company at the Wells G&H Superfund Site in Woburn, Massachusetts

Dear Martha:

This is to confirm that, pursuant to our telephone conversation yesterday, you have agreed to a thirty day extension of time within which Olin Corporation may respond to the above-referenced Supplemental Request for Information, from September 21, 2005, to October 21, 2005. As I explained, the questions posed in the Supplemental Request require Olin to review a substantial amount of material recalled from storage in order to determine if any of the materials are responsive.

If you have any questions, please contact me or my associate, Karen Crocker, at 617-832-3081. Again, thank you for your cooperation in this matter.

Very truly yours,



Laurie Burt

cc: Karen Crocker, Esq.

B3096036.1

0041-1305



P. O. BOX 248, 1186 LOWER RIVER ROAD, NW, CHARLESTON, TN 37310-0248

(423) 336-4000 FAX: (423) 336-4166

October 21, 2005

**RESPONSE TO SUPPLEMENTAL 104(e) INFORMATION REQUEST  
WHITNEY BARREL**

**PRELIMINARY STATEMENT**

In a Request for Information (the "Request") attached to a letter dated December 15, 2003, the Environmental Protection Agency, EPA New England ("EPA"), asked Olin Corporation ("Olin") to provide certain information and documents in connection with EPA's investigation of releases or threatened releases at the Whitney Barrel Company, 256 Salem Street, Woburn, Massachusetts, ("Whitney Barrel") situated within the Wells G&H Superfund Site in Woburn, Massachusetts, hereinafter referred to as the "Site." Specifically, EPA requested information and documents explaining Olin's relationship to Whitney Barrel. On March 15, 2004, Olin responded to EPA's information request (the "2004 Response").

In a letter dated August 16, 2005, the EPA asked Olin to provide additional information regarding certain matters included in the 2004 Response (the "Supplemental Request"), and information regarding some additional matters not raised in the Request. Olin submits this supplemental response in accordance with Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), as amended, and Section 3007 of RCRA, 42 U.S.C. § 6927, and in accordance with the extension of time as confirmed in a letter dated September 16, 2005, from Laurie Burt to Martha Bosworth.

Upon receipt of EPA's Supplemental Request, Olin undertook a diligent investigation (the "investigation") to identify information or documents responsive to the Supplemental Request. In accordance with the instructions set forth in the Supplemental Request, the investigation was limited to the facility located at 51 Eames Street in Wilmington, Massachusetts (the "Wilmington facility"), which is the only Olin facility located during the relevant period within a 25 mile radius of the Whitney Barrel facility of which Olin is presently aware.

In preparing this response, Olin reviewed the indexes of some 900 boxes of documents related to operations at this location. Boxes of material identified as potentially containing responsive information were reviewed for responsive documents. Olin also contacted employees believed to have relevant information. Olin reserves the right to supplement its response to the Supplemental Request, as appropriate, if such information is made available.

During this investigation, Olin located additional documents responsive to its 2004 Response. These documents are not responsive to the Supplemental Request. Olin provides these documents, attached hereto as **Exhibit L**, as a supplement to its 2004 Response.

This response is not made on the basis of personal knowledge unless otherwise indicated and was prepared by or with the assistance of agents, representatives and employees of Olin Corporation or others believed to have relevant information, and on the advice of counsel, which advice was relied upon herein. The answers set forth herein, subject to inadvertent or undiscovered errors or omissions, are based on and therefore necessarily limited by the records and information still in existence, currently recollected, thus far discovered in the course of the preparation of this response, and currently available to the undersigned.

If, upon review of this response to the Supplemental Request, EPA requires additional information and documents, please contact Curtis M. Richards of Olin at the address listed in the letterhead. Based on its investigation and subject to the foregoing understandings and reservations, Olin makes the following response to the Supplemental Request.

### **SPECIFIC RESPONSES TO SUPPLEMENTAL INFORMATION REQUEST**

#### **Information Concerning Olin's Waste Disposal and Facility Closure Activities**

- 1. In your 104(e) response you stated that Olin disposed of 193 barrels of material between 1981 and 1982 which were left at the Wilmington facility by the prior owner. Please identify all of the waste carriers, companies, and/or facilities used to dispose of these barrels.*

Response to Question 1: On information and belief, the "193 barrels" to which Olin referred in the 2004 Response were sent for disposal to CECOS International, Inc. and Rollins Environmental Services (NJ) Inc.

CECOS International, Inc.  
56<sup>th</sup> & Pine Avenue  
Niagara Falls, New York 14303

Rollins Environmental Services (NJ) Inc.  
Route 322 West  
P.O. Box 221  
Bridgeport, NJ 08014

2. For each company, please provide:
- a. The dates of each pickup and delivery;
  - b. The number of containers;
  - c. The type(s) of containers;
  - d. The size(s) of the containers;
  - e. The condition of each container;

Response to Question 2(a-e): Olin refers to the documents previously provided in the 2004 Response at **Exhibit I**, and the additional documents provided herein at **Exhibit AA** and **BB**.

- f. The original and any subsequently added contents (i.e., bulk raw material storage, finished product packaging, and/or waste storage), including but not limited to empty barrel residues, of each container including:
  - i. The name of each material;
  - ii. The chemical composition of each material;
  - iii. The physical state of each material (e.g., solid, sludge, liquid);
  - iv. The volume of each material; and

Response to Question 2(f)(i - iv): Olin refers to the documents contained in **Exhibit BB** attached hereto.

- g. All documentation or additional information related to these transactions.

Response to Question 2(g): Documents regarding these transactions were included in the 2004 Response at **Exhibit I**. For additional documents regarding the disposition of these barrels, please see **Exhibits AA** and **BB** attached hereto.

3. According to facility closure plan documents provided with your 104(e) response, Respondent hired a contractor to provide disposal of four process tanks to a scrap dealer in 1986. According to the agreement between Olin and the Contractor, "all of the methods of disposal and disposal sites [were] subject to Olin's approval." For each of these tanks, please identify the contractor(s), scrap dealer(s), and disposal location(s) used.

Response to Question 3: On information and belief, the "four process tanks" referred to in the facility closure plan documents were not disposed of in 1986. They were disposed of in 1987 or 1988, after the period being investigated.

**Information Concerning Respondent's Association with E. C. Whitney & Son**

1. *In your 104(e) response, you provided invoices documenting transactions with E. C. Whitney that reference "empty drums," "triple-rinsed empty drums," "mixed empty drums," "triple wash empty steel drum[s]," and "regular empty steel drums." Please describe the difference between each of these types of drums, including the processes used for each drum type.*

Response to Question 1: With the exception of the documents at **Exhibit CC** attached hereto, Olin has been unable to locate any specific information on the types of drums and processes to which this item of the Supplemental Request refers.

2. *In your 104(e) response you stated that, pursuant to RCRA regulations, all drums were required to be "thoroughly clean before being transported off-site." Please describe the procedures you employed to "thoroughly clean" all the drums you sold or otherwise sent/delivered off-site for recycling and/or disposal. Please describe how you disposed of any emptied materials and/or rinse water from these drums.*

Response to Question 2: Olin refers to its response to Question 1. Based on the current information known to Olin, it appears that rinse water from drum cleaning was likely discharged to the on-site waste water treatment facility. Treated waste water was likely discharged to the MDC sewer system pursuant to an Industrial Wastewater permit.

3. *Documentation regarding shipment of drums to E. C. Whitney was included in your 104(e) response. For each transaction, please provide:*
  - a. *The dates of each pickup and delivery;*
  - b. *The type(s) of containers;*
  - c. *The size(s) of the containers;*
  - d. *The condition of each container;*
  - e. *The original and any subsequently added contents (i.e., bulk raw material storage, finished product packaging, and/or waste storage), including but not limited to empty barrel residues, of each container including:*
    - i. *the name of each material;*
    - ii. *the chemical composition of each material;*
    - iii. *the physical state of each material (e.g., solid, sludge, liquid);*
    - iv. *the volume of each material;*

Response to Question 3(a-e): Olin refers to the documents contained in the 2004 Response at **Exhibit I**, and **Exhibit DD** attached hereto.

- f. *A description of the process Respondent used to empty, rinse, and/or clean the containers prior to pickup/delivery;*

Response to Question 3(f): Olin refers to its responses to Questions 1 and 2.

- g. *A description of how Respondent disposed of any emptied materials and/or rinse water; and*

Response to Question 3(g): Olin refers to its response to Question 2.

- h. *Any documentation or additional information regarding these transactions.*

Response to Question 3(h): Documents regarding the shipment of drums to E. C. Whitney were included in the 2004 Response at **Exhibit I**. For additional documents regarding the shipment of these drums, please see **Exhibit DD** attached hereto.

**Information Concerning Respondent's Association with any other Drum Reconditioning and/or Recycling Companies**

1. *State whether you sent/delivered containers to any other drum reconditioning/recycling company, including but not limited to, Kingston Steel Drum/Great Lakes Container Corporation (now known as Mallinckrodt, Inc.), Kingsland Drum Company, Roche Brothers Barrel & Drum Co., Roy Brothers, Inc., Ryan Barrel Company, Inc., and Woburn Barrel.*

Response to Question 1: Olin has not located information indicating that it sent or delivered containers from its Wilmington facility to any other drum reconditioning/recycling company, including but not limited to, Kingston Steel Drum/Great Lakes Container Corporation (now known as Mallinckrodt, Inc.), Kingsland Drum Company, Roche Brothers Barrel & Drum Co., Roy Brothers, Inc., Ryan Barrel Company, Inc., and Woburn Barrel.

2. *For each company identified above, please provide:*
- a. *The full name of each company or individual;*
  - b. *The full address for each company or individual;*
  - c. *How frequently you sent/delivered tanks to each company;*
  - d. *The time period during which tanks were sent/delivered;*
  - e. *The original and any subsequently added contents (i.e., bulk raw material storage, finished product packaging, and/or waste storage), including but not limited to empty barrel residues, of each container including:*
    - i. *the name of each material;*
    - ii. *the chemical composition of each material;*
    - iii. *the physical state of each material (e.g., solid, sludge, liquid);*
    - iv. *the volume of each material;*
  - f. *A description of the process Respondent used to empty, rinse, and/or clean the containers prior to pickup/delivery;*
  - g. *A description of how Respondent disposed of any emptied materials and/or rinse water; and*
  - h. *Any documentation or additional information regarding these transactions.*

Response to Question 2: Not applicable.

### Compliance with this Request

Note: All questions in this section refer to the present time unless otherwise indicated.

1. *Describe all sources reviewed or consulted in responding to this request and all individuals who have any knowledge of, or information about, the subject matter of any of the foregoing questions, including but not limited to:*
  - a. *the name of each individual;*
  - b. *the current job title and job description of each individual;*
  - c. *the job title and job description during the period being investigated of each individual;*
  - d. *whether each individual is a current or past employee of Respondent;*
  - e. *a description of the types of information the individual possesses (i.e., specific information on company operations, wastes generated, and/or waste disposal practices);*

Response to Question 1(a-e): Individuals consulted in responding to this request and individuals who have any knowledge of, or information about, the subject matter of any of the foregoing questions include but are not limited to

- Steve Morrow, Principal Environmental Specialist (1986-present), Olin Corporation, Charleston TN, general information concerning generation and disposal of wastes and environmental compliance;
- Allan Peirce, On-Site Manager (1996-present), Olin Corporation (51 Eames Street Facility), general information concerning generation and disposal of wastes and environmental compliance from 1996 to present;
- Don Cameron (former employee), maintenance (1980-86), On-Site Manager (1986-2000), Olin Corporation (51 Eames Street facility), general facility operations, maintenance and environmental compliance from 1980 to 1986;
- Don Knight (former employee), Treatment Plant Operator during period being investigated, Olin Corporation (51 Eames Street facility), operation of wastewater treatment plant and drum washing;
- June Plumer (former employee), Purchasing Agent during period being investigated, Olin Corporation (51 Eames Street facility), purchasing, contracts with vendors;
- Terry Printich (former employee), Administrative Assistant during period being investigated, Olin Corporation (51 Eames Street facility), purchasing, contracts with vendors;
- Lorraine Miller, Principal Environmental Specialist (present, employed as a chemist by Olin between 1973 and 1986), Olin Corporation, Charleston TN, 423/336-4500, corporate records retention;

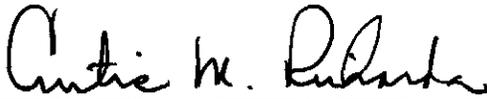
- David R. Vaughn (former employee), Associate Environmental Affairs Specialist and Regional Manager during period being investigated, Olin Corporation, Charleston TN, facility environmental compliance;
- Carl Nelson (former employee), Environmental Specialist during period being investigated, Olin Corporation, Charleston TN, facility environmental compliance;
- James C. Brown, Director of Environmental Remediation (2004-present), Process Engineer and Manager of Environmental Technology during period being investigated, Olin Corporation, Charleston TN, facility environmental compliance;
- Jack W. O'Grady, II (former employee), Senior Environmental Affairs Specialist during period being investigated, Olin Corporation, Charleston TN, facility environmental compliance;
- Ronald J. McBrien (former employee), Plant Manager during period being investigated, Olin Corporation (51 Eames Street facility), general facility operations;
- James F. Martucci (former employee), Production Engineer, Production Area Supervisor and Production Manager during period being investigated, Olin Corporation (51 Eames Street facility), general information on manufacturing processes; and
- M. D. Townley (former employee), Production Manager during period being investigated, Olin Corporation (51 Eames Street facility), general information on manufacturing processes.

*[This space intentionally left blank]*

- f. *the names of all divisions or offices of Respondent for which records were reviewed;*
- g. *the nature of all documents reviewed;*
- h. *the locations where those documents reviewed were kept prior to review;*  
*and*
- i. *the location where those documents reviewed are currently kept.*

Response to Question 1(f-i): Olin reviewed documents and information concerning the 51 Eames Street site in Wilmington, Massachusetts. Sources reviewed or consulted in responding to this request include but are not limited to records in Olin's corporate records archives, its Law Department, and its Environmental Remediation Group records center. The nature of the documents reviewed includes but was not limited to contracts, waste disposal records, and facility documents. Prior to review, these documents were stored in commercial records storage facilities. The reviewed records are currently either in the custody of Olin Corporation or have been returned to commercial records storage.

Signed this 1<sup>9</sup>th day of October, 2005



Curtis M. Richards  
Vice President, Environment, Health & Safety  
Olin Corporation







# MCGRATH NORTH MULLIN & KRATZ, PC LLO

ATTORNEYS AT LAW

SUITE 3700 FIRST NATIONAL TOWER  
1601 DODGE STREET, OMAHA, NEBRASKA 68102  
www.mcgrathnorth.com

JOHN A. ANDREASEN

TELEPHONE: 402-341-3070  
E-MAIL: jandreasen@mcgrathnorth.com

February 6, 2007

## VIA FEDERAL EXPRESS

Martha Bosworth  
Enforcement Coordinator  
U.S. Environmental Protection Agency, Region 1  
Office of Site Remediation and Restoration (HBS)  
1 Congress Street, Suite 1100  
Boston, Massachusetts 02114

ATTN: Wells G&H Case Team

Re: Supplemental Request for Information Pursuant to Section 104(e) of CERCLA in  
Relation to the Former Whitney Barrel Company at the Wells G&H Superfund  
Site in Woburn, Massachusetts

Dear Ms. Bosworth:

Our office represents ConAgra Foods, Inc., a corporate successor of Polyvinyl Chemicals, Inc. This response is being submitted to the above-referenced Supplemental Request for Information dated January 4, 2007 and received by our office on January 9, 2007. Further, this response incorporates previous correspondence and information contained therein from our office to the Agency and from Avecia, Inc., dated March 30, 2004 (copies attached as Exhibits A and B).

The above-referenced Supplemental Request for Information identifies Polyvinyl Chemicals, Inc. as having a possible connection to the Whitney Barrel Company. The pertinent time period identified as being investigated is 1950 to 1985. As previously stated, during this time period, Polyvinyl Chemicals operated at two different facilities within the vicinity of the subject Site, at 26 Howley Street, Peabody, Massachusetts from approximately 1959 until 1967 and at 730 Main Street, Wilmington, Massachusetts from 1967 to the present, subject to the various changes in business ownership as set forth in the above-referenced March 30, 2004 correspondence and as set forth in a response of AstraZeneca to a Request for Information for the Sutton Brook Disposal Area Superfund Site in Tewksbury, MA, dated April 6, 2001 (copy without enclosures attached as Exhibit C).

As previously stated in the above-referenced March 30, 2004 correspondence, Polyvinyl Chemicals, Inc. is not n/k/a AstraZeneca Pharmaceuticals, LP. The business that was previously

0045-1247

Martha Bosworth  
February 6, 2007  
Page 2

known as Polyvinyl Chemicals, Inc. is now owned and operated by DSM NeoResins, at 730 Main Street, Wilmington, Massachusetts.

Based upon the parties' additional investigation, no additional information responsive to the Whitney Barrel Company Request for Information is available at this time. As previously stated, Polyvinyl Chemicals has never operated at Eames Street, Wilmington, Massachusetts, as inferred by the interview documentation of a former Whitney Barrel employee, which was included in the documentation enclosed with the Agency's January 4, 2007 Supplemental Request for Information. However, we do note that a non-related company, National Polychemicals, Inc. operated a business at 51 Eames Street, Wilmington, Massachusetts which operated from 1953-1986 by several owners including American Biltrite Rubber Co., Fisons Limited, Fisons Corporation, Stepan Chemical Corporation and Olin Corporation. This facility is now the NPL Site known as Olin Chemical, Wilmington, Massachusetts. We further note that the interview documentation of the former Whitney Barrel employee identifies the pertinent party as "Poly Chemical/Poly Vinyl of Eames Street, Wilmington, MA." (Paragraph 7 of Enforcement Documentation).

This response is submitted on behalf of the aforementioned Polyvinyl Chemicals, Inc., based upon a good faith investigation consistent with the requirements of CERCLA 104(e). Polyvinyl Chemicals, Inc. and our client will comply with their obligations to provide EPA responsive information, if such information is discovered following submittal of this Response.

Please contact the undersigned regarding further information or inquiry with respect to this matter.

Very truly yours,



John A. Andreasen

JAA:it  
Enclosure

cc: Luke Mette (w/enclosures)  
Senior Counsel  
AstraZeneca Pharmaceuticals LP  
1800 Concord Pike  
PO Box 15437  
Wilmington, DE 19850

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NEW ENGLAND  
1 CONGRESS STREET, SUITE 1100,  
BOSTON, MA. 02114-2023

DATE: December 15, 2003 (Memo to File)

FROM: Search & Cost Recovery Section

TO: File

SUBJ.: (Interview) SSID #  
(Wells G & H)

MEMORANDUM

ENFORCEMENT CONFIDENTIAL  
ATTORNEY/CLIENT PRIVILEGE

Person Interviewed:

On Monday, November 24, 2003, I traveled to Burlington, Massachusetts to meet with the above-named individual. Upon arrival, I was greeted at the door by a female that introduced herself as the wife of [REDACTED]. I advised her as to whom I was and why I was there. She invited me in and led me to the dining area. [REDACTED] was aware of the reason for my visit and felt very strongly that she and I should talk, which we did, before I began dialog with her husband.

[REDACTED] entered the dining area shortly afterwards. I rose, presented my identification to him and in turn, he introduced himself to me. [REDACTED] left the room and [REDACTED] and I sat and then began to have conversation. [REDACTED] advised me of his medical condition and what he has gone through so far but felt that the worst was over and he was well on the road to recovery. I advised [REDACTED] of my reason for being there and what I was looking to

REDACTED

0045-0001

accomplish by my visit with him. He was very cooperative and straight forward.  
advised me of the following:

1. worked at Whitney Barrel at 256 Salem Street, Woburn, MA from 1969 until 1976.

2. He performed many functions while there. He was a truck driver, a barrel painter, a barrel washer and he did any other job that needed to be done.

3. His main job was that of the Whitney Barrel Company truck operator. His duty was to pick up and deliver barrels for the company. The truck could carry as many as 150 barrels per load.

4. Whitney Barrel Company usually employed at least five employees but during the summer, extra help was hired.

5. Some of the other Whitney Barrel Company employees were:

6. The Whitney Barrel Company was in the business of collecting, cleaning, refurbishing, recycling and selling used barrels and sometimes two-, three- and ten-thousand gallon tanks. The business was located at 256 Salem Street, Woburn, MA.

7. Whitney Barrel Company picked up barrels for refurbishing and recycling from  
Poly Chemical/Poly Vinyl  
of Eames Street, Wilmington, MA,

All barrels picked up from the above locations were taken to Whitney Barrel Company and put through the refurbishing/recycling process.

8. Whitney Barrel Company also traded barrels with other companies, depending upon the needs of the different companies. Some of the barrel companies involved in the trading were:

REDACTED

0045-0002

11. **Poly Chemical Company:** The drums from this location were brought to the Whitney Barrel Company for recycling. The residues from these drums, when dumped, would turn the water in the cleaning cycle green. These drums had markings on them but he does not remember what markings. He did not recall any particular odor from these drums, just smelled like chemicals.

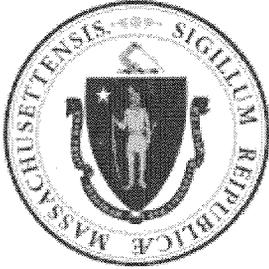
REDACTED

0045-0003

15. Drums with residues inside would come in, the covers went one way and the rings went another. The contents of the drums would be dumped in the hole in the floor. The hole was four to five feet in diameter and about five feet deep with a grate over it. The grate was "messed" up once and an employee fell into the hole. Could not remember the name of the employee. It was said that the drain ran out to the sewer but "stuff" still leached out to the Aberjona River.

REDACTED

0045-0004



**The Commonwealth of Massachusetts**  
**William Francis Galvin**

Secretary of the Commonwealth, Corporations Division  
 One Ashburton Place, 17th floor  
 Boston, MA 02108-1512  
 Telephone: (617) 727-9640

**OLIN CORPORATION Summary Screen**

Help with

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The exact name of the Foreign Corporation: OLIN CORPORATION

Entity Type: Foreign Corporation

Identification Number: 131872319

Date of Registration in Massachusetts: 09/30/1952

The is organized under the laws of: State: VA Country: USA on: 08/13/1892

Current Fiscal Month / Day: 12 / 31

Previous Fiscal Month / Day:

**The location of its principal office:**

No. and Street: 501 MERRITT 7  
 City or Town: NORFWALK State: CT Zip: 06856 Country: USA

**The location of its Massachusetts office, if any:**

No. and Street:  
 City or Town: State: Zip: Country:

**Name and address of the Registered Agent:**

Name: C T CORPORATION SYSTEM  
 No. and Street: 155 FEDERAL STREET  
STE 700  
 City or Town: BOSTON State: MA Zip: 02110 Country:

**The officers and all of the directors of the corporation:**

Title	Individual Name First, Middle, Last, Suffix	Address (no PO Box) Address, City or Town, State, Zip Code	Ex c
PRESIDENT	DONALD W. GRIFFIN	92 OLD BOSTON ROAD, WILTON, CT USA 92 OLD BOSTON ROAD, WILTON, CT USA	
TREASURER	JANET M. PIERPONT	57 MIDDLESEX RD., DARIEN, CT 06820 USA 57 MIDDLESEX RD., DARIEN, CT 06820 USA	

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business entity stock is publicly traded:  X

The total number of shares and par value, if any, of each class of stock which the business entity is authorized to issue:

Class of Stock	Par Value Per Share Enter 0 if no Par	Total Authorized by Articles of Organization or Amendments		Total Issued and Outstanding Num of Shares
		Num of Shares	Total Par Value	
No Stock Information available online. Prior to August 27, 2001, records can be obtained on microfilm				

- Consent       Manufacturer       Confidential Data       Does Not Require Annual Report  
 Partnership       Resident Agent       For Profit       Merger Allowed

**Note:** There is additional information located in the cardfile that is not available on the system.

Select a type of filing from below to view this business entity filings:

- ALL FILINGS
- Amended Foreign Corporations Certificate
- Annual Report
- Annual Report - Professional
- Application for Reinstatement

Comments

DF

# The Commonwealth of Massachusetts

Filing Fee: \$125.00

Late Fee: \$25.00

William Francis Galvin

Secretary of the Commonwealth

One Ashburton Place, Boston, Massachusetts 02108-1512

070023105

FORM MUST BE TYPED

## Annual Report for Domestic and Foreign Corporations

(General Laws Chapter 156D, Section 16.22; 950 CMR 113.57)

- (1) Exact name of the corporation: OLIN CORPORATION
- (2) Jurisdiction of incorporation: VIRGINIA
- (3) Street address of the corporation's registered office in the commonwealth:  
101 FEDERAL STREET, BOSTON, MA 02110  
*(number, street, city or town, state, zip code)*
- (4) Name of the registered agent at the registered office: CT CORPORATION SYSTEM
- (5) Street address of the corporation's principal office:  
190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105  
*(number, street, city or town, state, zip code)*
- (6) Provide the names and addresses of the corporation's board of directors and its president, treasurer, secretary, and if different, its chief executive officer and chief financial officer.

NAME	ADDRESS
President: <u>JOSEPH D. RUPP</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
Treasurer: <u>STEPHEN C. CURLEY</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
Secretary: <u>GEORGE H. PAIN</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
Chief Executive Officer:	
Chief Financial Officer: <u>JOHN E. FISCHER</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
Directors: <u>RANDALL W. LARRIMORE</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
<u>DONALD W. GRIFFIN</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>
<u>RICHARD M. ROMPALA</u>	<u>/ 190 CARONDELET PLAZA, SUITE 1530, CLAYTON, MO 63105</u>

- (7) Briefly describe the business of the corporation:  
CHEMICALS - DIVERSIFIED

(8-9) Capital stock of each class and series:

CLASS OF STOCK	TOTAL AUTHORIZED BY ARTICLES OF ORGANIZATION OR AMENDMENTS Number of Shares	TOTAL ISSUED AND OUTSTANDING Number of Shares
COMMON	120,000,000	73,322,590
PREFERRED	10,000,000	

- (10) Check if the stock of the corporation is publicly traded.

(11) Report is filed for fiscal year ending: DECEMBER / 31 / 2006  
*(month) (day) (year)*

Signed by: *Theodore J. [Signature]*

Chairman of the board of directors  
 President  
 Other officer  
 Court-appointed fiduciary  
on this 8<sup>th</sup> day of March, 2007

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