

INVESTIGATION

CASE #: 88-12-15-0731

DWM FILE #: 07-14-155

INVESTIGATOR: Ed Phillips / Arnold Schiff DATE: 12/18/88 TIME ARRIVED: 1000
 LOCATION: Elan Chemical Company PROPERTY OWNER: Elan Chemical Co. TIME DEPARTED: 1400
 ADDRESS: 268 Doremus Ave. MAILING ADDRESS: Same
Newark County: Essex
 BLOCK: 4014 LOT: 8 RESPONSIBLE PARTY: Elan Chemical Co.
 LOCATION TELEPHONE #: 201-344-8014 ADDRESS: Same
 EPA ID #: NJD042895680

LOCAL HEALTH DEPT. REP. _____ TELEPHONE #: _____
 ORIGIN OF COMPLAINT: Bob Swales - City of Newark TELEPHONE #: _____
 NATURE OF COMPLAINT: Chemical spill
 PHOTOGRAPHS TAKEN: yes - 2 rolls of 12 SAMPLE #: _____

FINDINGS: Upon arrival met with John Kasulides, Vice President of
Production. Elan is involved in the production of raw
materials for the flavors and fragrances industry. Products
of Elan are in liquid and crystalline form. See attached
aroma chemical list for Elan products.

Process: Elan operates a batch mixing process involving various
organic acids and batch specific alcohols. The mixing
process yields a ester. Water is drawn off during the process
to increase the grade of the product. The more water
drawn off, the higher grade product. Solvents are used as
a carrier or vehicle. The solvents decrease the viscosity
of the ester which allows for easier handling. The water/
ester/solvent mixture is distilled & recovery the solvent.
The recovered solvent is reintroduced into the process
until uncharacteristic odors are noticed & the solvent
purities have significantly diminished. The batch
operations involve the mixing of 6-8 batches at a time.
The process is continuous i.e., mixing, distilling, reuse
of solvents.

Work is requested as mentioned, when the solvents are
T.A. Sterling Ed Phillips
 Supervisor Signature Investigator Signature

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847550004

INVESTIGATION

CASE # 88-12-15-0731

DATE 12/8/88

RECOMMENDATIONS AND CONCLUSIONS:

no longer useable. The waste is temporary stored in 2 55 gallon drums adjacent to the dishing area of the plant. The waste is separated into light and dark fractions, i.e. one drum for light fraction, one drum for dark fraction.

Manifests for 1986, 1987 and 1988 were inspected. The attached manifest report depicts hazardous waste disposal activity for these years. F005 waste is the most frequent waste shipped off site. According to manifest reviewed, the solvents included in the waste are toluene, methanol, xylene, benzene, octanol, and heptane. The percentage of the specific compounds in the waste is approximately the following:

- Toluene 15-30%
- Methanol 10-15%
- Xylene - 2-5%
- Benzene - 5-10%
- Octanol - 5-10%
- Heptane - 0-10%

These top and end bottom end percentages were generated from manifest item "I" description. One manifest was incorrectly filled out. Specifically, manifest NJA0405589 used a D001 waste code instead of the F005, copy attached. That shipment contained the compounds listed above except for heptane.

Manifest activity annual reports have been supplied to the Department for 1986 and 1987. The company has not submitted an annual report detailing recycling activities per waste type.

Mr. Vassiliadis indicated that waste solvent is stored

D. Asterling
Supervisor Signature

Ed Phelan
Investigator Signature

INVESTIGATION

CASE # 88-12-15-0731

DATE 12/6/88

RECOMMENDATIONS AND CONCLUSIONS:

in drums and in a aboveground tank. After questioned, Mr. Vassiliadis indicated that the Department has not given Elm approval for waste storage in an aboveground tank. Mr. Vassiliadis was not aware that Departmental approval was ever needed. The location of the drum storage area and the aboveground tank are on the attached site map. Ultimately, waste disposal occurs from the tank. Drums are not shipped off-site. The exact size of the tank could not be determined, however, the tank appeared to be between 5,000 and 12,000 gallon capacity. Mr. Vassiliadis was questioned about the disposal of any process water, floor waste water, rain runoff patterns and other. Elm Chemical has a permit with Passaic Valley Sewerage Commission (PVSC). The PVSC permit # is 28403247. According to Mr. Vassiliadis all drums, internal floor and outside stormwater are connected to an effluent pit located on the southern corner of the property. The effluent pit generates a discharge to PVSC.

A tour was given of the facility. See the attached map for locations of facility features. Except for the area of the empty drum storage, waste solvent drum storage, and drum storage (map labels), the company yard is covered with asphalt. Small spills were noted at the empty drum storage area and at the southern end of Stack "B" on the attached map. In addition, an actual spill was noted at the second aboveground tank area. Pictures were taken of these spill areas.

The condition/status of the waste solvent drum storage area was as follows:

D. Sterling
Supervisor Signature

E. J. Phelan
Investigator Signature

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847550006

INVESTIGATION

CASE # 86-12-15-0731

DATE 12/8/88

RECOMMENDATIONS AND CONCLUSIONS:

- 1.) Hazardous waste labels/markings were not present.
 - 2.) Accumulation start date was not present.
 - 3.) Adequate aisle space was not present. Dums were stacked on pallets, four to a pallet. The pallets were side by side. The dums were stacked 3 dums high.
 - 4.) Approximately 500 dums were present.
- Actions were taken of the area

Another dum storage area exists on site. The location is depicted on the site map, south/northwest of the waste solvent storage area. This area contained approximately 1,000 dums. Many of the dums were in very poor condition. Leads were totally rusted & a point that very little of the lead remained intact. Many dum bungs were not present. Spilling of the contents of the dums in poor condition was clearly evident. Mr. Vocabichski indicated that he did not know exactly what was in all of the dums. His opinion was that the dums contain paint products, not sold, solvents and some heavy oils. The oil dums were marked as such and visibly discharging oil to the ground. Most of the ground in this area was with stained to a dark brown or black color. Directly south of this area an open drainage depression exists. This consists of large rocks. The south area of the dum storage area is sloped toward this drainage depression. During periods of rainfall, runoff flows toward the depression. It is likely that contaminants on the ground surface reach the depression. Flow from this drainage depression is toward the Passaic River. It should be noted that evidence (visual) depicting this scenario could not be seen along the river bank.

M. St. Line
Supervisor Signature

Ed Phillips
Investigator Signature

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847550007

INVESTIGATION

CASE # 88-12-15-0731

DATE 12/8/88

RECOMMENDATIONS AND CONCLUSIONS:

The hazardous waste tank, location depicted on map, did not contain any hazardous waste marked on the shell. A concrete retaining wall was present around this tank and the other product storage tanks.

As a result of this inspection, the following violations were issued to Elm:

1. NJAC 7:26-9.6(e) - air space.
2. NJAC 7:26-7.4(g)2 - annual report detailing treatment
3. NJAC 7:26-9.3(e)1 - wash of site in 90 days.
4. NJAC 7:26-9.3(b) - Dept approval for storage of waste in a aboveground tank.
5. NJAC 7:26-9.3(a)3 - start date and hazardous waste labeling or marking.
6. NJAC 7:26-7.4(e)2 - proper completion of a manifest
7. NJSA 58:10-23c - Hazardous substance discharge.
8. NJSA 58:10-23e - nonnotification of the discharge.

M. Sterling
Supervisor Signature

Ed Phillip
Investigator Signature

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847550008

INVESTIGATION

CASE # 84-12-15-0731

DATE 12/8/88

RECOMMENDATIONS AND CONCLUSIONS:

At a minimum the following should be done:

1. A full generator inspection should be done after the 2 week cleanup date.
2. All drums in the area where 1,000 are stored should be investigated to determine contents. Drums in poor condition should be overpacked to ensure that further discharge does not take place.
3. A sampling investigation should be done to determine the extent of soil contamination in the southeastern portion of the site. After determination has been accomplished, a cleanup should be performed.

A violation of NSAC 926-7.4(b)3 was issued since the case previously alleged work of similar nature as a F005 work. The manifest which was properly filled out used a D001 work number instead of the F005 even though the characteristics of the waste was similar to previous F005 work alleged.

M. Stulme
Supervisor Signature

Ed Phillips
Investigator Signature

12/18/88 REVISION 10/1
PASSAIC RIVER

PASSAIC RIVER

WASTE SOLVENT STORAGE AREA

DRUM STORAGE
WASTE OILS
UNSOLD PRODUCT
UNUSED PRODUCT
APP. 1,000 DRUMS (55G.)

RAW MATERIAL PRODUCT STORAGE RACKS (55GL DRUMS)

ELAN CHEMICAL
SITE PLAN
268 DOREMUS AVE
NEWARK, NJ 07105

HAZARDOUS WASTE OVERGROUND TANK

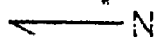
UNDERGROUND TANKS
DUCT ACCESS MATERIALS

TANK W/ SPILL

TRAILERS
EMPTY DRUM STORAGE

EFFLUENT PIT

SCALE
1" = 65'



SITE ACCESS DOREMUS AVE SITE ACCESS SITE ACCESS

847550010

INVESTIGATION

CASE #: 98-12-15-0731

DWM FILE #: 07-14-155

INVESTIGATOR: Ed Phillips

DATE: 3/3/89 TIME ARRIVED: 1020

LOCATION: Elemental Chlor Chemical Co

PROPERTY OWNER: Elton Lane

ADDRESS: 268 Doremus Ave

MAILING ADDRESS: One

Newark County -

BLOCK: 4014 LOT: 8

RESPONSIBLE PARTY: Elton Lane

LOCATION TELEPHONE #: 201-344-5014

ADDRESS: 5 One

EPA ID #: NJ-D-042895680

LOCAL HEALTH DEPT. REP. _____ TELEPHONE #: _____

ORIGIN OF COMPLAINT: _____ TELEPHONE #: _____

NATURE OF COMPLAINT: Follow up investigation

PHOTOGRAPHS TAKEN: 1/1 SAMPLE #: _____

FINDINGS: Investigation conducted during steady rain

in response to a spill violation RCRA, issued on 12/16/88, a
follow investigation was conducted. The purpose of this
investigation was to determine the status of Elton's effort
to remediate the area of leaking drums (approximately 1000)

Elton had begun a segregation, removal operation of the leaking
drums. Based upon initial findings, a soil contamination
investigation and remediation plan is also required.

Met with Andy Zavelle of Elton upon my arrival.
It should be noted that Andy is not actually involved
with cleanup. John Zavelle, general contact person,
was a former at the time of this investigation.
Since Mr Zavelle is not actually involved, he
didn't really know all the facts of the state of the
cleanup.

An inspection of the drums was conducted. Many drums,
previously found to be leaking, had been covered to
prevent further leaking. However, many drums around
with badly rusted tops, sides, and in some instances
bottoms. As was the case during the 12/16/88 inspection, soil
contamination is widespread under the drum storage area.

Supervisor Signature _____

Ed Phillips
Investigator Signature

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INVESTIGATION

CASE # 88-12-15-0731

DATE 2/3/89

RECOMMENDATIONS AND CONCLUSIONS:

Visible contamination consisted of multi-colored liquid and black petroleum products.

Based upon this inspection, Elan Inc/Elan Chemical Co. was issued another NOV for the discharge of a hazardous substance. The NOV was given to Mr. Rudy Zurek.

Supervisor Signature

Ed Phillips
Investigator Signature

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847550024

NEW JERSEY DEPARTMENT OF ENVIRONMENT & PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
HAZARDOUS WASTE INSPECTION REPORT

DWM-329

GENERATOR INSPECTION REPORT

FACILITY INFORMATION

FACILITY NAME: Elan Chemical
FILE NUMBER: 07-14-155
VHT FACILITY FILE NUMBER: _____
PERMIT #: _____
REGION: M
INSPECTION DATE: 6-14-90
INCIDENT/CASE NUMBER: _____
INSPECTION TYPE: Remediation
RESPONSIBLE AGENCY CODE: 5
INSPECTOR'S NAME: Jodie Stein
INSPECTOR'S AGENCY: NJDEP
INSPECTOR'S BUREAU: DHWM
EPA ID NUMBER: NJSD042895680
ADDRESS: 268 Doremus Ave
Newark NJ 07108
LOT: 8,20 BLOCK: 4014
COUNTY: Essex
FACILITY PERSONNEL: John Vassiliades
TELEPHONE #: 201-344-8014
OTHER STATE/EPA PERSONNEL: _____
REPORT PREPARED BY: Jodie Stein
REVIEWED BY: AST
DATE OF REVIEW: 7/31/90

JUN 20 REC'D

REVISION: 3
01/88

847550031

TIME IN: _____

TIME OUT: _____

PHOTOS TAKEN YES NO

SAMPLE TAKEN YES NO

IF YES, HOW MANY? 12

NO. OF SAMPLES _____

NJDEP SAMPLE ID#: _____

MANIFESTS REVIEWED YES NO

Number of manifests in compliance 24

Number of manifests not in compliance 1

List manifest document numbers of those manifests not in compliance.

NJA0571060 - NOTSD COPY.

847550032

-A1-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS:

On 6-14-90, I conducted a RCRA inspection at Elan Chemical Inc. in Nevada. The facility representative was John Vassiliadis, V.P. of Production. The facility employs 83 people on 3-shifts (14-500).

Elan is a facility that manufactures raw chemicals for flavor & fragrance companies. Over 100 chemicals are made here, where the bulk of the material are organic acids, such as lauric acid, capric acid, myristic acid & caproic acid are mixed with alcohols, such as ethanol*, amyl alcohol, methanol* & H.E.K. to make esters. These ester products are in liquid and crystalline form. Other inorganic acids used are HCl, sulfuric acid and butyric acid. Solvents are also used, such as toluene*, which do not actually take part in the reaction, but are used as a dissolvent for materials, or as an extractant of H₂O. All these raw materials are located throughout the facility.

The basic process works as follows:
* = most often used.

847550033

-A2-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS (continued):

Specific organic or inorganic acids (previously mentioned) are added to alcohol in 50 gal. reactors. Then the solvents are added and the entire mixture is refluxed. For more detailed descriptions of the solvent see report by Ed Phillips 12-22-88. The solvent is distilled & ultimately recovered and is used next time for the same product. Solvents are product specific. When solvents are no longer reusable they go into a 55 gal drum (wastestream #1) located inside the distillation area. The wastes are separated into 2 wastestreams by color. Light is 1 & Dark is 2. The full drums go outside to long waste storage area. According to Ed Phillips report, a long waste tank, located outside, was used to store long waste, however due to an NOV issued 12/8/88, it is no longer in use. Some acids, like HCl for example, ~~are~~ used as catalysts also. However, this process has ceased!

The H₂O extracted off the process, rain H₂O, etc goes into an upland pit located

847550034

-A3-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS (continued):

on the southwest corner of the property, which then discharged into into Passaic Valley sewer Commission, permit #20403242. (Ela also has approx. 44 active air permits) Approx 120-150 and/or 420 is discharged / batch into the pit.

The facility tour found most areas, except the haz. waste storage areas to be in good order. The haz. waste storage areas were pitiful. It was brought to my attention that Arnold Skiff, DHEW/PHS had visited the site the week of 5/30/90 and issued several spill violations for these areas. However, another site visit by myself resulted in several RCRA violations in addition. This visit found heavy soil, coating of curb material, large quantities of haz waste drums (est. 1604-55 gal drums). These drums were leaking, not of sturdy leak proof construction, being not securely closed, sitting tops, sides and/or bottoms; some were improperly stacked - 4 high. All containers not labelled; inadequate aisle space; waste not segregated by waste type, & waste not tested.

847550035

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS (continued):

For these, NOU's were issued. According to Mr. Vassiliadis, the majority of these drums were to be "evaluated" for possible future use. However, it is obvious that this ~~and~~ hazardous waste have been on site for more than 90 days, and probably cannot be reused. An NOU was also issued for 790 day storage. Also, in reference to Ed Philip's report, a clean-up waste plan was submitted ^{to the} Dept by Elan in 7/89 for proposed clean-up & disposal remediation, but the Dept. never approved or denied it. Elan claims to still be waiting for an answer from the Dept to clean-up. However, according to Mr. Vassiliadis, approx. 3000 drums have already been checked since 12/88, on their own ~~own~~ ^{visual} ground content remains.

The required documentation was reviewed & several deficiencies were noted here; no daily ~~and~~ inspection log; 1 manifest, #NSA 037060 had no FD copy, & 11 manifests had no LB notifications.

847550036

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO _____ DATE _____

FROM _____

SUBJECT Summary of Findings Continued:

no written job description, no written description
 on type & amount of training. The contingency
 plan was reviewed, and it lacked a list of
 emergency equipment, location & physical description

Plan also had above ground tanks on site:

1 - 12,000 gal #4 fuel oil for boiler, filled
 ~ once/week.

1 - 19,000 gal sodium hydroxide, filled 4000g.
 at a time

7 - 8,000 gal Hydrochloric acid, filled 2500g at a time

Due to the fact that there was some LDR
 notifications missing, I recommend that this be
 referred to USEPA.

847550037

Describe the activities that result in the generation of hazardous waste.

- # (1) & (2) wastestreams are from unusable solvent mixtures. (eg xylene, toluene)
- # (3) wastestream consists of (A) materials that were discontinued or they no longer have use for or (B) unusable materials or (C) products that come out using HCl

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

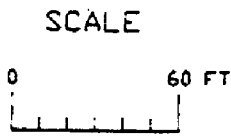
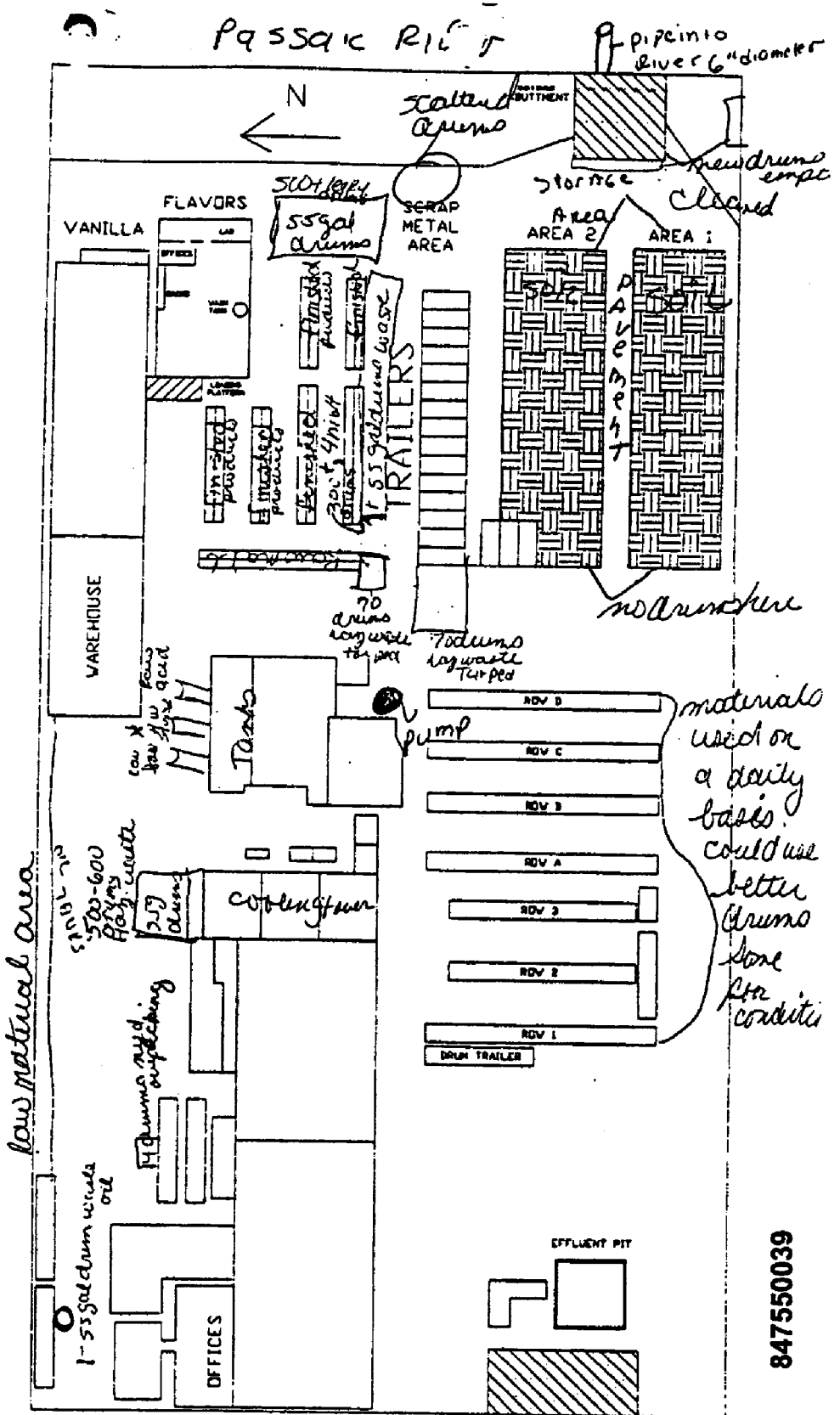
- * See map attached for location
- 1-55 gal drum ^{waste oil} mixed in with saw materials (X720)
- 4-55 gal drums saw material red overpack
- 1/604 55-gal drums - ** unknown how waste
- ~~1-55 gal drum of waste oil (X720)~~

* see NOV 7:26-8:5(a); Roy waste + Rox Roy waste are mixed together, so company doesn't know which is which.

847550038

ELAN
CHEMICAL

* May Waste
Storage tank
Not in use.



Pump pumps out area. Possible dumping

847550039



INCORPORATED 268 DOREMUS AVE. NEWARK, N.J. 07105 (201) 344-8014

FAX: (201) 344-1948

February 16, 1995

Mr. Lance R. Richman, P.G.
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
26 Federal Plaza
Room 13-100
New York, New York 10278

Re: Request for Information Under 42 U.S.C. 9601
et seq. and 42 U.S.C. 6901 et seq. ; Diamond Alkali
Superfund Site, Passaic River Study Area

Dear Mr. Richman:

This letter is in response to a letter received on January 5, 1995 by Elan Chemical Company, Inc. dated January 3, 1995 from Kathleen Callahan, Director of Emergency and Remedial Response Division of the U.S. Environmental Protection Agency. The letter references the Diamond Alkali Superfund Site, Passaic River Study Area. Elan's response is being made within the time frame allowed by the extension granted until February 21, 1995.

Attached are the responses prepared by Elan Chemical Company.

Please call if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "David Weisman". The signature is written in a cursive, somewhat stylized font.

David Weisman

cc: Ms. Patricia C. Hick
Assistant Regional Counsel
Office of Regional Counsel
Room 310
26 Federal Plaza
New York, New York 10278
bcc: Jeffrey M. Schawartz, Esq.
Randi Schillinger, Esq.

847520001

**ELAN CHEMICAL COMPANY, INC.
RESPONSES TO
ENVIRONMENTAL PROTECTION AGENCY
REQUEST FOR INFORMATION**

QUESTION 1.

Since December 30, 1977, Elan Chemical Company, Inc. ("Elan") has operated at a portion of the current facility. A copy of the 1977 deed is located at Appendix 1. On April 24, 1983, Elan acquired additional property adjacent to the property acquired in 1977. A copy of this deed also is located at Appendix 1. Since 1983, the Elan facility has consisted of both parcels of property. Please refer to the response to question 15, for an explanation of the corporate history of Elan at this facility.

QUESTION 2.

- a) Elan currently holds no RCRA permits and, to our knowledge has not held a RCRA permit in the past. Elan is currently permitted to accumulate hazardous waste for ninety days or less in a 10,000 gallon above-ground vertical carbon steel tank. See Appendix 2.a) for a copy of New Jersey Department of Environmental Protection ("DEP") authorization letters. Elan's EPA Identification Number is NJD 042-895-680.
- b) Elan currently holds no Federal Water Pollution Control Act ("WPCA") permits and, to Elan's knowledge has not held a WPCA permit in the past. Elan currently holds a Passaic Valley Sewerage Commission Sewer Connection Permit ("PVSC Permit"), Permit No. 20 40 3242. The effective date of the current permit is April 14, 1991. Elan has held PVSC Permits since April 1981. Copies of the current PVSC Permit and Elan's past PVSC Permits are located at Appendix 2.b).

QUESTION 3.

2,3,7,8, tetrachlorodibenzo-p-dioxin	
or other dioxin compounds-----	No
Benzy chloride-----	Yes
Methyl ethyl ketone-----	Yes
Benzene/ethyl benzene-----	Yes
Toluene-----	Yes
Acetone-----	Yes
Xylene-----	Yes
Hydrochloric acid-----	Yes

847520002

QUESTION 4.

- a) Elan is in the business of manufacturing chemicals which are used by the food flavor and fragrance industries. Various catalysts and processing aids are typically utilized in the manufacturing process. A list of Elan's current raw materials and finished products are provided at Appendix 4.a).

The manufacturing process is a batch process and typically consists of three major steps:

Step 1 - Reaction.

During the reaction step the raw materials, catalysts and processing aids (solvents, etc.) are loaded into a reactor. Typically, heat is applied for a period of time during which the reaction mixture is agitated.

Step 2 - Wash

At the end of the reaction step the reaction mixture is typically washed with water or a mildly caustic solution to remove the un-reacted acids. This is accomplished in the reactor or a wash tank.

Step 3 - Purification

Purification is typically achieved by vacuum distillation. During this step the solvents and unreacted raw materials are removed from the reaction mixture, thereby isolating the finished product. This is accomplished in specially equipped distillation stills.

The recovered solvents are reused until they are degraded.

After purification, the finished product is drummed and shipped to customers.

The materials listed in question 3 are not a product or by-product of the manufacturing process. In addition, we do not believe that other hazardous substances are a product or by-product of the manufacturing process. Please refer to a copy of the product list provided at Appendix 4.a). Hazardous substances are utilized as either (i) raw materials, which are converted into new compounds during the manufacturing process, (ii) processing aids, or (iii) solvents, which are materials that are not chemically altered and are recovered for reuse in subsequent batches.

- b) We do not believe that our manufacturing processes involve the generation of hazardous substances. Please refer to our product list provided at Appendix 4.a). As explained in the

response to question 4.a) above, Elan utilizes hazardous substances as part of its manufacturing process in its raw materials catalysts and processing aids. Solvents are recovered during the Purification step when the product is isolated from the un-reacted raw materials. These recovered solvents are reused until they are degraded. When the solvent is no longer usable it is disposed of as a hazardous waste.

- i) The recovered solvents are better than 95% pure. The remaining 5% is typically comprised of un-reacted raw materials, product and water. The recovered solvent is most likely to be reused in the subsequent production batch in the Reaction step.
- ii) We do not believe any hazardous substances are generated in finished product. (Please refer to the responses to questions 4.a) and 4.b)).
- iii) When solvents are degraded and no longer usable, they are disposed of as a hazardous waste. Such hazardous wastes are currently combined in one waste stream from the entire production facility.

QUESTION 5.

Hazardous substances which constitute raw materials utilized in Elan's manufacturing activities are delivered to Elan from vendors in Department of Transportation approved packaging. Solid materials are packed in polyethylene lined fiber drums or polyethylene lined paper bags. Liquids are enclosed in 55 gallon steel or 55 gallon plastic drums. Some materials are packed in 15 or 30 gallon plastic or steel drums. Some materials are delivered in bulk tanker trucks.

These new raw material hazardous substances are stored on site (Elan does not have any off-site storage facilities) in designated areas in drums on pallet racks resting on paved surface. There are separate storage areas for poisons, corrosive materials, flammable materials and non-hazardous materials. Materials delivered in bulk tanker trucks are stored in bulk storage tanks. Where applicable, bulk storage tanks are equipped with conservation vents and each vent is permitted by the DEP.

Unfinished products which await additional processing are stored in 55 gallon steel or plastic drums on pallet racks in the designated "Work In Process" area of the property.

Recovered solvents that are reused are stored in 55 gallon steel or plastic drums on pallet racks in the designated "Work In Process" area of the property.

Spent solvents are classified as hazardous waste and are pumped directly to the accumulation tank mentioned in the response to question 2.a). Please refer to Appendix 5 for a copy of Elan's DEP approved DPCC Plan for a detailed description of the storage facilities.

- a) Yury Langer is the Environmental and Safety Manager currently responsible for the proper handling of hazardous waste at Elan. Yury Langer's home address is 26 Pomona Road, P. O. Box 135, Pomona, New York 10970, (914) 362-6753. Mr. John Vassiliades, the production manager at Elan, is currently responsible for the proper handling of hazardous substances, other than hazardous waste at Elan. Mr. Vassiliades home address is 189-144 44th Avenue, Flushing, New York 11358 (718) 353-0777. Prior to Mr. Langer, Mr. Albert Roque, who resigned from Elan and moved out of State in May of 1994 was responsible for the handling of hazardous waste at Elan. Mr. Roque held this position since 1993. Mr. Roque's address is 608 Bronwood Estates, Fort Smith, Arizona 72916. Prior to Albert Roque, the responsibilities for proper handling of hazardous substances (including hazardous waste) were a part of Mr. Vassiliades' position, since 1978.
- b) Oldover Corp., State Road 652, Arvonnia, VA 23004
Marisol Inc., 125 Factory Lane, Middlesex, NJ 08846
S&W Waste, Inc., 105 Jacobus Avenue, So. Kearny, NJ 07032
Cycle Chem Inc., 217 So. First St., Elizabeth, NJ 07206
SCA Chemical Services, Co. 100 Lister Ave., Newark, NJ 07105
Solvent Recovery Service of NJ, Inc., 1200 Sylvan Street, Linden, NJ 07036
Laidlaw Env. Services, 2815 Old Greenbrier Pike, Greenbrier, TN 37073
- c) Please refer to the response to question 5 above with respect to Elan's current storage practices. New raw materials, unfinished product and recovered solvents to be reused have, throughout Elan's history, generally been stored as described in the response to question 5 above except certain of the surfaces upon which the drums were stored may not have been paved. With respect to hazardous waste, prior to Elan having a DEP approved accumulation tank for hazardous waste, Elan stored the spent solvents in a 4500 gallon above ground storage tank and/or in 55 gallon steel drums. These drums were accumulated and stored on site in a designated area on

pallet racks. The waste was shipped to the facilities mentioned in response to question 5.

QUESTION 6.

- a)
- i) At least from 1977, the date of Elan's organization, the process waste water stream from the facility has been connected to a sanitary sewer system.
 - ii) The process waste water stream is currently pretreated and has been pretreated since 1986. From 1986 through approximately December 1991, the pretreatment process consisted of aeration and Ph adjustment. In January of 1992, extraction with Isopar H to remove organics was added to the pretreatment process.
 - iii) Please see response to question 6(a)(i).
- b)
- i) At least from 1977, the date of Elan's organization, the floor drains have been connected to a sanitary sewer.
 - ii) Pretreatment of the waste stream commenced in 1986. Floor drains direct waters (wash waters, rain waters) to sump pumps which pump the waters to the pretreatment system as described above, and which are ultimately discharged to the sanitary sewer.
 - iii) See response to question 6b)(i) above.
- c)
- i) A map of unknown origin, dated April 16, 1968, found in Elan's historical files makes reference to a waste pond on the property. No information is known about the pond. Please see Appendix 6c)(i) for a copy of the map.

Prior to 1985, Elan utilized a cistern, located to the left of its entrance door, to collect process effluent before its discharge into the sewer. The cistern has been sealed.
 - ii) We have no knowledge if the pond was lined or unlined.
 - iii) We have no information regarding any treatment or discharges from the pond.

- d) Please refer to Appendix 6.d) for a diagram of Elan's waste water collection and pre-treatment system.

QUESTION 7.

- a) Hazardous substances, including the substances listed in response to item (3) or identified in the response to item (4), were not generated during the operation of the facility. As indicated above, at the response to question 4, hazardous substances were utilized as raw materials or processing aids, and solvents are recovered and reused. When the solvents are no longer reusable, they are disposed of as hazardous waste. Please refer to Appendix 7 for copies of Elan's manifests.
- b) There has been no disposal or discharge of hazardous substances into the Passaic River since 1977, the date of Elan's organization. There is no data available prior to 1977.

QUESTION 8.

We know of no incidents that resulted in discharges of hazardous substances to the Passaic River.

With respect to incidents resulting in releases of hazardous substances onto the property:

1. On November 4, 1992, a small fire occurred at the Elan facility. During the Fire Department's attempts to extinguish the fire, several wooden pallets were ignited which ultimately caused four plastic drums containing 20-25 gallons of benzy chloride to melt. Prior to this time, there had not been a leak of hazardous substances. When the plastic drums melted, the contents leaked. The area where the drums melted was paved, pitched and bermed. The Fire Department immediately informed the DEP of the leak. Elan personnel were present when the Fire Department notified the DEP of this leak. Once the fire was extinguished, all further action ceased until the DEP arrived at the scene. Upon the DEP's arrival, cleanup activities were performed, a vacuum and absorbent speedy dry was utilized. Please refer to Appendix 8 for relevant documents relating to this incident.
2. In or about the summer of 1989, certain drums (some determined to contain hazardous substances) stored in a then unpaved gravel area of the property, were determined by the DEP to have corroded and leaked. DEP required a delineation of the contamination in this area. Soil

sampling of the area was undertaken. Remediation for the area was conducted under a "Memorandum of Agreement" entered into on August 27, 1992 with the DEP. The contaminated area was encapsulated with DEP approval. Please refer to Appendix 8 for relevant documents relating to this incident.

QUESTION 9.

Please refer to the response to question 8 above for the date of incidents involving discharges of hazardous substances onto the property.

With respect to incidents involving discharges of hazardous substances into the wastewater system, we are unaware of any specific incidents involving a discharge into the wastewater system. We do not consider PVSC Permit excursions as discharges and accordingly, have not treated them as such.

QUESTION 10.

- a) The facility is subject to flooding due to:
- i) flood overflow from the Passaic River, and
 - ii) overflow from sanitary sewer back-up.
- b) November 8, 1993 the facility was flood by the overflow from the Passaic River. The flood lasted approximately 5 hours.

December 11, 1992 the facility was flooded by the overflow from the sanitary sewer and overflow from the Passaic River. The facility was flooded for 3 days.

In January 1988, the facility was flooded by the overflow from the Passaic River. The facility was flooded for 6 hours.

QUESTION 11.

- A. On July 12, 1993, the DEP issued a Notice of Violation to Elan alleging (i) the failure of Elan to prepare a manifest before transporting or offering for transport hazardous waste off-site in violation of N.J.A.C. 7:26-7.4(a)3, and (ii) the failure of Elan to determine if waste is hazardous, in violation of N.J.A.C. 7:26-8.5(a). On October 19, 1993, Elan received from DEP a Notice of Civil Administrative Penalty Assessment assessing penalties for these alleged violations.

Elan requested and was granted an adjudicatory hearing.

Settlement negotiations ensued and a Stipulation of Settlement was filed with the State of New Jersey Office of Administrative Law (OAL) on July 13, 1994. The OAL issued a Decision Approving Settlement on July 15, 1994 resolving this matter.

Please refer to Appendix 11.A for copies of relevant pleadings and related documents providing additional detail with regards to this matter.

- B. On January 5, 1994, the Passaic Valley Sewerage Commissioners (PVSC) filed suit against Elan alleging that Elan violated the provisions of N.J.S.A. 58:14-1 et seq. by discharging pollutants in excess of the discharge limitations of its PVSC Permit No. 20403242, the rules and regulations of the PVSC, and the Organic Chemicals, Plastics and Synthetic Fibers ("OCPSF") Categorical Pretreatment Standards adopted by the EPA at 40 C.F.R. 414.

On February 10, 1994, Elan filed its Answer. Subsequently, a pretrial conference was scheduled by the court for May 27, 1994. The court also scheduled a trial date of July 11, 1994. Settlement negotiations ensued. These negotiations yielded a verbal settlement of this case. Presently, as evidenced by the attached correspondence, the parties are revising the terms of a proposed Consent Order and Final Judgement. It is expected that the terms of Order will be finalized shortly, thereby resolving this matter.

Please refer to Appendix 11.B for copies of relevant pleadings and related documents providing additional detail with regards to this matter.

- C. On April 22, 1991, Elan was served with an Administrative Order and Notice of Civil Administrative Penalty Assessment issued by the DEP. The DEP alleged that Elan violated the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the regulations promulgated thereunder. The Order alleged, among other things, leakage of the drums in the then hazardous waste storage area. (This is the same drum leakage referenced in our response to question 8 above.) Elan contested this action and on May 6, 1991 requested an administrative hearing to adjudicate the findings and penalty assessment set forth in the Administrative Order. Elan's request for an adjudicatory hearing was granted by the DEP.

A telephone prehearing conference was held in this matter on July 22, 1992. Subsequently, a Prehearing Order was issued by the court on August 5, 1992 (amended on October 30, 1992). Thereafter, the parties exchanged interrogatories. During the same time period, the parties entered into a "Memorandum of Agreement" and Elan agreed to encapsulate the entire former

drum storage area with impermeable asphalt cover. Please refer to response to question 8.

In December 1992, the court scheduled a hearing to decide this matter. However, by letter dated January 26, 1993 the parties notified the court that a settlement had been reached and a Stipulation of Settlement was filed with the State of New Jersey Office of Administrative Law (OAL) on March 17, 1993. The OAL issued a Decision Approving Settlement on March 29, 1993 resolving this matter.

Please refer to Appendix 11.C for copies of relevant pleadings and related documents providing additional detail with regards to this matter.

We do not consider a Notice of Violation letter that was not ultimately incorporated into a formal DEP administrative order and notice of civil administrative penalty or into a formal complaint to be a "proceeding" against Elan and, have not treated them as such.

QUESTION 12.

Please refer to Appendix 12 for copies of Elan's Manifests.

The following documents relating to the purchase, use and handling of hazardous substances at Elan have not been supplied with this Request For Information, but are available upon request.

- a) Purchase Orders for Raw Materials - Elan's purchase orders for raw materials, for the last two (2) years are stored in trailers on site, at the facility. The purchase orders are filed by vendor name, in chronological order. Each purchase order is attached to its shipping and receiving documents and a copy of payment to the vendor. Due to the volume of these documents, they have not been supplied with this request.
- b) Production Batch Records - Elan's production batch records for the past six (6) months are retained at the facility by John Vassiliades, Vice President of Production. These records contain a detailed description of the raw materials utilized, their quantities, the temperature, pressure or other relevant information as to a particular manufacturing process. Due to the volume of these documents, they have not been supplied with this request. If these documents are requested, Elan considers the information in these documents to be confidential and will, if requested, to provide these documents, assert a claim of confidentiality as to such documents.

- c) Material Safety Data Sheets (MSDS) - Elan's MSDS for each raw material hazardous substances is retained at the site. Hard copies are kept by Mr. John Vassiliades in the production office. Yury Langer, Environmental and Safety Manager also retains copies on CD Rom. Due to the volume of these documents, they have not been supplied with this request.

QUESTION 13.

In addition to the documents provided in the foregoing responses please refer to Appendix 13 for additional documentation. We do not consider the sampling conducted of our process wastewater and reported on Elan's Pretreatment Monitoring Reports submitted to PVSC to be results of "any other environmental media performed at the facility" and accordingly have not included these monitoring reports at Appendix 13.

QUESTION 14.

- a) Please refer to response to question 1. Pursuant to a deed dated December 30, 1977, Elan purchased a portion of the current facility from the New Jersey Economic Development Authority. Pursuant to a deed dated April 24, 1983, Elan purchased a portion of the current facility from Consolidated Rail Corporation. Please refer to Appendix 14 for a copy of each of the deeds and other relevant documents of sale.
- b) Not Applicable
- c) Please refer to response to question 15.f) below.

Answer to Question 15.

- a) Elan Chemical Company, Inc.
- b) Ira B. Kapp Chairman of the Board
Jerry Guerrara President
Jerome Scharf Vice President
David Weisman Secretary/Treasurer

all located at:
Elan Chemical Company, Inc.
268 Doremus Avenue
Newark, New Jersey 07105

- c) State of Incorporation - New Jersey.
Registered Agent - Jeffrey M. Schwartz, Esq.

Saiber Schlesinger Satz & Goldstein
One Gateway Center
Newark, New Jersey 07102

d) Attached at Appendix 15 are Elan's:

Certificate of Incorporation	9/26/77
Certificate of Amendment	1/4/78
Certificate of Amendment	12/29/93

e) No subsidiaries or affiliates.

f) The present Elan Chemical Company, Inc. was organized in 1977.

In May of 1964 a corporation under the name Elan Chemical Company ("Elan-Conn") was incorporated under the laws of the State of Connecticut. Elan-Conn acquired the assets of another chemical company in 1964 and commenced business operations as a manufacturer of chemicals in Springdale, Connecticut.

In 1968, Elan-Conn acquired the facility located at 268 Doremus Avenue, Newark, New Jersey from Essex Chemical Co. Elan-Conn qualified to do business in New Jersey and began operating at the Doremus Avenue site. In 1971, the owners of Elan-Conn, via a tax-free "F Reorganization," organized a New Jersey corporation and liquidated Elan-Conn into the new New Jersey corporation. The effect of this reorganization was to convert Elan-Conn from a Connecticut corporation into a New Jersey Corporation ("Old Elan-NJ").

In September 1977, Felton International, Inc. ("FII"), a New York corporation doing business in Brooklyn, organized the present Elan Chemical Company, Inc. ("Present Elan") as a New Jersey subsidiary for the purpose of acquiring Old Elan-NJ from its then owners, Messrs. Herbert Halpern, Herman Kaplan and Harold Kwart. The acquisition was effected via a complex transaction designed to provide for the availability of New Jersey Economic Development ("E.D.A.") financing for a portion of the assets to be acquired. Present Elan was originally incorporated by FII under the name Elan Acquisition Corporation.

The acquisition transaction was comprised of a series of steps, which were all concluded on the same day:

1. First, Elan Acquisition Corporation (as a subsidiary of FII) purchased 56% of the shares of Old Elan-NJ and the E.D.A. purchased the remaining 44% of the shares. E.D.A. paid for its shares by issuing E.D.A. bonds to the sellers.

2. Then, Elan Acquisition Corporation and E.D.A. immediately liquidated Old Elan-NJ, with the real estate and tangible depreciable assets of Old Elan-NJ being distributed to E.D.A. and the remaining assets of Old Elan-NJ being distributed to Elan Acquisition Corporation.

3. Then, all of the real estate and tangible depreciable property received by E.D.A. on the liquidation was sold to Elan Acquisition Corporation for an amount equal to the face amount of the E.D.A. bonds issued to the sellers.

4. Elan Acquisition Corporation, after the foregoing series of steps, acquired all of the assets of Old Elan-NJ, and the sellers held E.D.A. bonds having a value equal to the value of the corporation's real estate and tangible depreciable property.

5. Elan Acquisition Corporation then changed its name to Elan Chemical Company, Inc. (referred to above as Present Elan).

Thereafter, until July 1985, Present Elan conducted its business operations as a New Jersey subsidiary of FII. In July 1985, FII terminated its operations and liquidated. A portion of its assets were assigned to a liquidating trust established for the benefit of FII's shareholders. Among the FII assets assigned to the liquidating trust was the stock of Present Elan.

In July 1986, five individuals purchased the stock of Present Elan from the liquidating trust: D. Weisman (35%), I. Kapp (35%), D. Katzman (10%), J. Scharf (10%) and J. Guerrero (10%). At such time, the said five individuals also purchased a vanilla business from the liquidation trust as a partnership, Elan Food Laboratories (the "Partnership").

In 1989, Katzman's interests in Present Elan and the Partnership were redeemed by such entities, and the other four principals continued as the remaining owners.

- g) Please refer to the response to question 15.f)
- h) Please refer to the responses to question 15, above.
- i) Herman Kaplan
Garden Road
Harrison, New York 10528

Herbert Halpern
12 Fenimore Drive
Harrison, New York 10528

Harold Kwart
203 Cheltenham Road
Newark, Delaware 19711

Ira Kapp)
David Weisman)
Jerry Guerrera)
Jerome Scharf)

all located at:
268 Doremus Avenue
Newark, New Jersey 07105

David Katzman
20-G Weavers Hill
Greenwich, Connecticut 06931

As to changes in ownership, please refer to the responses to question 15, above.

QUESTION 16.

The answers to this "Request for Information" were prepared by

Yury Langer
Environmental & Safety Manager
Elan Chemical Company, Inc.
268 Doremus Avenue
Newark, New Jersey 07105
Tel.: 201-344-8014, Ext. 110 and

David Weisman, President
Elan Chemical Company, Inc.
268 Doremus Avenue
Newark, New Jersey 07105
Tel. 201-344-8014, Ext. 125

Yury Langer has limited personal knowledge of the responses and was assisted by the following Elan personnel

John Vassiliades
V.P. Production
Elan Chemical Company, Inc.
Home Address:
189-14 44th Avenue
Flushing, New York 11358

Question 8

Karol Sulimirski
Plant Manager
Elan Chemical Company, Inc.
Home Address:
11 Mile Road
Suffern, New York 10901

Questions 1-7, 9-14

In addition, this "Request for Information" was prepared based on review of corporate and other documents by our attorneys, and employee interviews.

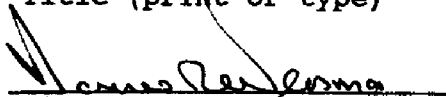
CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

STATE OF NEW JERSEY)
)
COUNTY OF ESSEX)

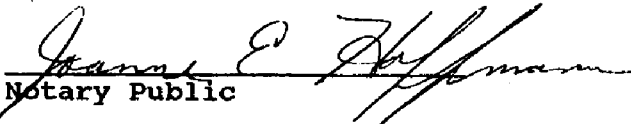
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information) and all documents submitted herewith, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete, and that all documents submitted herewith are complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that my company is under a continuing obligation to supplement its response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information or the company's response thereto should become known or available to the company.

David Weisman
Name (print or type)

President
Title (print or type)


Signature

Sworn to before me this
16 day of February, 1995.


Notary Public

JOANNE E. HOFFMANN
Notary Public of New Jersey
My Commission Expires October 20, 1997

**Elan Chemical Company, Inc.
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**Stanchart Business Credit,
Inc.**

New York, New York

ENSR

**Phase I Environmental
Assessment
Elan Chemical Co.
268 Doremus Avenue
Newark, NJ**

ENSR Consulting and Engineering

October 1992

Document Number 6294-003-400(464)

*REC'D
10/17/92*

847521171



ENSR Consulting
and Engineering

Somerset Executive Square I
One Executive Drive
Somerset, NJ 08873
(908) 560-7323
(908) 560-1688/FAX

October 2, 1992

Mr. Donald Flores
Stanchart Business Credit, Inc.
477 Madison Avenue, 20th Floor
New York, New York 10022

Re: Phase I Environmental Assessment
Elan Chemical Co. Property
268 Doremus Avenue, Newark, New Jersey

Dear Mr. Flores:

ENSR Consulting and Engineering (ENSR) is pleased to submit its Phase I Environmental Assessment of the above referenced facility. This evaluation was performed pursuant to ENSR's written proposal dated September 10, 1992, which was approved by you the same day. We understand this assessment was requested to provide you with information to assist in your decision regarding the issuance of a credit extension to Elan Chemical Co.

The details of the scope of the investigative effort are provided in Exhibit A. The following paragraphs summarize our initial findings, provide recommendations regarding the need for future investigative activities, and discuss study limitations.

Site Location and Description

The subject site consists of three parcels (Lots 8, 9, and 20 of Block 5014) which contain a main manufacturing building with attached offices, and ancillary rooms, and two other significant structures used for warehousing and other production activities. These parcels of land are situated on Doremus Avenue in an industrialized section of Newark, NJ.

Site History

The main parcel (Lot 8) was developed prior to the late 1920s as a vegetable oil plant. Sometime prior to the late 1940s and continuing through the 1960s, the site was used under several names for the manufacturing of paint and a variety of sealings and coatings. Based on a review of industrial directories and fire insurance maps, Elan Chemical Co. began using the main parcel in 1971. In 1977 Lot 20, railroad right-of-way, was sold to Elan Chemical Co. by the Central Railroad of New Jersey. Railroad tracks and the elevated fill were removed from this parcel and Elan began using this area for storage.

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Description of Current Site Uses

The property is currently used to manufacture ingredients for the food flavoring industry. The manufacturing activities consist of the batch processing of various acids and batch specific alcohols, involving reactions, pH adjustments, and distillations. Solvents are also used in the process. The principal wastes generated by the processes are wastewater and water-soluble compounds, and waste solvents. Wastewater is pre-treated on site before being discharged to the local sewage authority. Solvents are recycled into the processing operations until they are no longer useable. They are then stored onsite in 55-gallon drums before pumped in an aboveground 4,500-gallon storage tank prior to off-site disposal. A large portion of the exterior property is used for the temporary storage of chemical intermediates (i.e., work in progress) in 55-gallon drums.

Summary of Findings

Based upon the historical research, review of facility provided reports and correspondence, limited review of governmental waste incident files and databases, interviews with site representatives, and the on-site visual inspection of the property, evidence was found to indicate that there has been a contamination problem affecting the subject site related to leaking hazardous waste drums. During the course of the investigation, several other sources of potential concern were identified, each of which are briefly discussed below.

- Former Drum Storage

The unpaved area currently used for scrap metal storage was formerly used (as late as 1990) to store 55-gallon drums of hazardous waste solvents. Several inspections by the New Jersey Department of Environmental Protection and Energy (NJDEPE) Division of Hazardous Waste Management from 1988 through 1990 resulted in Notice of Violations (NOVs) for violations including improper labelling of hazardous waste drums, discharge of hazardous substances from leaking drums, failure to ship hazardous waste offsite within 90 days, and manifesting and other compliance deficiencies.

Elan Chemical Co. hired a consultant who in 1991 and 1992 conducted soil boring sampling in areas of stained soil. Our review of the 1992 sampling data indicates a number of the soil samples contained polycyclic aromatic hydrocarbons (PAHs) at concentrations greater than the proposed New Jersey Cleanup Standards published in the New Jersey Register on February 3, 1992 (N.J.A.C. 7:26). These standards were developed for residential and non-residential surface soil: subsurface soils, groundwater, and building interiors in order to expedite the cleanup of various sites throughout the state. Though these

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cleanup standards are only proposed at this time, the NJDEPE has advised ENSR on other projects that they are using these proposed regulations as guides in determining appropriate actions for potential areas of concern. In addition, chromium was detected in all the samples in concentrations as high as 1230 ppm. There is no proposed cleanup standard for chromium at this time; however, a guideline of 100 ppm has been used in the past. Elan Chemical Co.'s consultant proposed to encapsulate the area with asphalt. A Memorandum of Agreement was entered into between NJDEPE and Elan Chemical Co. on August 27, 1992 allowing the area of concern to be encapsulated as proposed. We wish to point out that NJDEPE has informed Elan Chemical Co. that leaving contaminants in place that may exceed the New Jersey Proposed Cleanup Standards, when and if promulgated, may require a deed restriction on the property. In addition, other NJDEPE programs, i.e., ECF may or may not accept this proposed remedial measure.

On April 17, 1991, Administrative Order and Notice of Civil Administrative Penalty Assessment was issued by NJDEPE with a \$21,000 fine based on the previous inspection discussed above. Elan Chemical Co. is appealing the fine and a hearing is currently scheduled for February 1993.

- Known Contamination in a New Jersey Bell Underground Vault

Directly in front of the subject property, to the right of the entrance door, is a New Jersey Bell underground vault (manhole). New Jersey Bell workers discovered chemical odors coming from the water in this manhole and informed NJDEPE in May 1992. A sample collected by New Jersey Bell in April 1992 revealed contamination with toluene and other solvents used by Elan Chemical Co. An additional sample was collected from "fresh liquid" which entered the manhole after it had been pumped out and similar contaminants were found. As a result, New Jersey Bell has claimed the underground cables have failed and are currently running overhead telephone lines since the potential hazards prevent them from making repairs. New Jersey Bell has requested that NJDEPE identify the responsible party and implement corrective action. Elan Chemical Co. has been notified by NJDEPE as a potential source of the contamination based on the presence of an Elan Chemical Co. cistern located to the left of the entrance door. Prior to 1985, this cistern was used by the facility to collect process effluent before discharge into the sewer. In 1985, Elan Chemical Co. claims it sealed the line into the sewer when it began using its on-site pretreatment process. The facility claims the source of the contamination originates from overflow of the municipal sewer line which runs parallel to the underground New Jersey Bell cable. In addition, Elan Chemical Co. claims to have filled the cistern with sand after hearing about the problem with the New Jersey Bell vault. ENSR contacted the NJDEPE investigator handling the case, Mr. Gary Greulich, and was told that he is currently

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attempting to determine the building code requirements from 19... that would dictate the proper procedures for disconnecting their effluent line to the cistern. point out, however, that these measures undertaken by Elan Chemical Co. do not eliminate the cistern as a potential source of the contamination and the potential for the facility to be identified as a Potentially Responsible Party (PRP).

- Non-Compliance with PVSC Discharge Permit

Elan Chemical Co. discharges pre-treated process effluent to the Passaic Valley Sewage Authority (PVSA) under a valid discharge permit. ENSR reviewed monthly testing results from discharge samples collected from October 1991 through September 1992 for permit compliance. Each month at least one chemical compound exceeded its discharge limit. There is the potential for the PVSA to require Elan Chemical Co. to improve its treatment process.

- Discharge Pipe into the Passaic River

Upon a review of NJDEPE hazardous waste files, ENSR discovered that during a RCRA site inspection on July 16, 1990, the NJDEPE discovered a discharge pipe exiting the southeast portion of site into the Passaic River. The NJDEPE investigator, Ms. Jodie Stein, determined that no permit was on file with the NJDEPE Division of Water Resources.

- Aboveground Hazardous Waste Storage Tank (Tank No. 61)

As previously mentioned, Elan Chemical Co. has in the past and at the present time, used a 4,500-gallon aboveground storage tank to store waste toluene and methanol, prior to off-site disposal. As a result of a December 8, 1988, site inspection, the NJDEPE issued a Notice of Violation (NOV) for failure to obtain Department approval for storage of waste in an aboveground tank and not having the tank labelled hazardous waste (N.J.A.C. 7:26-9.3(b)). Elan submitted a letter to the NJDEPE notifying them that use of the tank had been discontinued. ENSR obtained a copy of an internal NJDEPE memo which indicated that Elan had come into compliance with this and other violations.

Interviews with site representatives during ENSR's September 11, 1992 site inspection indicated that waste solvents are temporarily stored in the tank in question, Tank 61.

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- Prior Disposal Practices of Former Operations

As previously discussed, ENSR has learned that the subject property was used, in the mid-1900s to manufacture paints and various coatings and sealants. Although there was no available information regarding waste disposal information nor was there any observable evidence of on-site waste disposal during our site inspection, there is concern that this former operation may have released hazardous substances to the environment.

Review of Available Material Safety Data Sheets

ENSR was provided by Elan Chemical Co. a raw material inventory list dated June 30, 1992. During our site inspection of September 11, 1992, we reviewed available Material Safety Data Sheets (MSDS) for these raw materials to identify any materials which were described as toxic. While each MSDS is different in terms of how much chemical information is provided and how it is presented, ENSR has compiled a partial list (Table 1) of chemicals which were identified as either toxic or a high health hazard (T), or having low toxicity (LT). Please be aware that other raw materials used by Elan Chemical Co., that either did not have an available MSDS or whose MSDS contained insufficient information, may also be toxic.

Recommendations

ENSR's findings related to the Former Drum Disposal Area, other historical on-site operations, and the New Jersey Bell underground vault, as discussed above, cannot be verified without undertaking an analytical testing program. The decision to implement such a program is dependent on Stanchart Business Credit, Inc.'s assessment of the potential business risks involved, along with the consideration of the various indemnification agreements, warranties, or representations that may exist between the two parties. Based solely upon the results of this preliminary investigation, the information suggests that some testing for potential groundwater contamination should be considered. This testing program, if implemented, should focus on determining whether the soil contamination identified in the Former Drum Disposal Area, the cistern, and any other potential contamination from the former paint manufacturing operations, has released contaminants into the groundwater.

ENSR believes that if the facility were to trigger the requirements of the NJDEP Environmental Cleanup Responsibility Act (ECRA), there is a high probability of finding significant waste-related problems at this site. Furthermore, it is unclear how the proposed NJDEP cleanup standards will affect the site. In order for Stanchart Business Credit, Inc. to fully verify and assess the potential environmental liabilities at this site, ENSR would

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TABLE 1

Partial List of Toxic Raw Materials
Used by Elan Chemical Co.

Chemical	Identifk
Acetic Anhydride	T
Acetone	LT
Cassia Oil Natural	LT
Arquad HT-75	T
Aluminum Chloride	T
Aluminum Isopropylate	T
Benzyl Chloride	T
Boric Acid	T
N-Butyric Anhydride	LT
Cedrol Crude-X POL	LT
Cedarwood Oil	LT
Cinnamic Alcohol	LT
Dimethyl Formamide	T
Dimethyl Sulfate	T
Glycerine	LT
Heptane	LT
Heptanoic Acid	T
N-Hexanol	LT
Hydrochloric Acid	T
Isopare	LT
Methanol	T
Cinnamic Acid	LT
Ethylene Dichloride	T
Formaldehyde 37%	T
Caproic Acid Natural	T
4-Isopropylaniline	T
4-N-Butylaniline	T
P-N-Butylaniline	T
4-sec-Butylaniline	T
Acetone natural	LT
Benzoyl Chloride	T

T - Toxic or a high health hazard
LT - Low toxicity

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recommend implementing an ECRA-type sampling program. While implementing such a sampling program would be costly at this time and possibly perceived by Stanchart Business Credit, Inc. to be unnecessary based on their assessment of the business risks involved, we do recommend, at a minimum, the implementation of the following tasks using NJDEPE approved procedures:

- Install and sample a minimum of three monitoring wells onsite.
- Advance a minimum of two soil borings adjacent to the former cistern and collect and analyze soil samples at a depth below the base of the cistern, and collect a sample of the sand in the cistern.
- Collect and analyze water samples from both the pre-treated process effluent (prior to discharge to the sewer) and the New Jersey Bell vault for comparison purposes.
- Collect and analyze a surface sample of the stained soil observed behind the dumpster area during our September 11, 1992 site inspection.

Regarding the ongoing issues which NJDEPE has been involved with and other issues that they have expressed concern with in the past, we recommend that Stanchart Business Credit maintain contact with the appropriate NJDEPE representatives for status updates on the following:

- The proposed encapsulation of the Former Drum Area. It is also recommended that the NJDEPE-ECRA office be contacted to determine whether ECRA would accept this remedial measure.
- The resolution of the \$21,000 fine cited in the April 17, 1991 Administrative Order and Notice of Civil Administrative Penalty Assessment.
- The New Jersey Bell vault investigation as it may identify Elan Chemical Co. as a potentially responsible party.
- The discharge pipe entering the Passaic River.
- The storage of hazardous waste in an aboveground tank.

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Study Limitations

This report describes the results of ENSR's initial investigation to identify the potential presence of significant environmental liabilities materially affecting the subject property. In the conduct of this investigation, ENSR has attempted to independently assess the potential presence of such problems within the limits of the established scope of work as described in our proposal dated September 10, 1992. However, verification of potentially important facts was not always possible. As with any due diligence evaluation, there is a certain degree of dependence upon oral information provided by facility or site representatives which is not readily verifiable through visual inspection or supported by any available written documentation. ENSR shall not be held responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed by facility or site representatives at the time this investigation was performed.

This report and all field data, notes, and laboratory test data (where applicable) were gathered and/or prepared by ENSR in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of ENSR's investigation of the site. The statements, conclusions, and opinions contained in this report are only intended to give approximations of the environmental condition of the site. Moreover, there are several major modifications that are inherent in the conduct of this or any other environmental due diligence examination.

First, it is difficult to predict which, if any, of the potential environmental issues identified will become actual problems in the future, for federal and state environmental regulations continually change as do the enforcement priorities of the applicable governmental agencies involved.

Second, even for problems currently identified, it is often difficult and sometimes impossible to accurately estimate the liabilities that may be involved in remedying the problem(s), for the legal and technological standards for evaluating, remedying, and allocating liability for environmental issues are in a constant state of change. Moreover, the liability for remedying environmental problems tends to be highly dependent upon agency negotiations and the sometimes arbitrary and unpredictable nature of agency officials charged with such negotiations.

Third, there is always the distinct possibility that major sources of future environmental liability have yet to manifest themselves at the point where they are reasonably identifiable through an external investigation such as the one conducted herein.

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ENSR

October 2, 1992
Mr. Donald Flores
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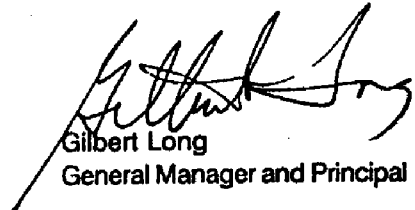
This report, including all supporting field data, notes, and laboratory data where applicable (collectively referred to hereinafter as "Information") was prepared or collected by ENSR for the benefit of its client, Stanchart Business Credit, Inc. ENSR's client may release the information to third parties, who may use and rely upon the Information at their discretion. However, any use of or reliance upon the Information by a party other than specifically named above shall be solely at the risk of such third party and without legal recourse against ENSR, its parent or its subsidiaries and affiliates, or their respective employees, officers, or directors, regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent, or other negligence and strict liability of ENSR), statute or otherwise. This Information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

ENSR appreciates the opportunity to provide environmental services to Stanchart Business Credit, Inc. If you have any questions regarding our report or its findings, please contact me at (908) 560-7323.

Sincerely,



Donald P. Hessemer
Senior Project Manager



Gilbert Long
General Manager and Principal

DPH/gpk

Reference No. 6494-003-400(464)

Attachments: Exhibit A
cc: File 6294-003

847521180

**EXHIBIT A
SUPPORTING DOCUMENTATION FOR ENVIRONMENTAL DUE DILIGENCE**

PART I: SITE OWNERSHIP AND LOCATION

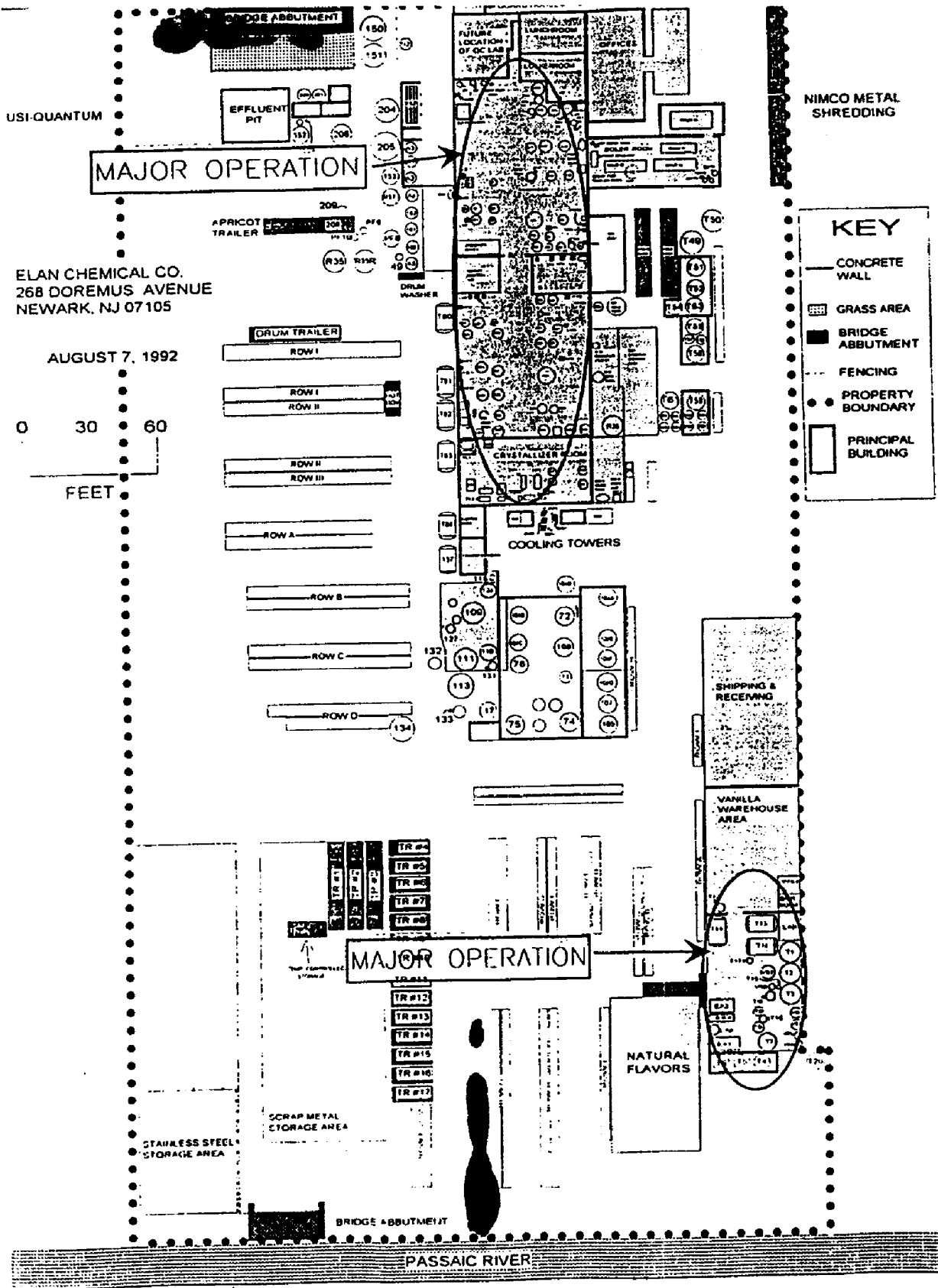
1. **Site Owner:**
 - (a) **Name:** Elan Chemical Co.
 - (b) **Address:** 268 Doremus Avenue
Newark, NJ 07105

2. **Site Operator:**
 - (a) **Name:** Elan Chemical Co.
 - (b) **Address:** 268 Doremus Avenue
Newark, NJ 07105

3. **Site Location References: (See Figure 1: Site Location Map)**
 - (a) **Address:** 268 Doremus Avenue
Newark, NJ 07105
 - (b) **County:** Essex
 - (c) **U.S.G.S.
Quad Map:** Jersey City and Elizabeth, NJ

PART II: DESCRIPTION AND CHARACTERIZATION OF SITE

1. **Physical Description of Site (See Figure 2: Site Plan)**
 - (a) **Site acreage:** Approximately 4 acres
 - (b) **Estimated % of site covered by buildings and pavement:** 90%
 - (c) **Site and building layout:** The rectangular-shaped property is located along the easterly side of Doremus Avenue. The site contains a main one-story building extending from Doremus Avenue towards the center portion of the property. This building contains offices, lunchroom, lockerroom, and the main manufacturing operations. A storage shed used to store hoses, belts, and pumps is located along the northwest corner of the site. In the northeast portion of the site is a one-story building which contains three rooms: the shipping and receiving area, the vanilla warehouse area, and an extraction



and blending room. Adjacent to south side of this building is the Natural Flavors Building. The eastern end of the site is used for the outside storage of finished goods and also contains the outside scrap metal storage area. A small one-story building used for toluene extraction is located in the center of the site. The southern portion of the site contains the outside drum storage area for work in progress. Finally, the southwestern portion of the site contains the wastewater effluent pit and treatment system. Interspersed through the center of the property are numerous aboveground storage tanks containing process chemicals and wastewater.

- (d) **Topography and slope:** The subject property is relatively flat; however, in the rear of the property, the ground slopes to the north where Elan has recently installed a catch basin which will eventually be pumped to the on-site treatment system.
- (e) **Depth to groundwater/flow direction:** Depth to groundwater was determined to be between 6 to 6.5 feet below grade during soil boring activities in January 1992. Groundwater flow is expected to be towards the Passaic River and subject to tidal fluctuations.
- (f) **Surface water and wet areas (including streams, rivers, ponds, etc.):** The Passaic River borders the eastern side of the site along the rear portion of the property.
- (g) **Ditches/Drainage Features:** None observed.

2. Brief Description of Current Use in Terms of Products Made; Processes Used; Raw Materials Employed; Chemicals and Fuels Used; and Wastes Generated, Including Waste Disposal Facilities/Locations Used:

Elan Chemical Co. manufacturers food flavorings and ingredients used in flavors and fragrances. Major process operations take place in the Blending Room and the Main Manufacturing Building. In the Blending Room, vanilla extract is produced by blending ground vanilla with ethyl alcohol. Wastes include wastewater and spent vanilla beans. The wastewater goes into floor drains which lead to a sump and is then pumped to the on-site pretreatment system.

The Main Manufacturing Building houses the batch processing operation involving various acids and batch specific alcohols. The process consists of reactions, washings, and distillation. The reaction process produces an ester. Water and water-soluble contaminants are driven off by adjusting the pH (washing) which increases the grade of the product. Process wastewater is diverted for on-site pretreatment before being discharged to the Passaic Valley Sewage Authority. Solvents are used in the process as a carrier to decrease the viscosity of the ester which allows for easier handling. The resulting ester/solvent

*Unless otherwise noted, the groundwater flow direction has been inferred from a review of regional topographic data. Site specific conditions may vary due to a variety of factors, including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

mixture is distilled to recover the solvent, which is then recycled into the process until it is no longer effective. Waste solvents are temporarily stored in 55-gallon drums in the exterior Hazardous Waste Storage Area before being pumped into an aboveground 4500-gallon storage tank (Tank 61) where it is blended prior to off-site disposal.

The facility is heated by oil and gas although currently it is heated primarily by gas.

3. Selected Facility Information:

- (a) **Septic tanks/leaching fields:** None observed or reported.
- (b) **Sanitary sewers:** The subject property is served by the municipal sanitary system.
- (c) **Process wastewater sewers:** The subject facility discharges between 60,000 to 70,000 gallons/day of treated wastewater to the Passaic Valley Sewerage Commission (PVSC) under a valid permit. The waste stream also includes cooling water and water from building floor drains and sumps. More detailed information is provided in Part VI, No. 3, Wastewater Discharges.
- (d) **Facility water supplies (potable and process):** Potable and process water is obtained from the City of Newark Municipal System.
- (e) **Wells (active or abandoned monitoring, potable or process water supplies, injection, gas/oil):** None present.
- (f) **Other:** None.

4. Observations Concerning Waste Management Practices at Site

- (a) **Date of site/facility inspection:** September 11, 1992.
- (b) **Weather-related limitations:** None.
- (c) **Access-related limitations:** None.
- (d) **General condition of interior areas:**
 - (i) **Process areas:** The Blending Room appeared well maintained. Floor drain channels in the cement floor transport wastewater to the on-site wastewater treatment system. The Main Manufacturing Building had numerous wet areas on the concrete floor.
 - (ii) **Raw material/chemical supply areas:** Raw materials are received in 55-gallon drums in the Shipping and Receiving Room which appeared well maintained.
 - (iii) **Waste storage areas:** With the exception of floor drains and sumps described below, all wastes are stored in drums and an exterior aboveground tank. Tank 61,

which is used to mix and store waste solvents prior to off-site disposal, had no containment dike and is in a paved area.

(iv) **Floor drains, sumps:** A floor drain channel system leading to a sump is present in the Blending Room, the Natural Flavors Building, and the Main Manufacturing Building. All three systems lead to the on-site treatment system and were observed containing wastewater during the inspection.

(v) **Other:** None.

(e) **General condition of exterior areas:**

(i) **Process areas:** Much of the exterior areas is used for storage of finished products and "intermediate" (work in progress) stored in drums on pallets in paved areas. The drums appeared in good condition. Intermediates are stored in large aboveground holding tanks in diked areas.

(ii) **Waste storage areas:** A hazardous waste storage area was observed outside containing two drums on a pallet in a paved area beneath an overhang. There was no access limitation or dike in the area. Drums were marked as flammable liquid and hazardous waste and dated 4/27/92. It should be noted that this waste appears to have been stored greater than 90 days.

The bulk of the hazardous waste produced at the site is a mixture of primarily toluene and methanol and other solvents stored in an aboveground tank. No ground staining was observed in this area.

The Scrap Metal Storage Area, located on the main non-paved portion of the site (gravel), contained large abandoned vessels and empty drums as well as a dumpster which was observed to contain empty bags and cardboard. Behind the dumpster stained soil was observed.

(iii) **Loading/unloading docks:** No significant conditions were observed at the loading dock area in front of the Shipping and Receiving Room.

(iv) **Tank fill locations:** No evidence of spills was observed at the No. 4 fuel oil storage tank.

(v) **Catch basins:** Two catch basins for storm runoff were observed in the driveway along the northern side of the site. They discharge to the PVSC. Three others were observed in a line between the Main Manufacturing Building and the Work in Progress Area, and according to the Site Effluent Plot Plan, lead to the on-site treatment system prior to discharge to the PVSC.

(vi) **Other:** A pool of brown slurry with an odor of vanilla and alcohol was observed in a low lying catch basin area outside the Electrical Transformer Area. This catch basin also appears to lead to the on-site pretreatment system.

(f) Other observations:

- (i) **Discolored soils:** Stained soil, yellow in color, was observed behind a dumpster in the Scrap Metal Storage Area.
- (ii) **Discolored water:** Oily sheens were observed on puddles of recent rainwater throughout the site.
- (iii) **Unusual odors:** Due to the site operations, strong fragrance odors were observed throughout the site.
- (iv) **Unusual vegetative conditions:** None observed.
- (v) **Other observations:** Water with an unidentified chemical odor was observed in a New Jersey Bell manhole located directly in front of the subject property.

PART III: SITE HISTORY AND DESCRIPTION OF SURROUNDING LAND USES

1. Description and Former Uses of Site, Including Dates Where Known, and Other Relevant Information Concerning Waste Generation, Disposal, and Underground Tanks:

The subject site appears to have been developed prior to 1926 based on a review of "Robinson's Atlas of the City of Newark 1926" and a 1931 Sanborn Insurance Map. Both of these maps show the presence of most of what is currently the Main Manufacturing Building and identify the occupant as Schultz Vegetable Oil Company. The Sanborn Map identified the structure as storage. A boiler house which is no longer present was also shown as well as a steel frame structure which was "vacant and dilapidated". An industrial directory identified Better Finishes and Coatings (BFC) as the occupant in 1949 which manufactured paints, enamels, lacquers, and other coatings.

A 1951 Sanborn Map confirmed BFC as the occupant and identified the main building for paint manufacturing. This map also showed the absence of the boiler house and steel frame. Industrial directories show the site remaining as BFC and Essex Chemical Corp. through 1964 continuing the manufacturer of coatings and sealants.

A 1974 Sanborn Map shows ancillary structures attached to the main building and a warehouse building which appears to be the present Vanilla Warehouse Area and Blending Room. The appearance of solvent tanks at the east end of the main building is also shown on this 1974 map. The industrial directories identify Elan Chemical Corp. as the occupant since 1971 although there is a gap from 1964 to 1971. A review of property deeds indicates that the property was sold to Elan in 1977 and included property previously owned by the Central Railroad of New Jersey. According to Mr. David Weisman, President of Elan Chemical Corp., the southern portion of the property had been a railroad right-of-way and

had been covered with about 20 feet of fill for the railroad. The railroad removed the tracks and fill before selling Elan the property.

2. Description of Current and Former Uses of Properties Abutting or Adjacent to the Site, Including Relevant Information Concerning Potential Waste Generation and Underground Tanks:

The entire Doremus Avenue is a heavily industrialized area. The subject property is bounded to the north by a scrap metal yard (NIMCO Shreading Co.), to the east by the Passaic River, to the south by Quantum Chemical Co., and to the west by Doremus Avenue. Directly across Doremus Avenue is currently an open lot with tires and crushed cars; however, the predominant parcel of land is the former Pitt-Consol Chemical Co. NIMCO Shreading Co. and Quantum Chemical Co. both are listed as having registered underground storage tanks.

Pitt-Consol is currently under investigation under the Superfund program. Sanborn maps as far back to at least 1974 show Pitt-Consol occupying this adjacent property with numerous aboveground storage tanks present. According to a 1986 report submitted to the New Jersey Turnpike Authority which documented a historical survey of potential sources of contamination within and adjacent to a proposed turnpike right-of-way, the Pitt-Consol property was identified as having a variety of potential contamination sources including as far back as 1934, including tank storage and liquid storage. The 1931 and 1951 Sanborn maps show this property being occupied as a tar plant. Sanborn maps from 1974, 1951, and 1931 indicate the adjacent property to the north of Elan (currently a scrap metal storage yard) as an oil blending plant with oil tanks at the eastern and western ends of the property.

3. Description of Other Potentially Significant Land Uses Currently Situated Within a Minimum of 250 Feet of Site:

Numerous additional chemical and petroleum facilities extend in both directions on Doremus Avenue.

PART IV: INVENTORY OF SENSITIVE RECEPTORS IN SITE VICINITY

1. Wells/Potable Drinking Water Supplies Within a Minimum of 1,000 Feet:

According to Mr. Nicholas Koval of the Essex County Department of Planning and Economic Development, there are no potable wells or other drinking water wells in Newark. The area obtains its drinking water from the Wannaque Reservoir in northern New Jersey.

2. Residences Within a Minimum of 1,000 Feet:

There are no residences within 1,000 feet of the subject facility. The area is entirely industrial.

3. Significant Wet Areas/Surface Water Bodies Within a Minimum of 1,000 Feet:

The Passaic River borders the eastern side of the subject property.

4. Other Sensitive, Off-Site Receptors Within a Minimum of 1,000 Feet:

None present.

PART V: DESCRIPTION OF KNOWN OR SUSPECTED RELEASES OF HAZARDOUS MATERIALS OR PETROLEUM HYDROCARBONS

1. Has the Subject Site ever been Listed on Any of the Following:

	<u>Yes</u>	<u>No</u>
(a) National Priorities List (Superfund)	—	<u>X</u>
(b) CERCLIS Data Base (of Potential Problem Sites)	—	<u>X</u>
(c) State List/Inventory of Problem Sites	—	<u>X</u>

If "Yes", describe the listing, including lead agency, reason for listing, and current status of the case: [provide copies of any relevant reports, letters, or other supporting documentation]

2. If the Facility or Site Has Not Been Listed in (1) Above, Has the Facility Ever Had a Release, Spill, or Leak of a Hazardous Substance or Petroleum Hydrocarbons or Has the Facility/Site Ever Been Investigated by a Governmental Agency for the Actual or Potential Presence of an On-Site Contamination Problem? If so, Describe the Circumstances Surrounding the Incident (Date, Source, Location), Including Any Notification Submitted or Received, the Agency Response and Current Status of the Matter: [Provide copies of any notification, relevant reports, letters, or other supporting documentation] See Attachments A, B, and C.

- **Spill in Scrap Metal Storage Area**

According to Elan Chemical Co. and a review of correspondence between the company and the NJDEPE, the Scrap Metal Storage Area was formerly used as a drum storage area, and leaking drums were discovered by NJDEPE in this gravel area. Elan hired a consultant, Environmental Waste Management Associates (EWMA), who collected soil samples from three visually stained areas in March 1991. The results were submitted to NJDEPE in a report dated March 26, 1991 with recommendations for additional soil sampling. The NJDEPE approved the sampling plan and EWMA advanced 8 soil borings in the area in January 1992. Sampling results and a recommendation to

encapsulate the area with asphalt were submitted to NJDEPE in April 1992. The NJDEPE responded on June 4, 1992 by offering Elan the opportunity to perform remedial activities under a Memorandum of Agreement (MOA) with the NJDEPE. An MOA was subsequently signed on August 27, 1992, and the NJDEPE approved the proposal for encapsulation in a letter to Elan dated September 16, 1992. The NJDEPE also indicated that a deed restriction may be required if proposed cleanup standards (N.J.A.C. 7:26D) "are adopted substantively as is," and that the proposed encapsulation may or may not be acceptable for other NJDEPE programs such as ECRA.

- New Jersey Bell Manhole Contamination

At the present time, there is an NJDEPE investigation looking into the contamination of a New Jersey Bell underground vault (manhole) located in front of the subject property. The situation was brought to the attention of NJDEPE by New Jersey Bell in May 1992 when a field crew noticed unusual odors emanating from the manhole. A sample of the liquid collected in April 1992 revealed the presence of toluene and other solvents. The manhole was pumped out on May 26, 1992, three times as new liquid was entering into the manhole and another sample was collected which revealed similar chemical compounds as the first sample. Due to this condition, New Jersey Bell has asserted that the underground cables are falling and they will not permit their field crew to enter the manhole for repairs. New Jersey Bell has requested that NJDEPE identify the responsible party and implement corrective actions.

Approximately 8 to 10 feet to the north of the manhole is a cistern, which Elan used prior to 1985 to discharge process effluent before it entered the municipal sewer. NJDEPE suspects that this cistern is a potential source of the contamination discovered in the New Jersey Bell vault. Elan responded to an NJDEPE request to sample the water in the cistern by informing NJDEPE that the cistern had been filled with sand.

3. **Are There Any Sites Located Within a Minimum of 1,000 Feet of the Subject Site that are Shown on Either the National Priorities List of Federally-Designated/Proposed Superfund Sites, the U.S. EPA's CERCLIS Data Base List of Potential Problem Sites, or Any Comparable State List: for Each Identified Site, Describe Source of Listing, Approximate Distance and Direction Relative to Subject Site, and Whether or Not the Listed Site Appears to be in an Upgradient, Downgradient, or Parallel Hydrogeological Gradient Relative to the Subject Property:**

National Distillers and Chemical Corp., located to the south at 300 Doremus Avenue, is less than 1/4 mile from the subject property and is listed on CERCLIS. An EPA site inspection was completed in September 1985. This site appears to be in a parallel hydrogeological gradient relative to the subject property.

Four additional sites, listed on CERCLIS, are located between 1/8 and 1/4 mile away from the subject property:

- Celanese Chemical Co. (375 Doremus Avenue)
- Celanese Newark Terminal (354 and 375 Doremus Avenue)
- Newark Housing Authority Property (291 - 549 Avenue P)
- Pitt-Consol Chemical Company (191 Doremus Avenue)

The Newark Housing Authority and the Pitt-Consol Chemical Co. appear to be upgradient from the subject property, while the Celanese properties appear to be in a parallel gradient. There are no NPL sites within a 1/2 mile of the subject property.

National Distillers and Chemical Corp., the two Celanese properties, and Pitt-Consol Chemical Company are also included in the New Jersey List of Hazardous Waste Sites.

PART VI: SELECTED REGULATORY ISSUES

1. Solid and Hazardous Waste

(a) Identify and describe principal wastes generated, including estimated annual quantities by waste type: [Use table shown below—attach copies of annual/bi-annual waste reports, manifests, etc.] See Attachment D.

Hazardous Wastes		Non-Hazardous Wastes	
Waste Type	Annual Vol.	Waste Type	Annual Vol.
Flammable Spent Solvents	43,814 gal (1991)	Trash	480 cu. yds.

(b) Identify RCRA Status of Facility (Check One)

- i. Conditionally exempt small quantity generator (<100 kg/mo) _____
- ii. Small quantity generator (100-1,000 kg/mo) _____
- iii. Generator (> 1,000 kg/mo) X
- iv. TSD facility _____

Comment: Facility reportedly stores hazardous waste on site less than 90 days but has been cited for violations in the past. During our September 11, 1992 site inspection, two drums of hazardous waste were observed onsite dated 4/27/92, indicating greater than 90 days storage. In addition, hazardous wastes is also being stored in an aboveground tank.

**List the facility's EPA Identification number:
[Attach copy of EPA Notification of Hazardous Waste Activity]**

NJ D04289560

Copy of EPA Notification of Hazardous Waste Activity was unavailable.

- (c) **What is the maximum quantity of hazardous waste the facility generates on a monthly basis? [kg/mo – 1 kg = 2.2 lbs = 0.26 gal]** Based on the review of two hazardous waste manifests dated 7/6/92 and 8/11/92, Elan disposed of 5,000 gallons of hazardous waste in that one month span.
- (d) **What is the maximum quantity of hazardous waste the facility accumulates onsite at any one time? [kg]** Based on a review of 1991 hazardous waste manifests, the maximum quantity stored on site was 5300 gallons which was disposed of in May 1991.
- (e) **What is the maximum period of time the hazardous waste remains onsite (prior to onsite treatment, storage or disposal; or shipment offsite for treatment, storage or disposal)? [days]** Based on a review of 1991 hazardous waste manifests, the maximum period is approximately 45 days; however, the facility has been cited for storing greater than 90 days in the past.
- (f) **Describe the condition(s) of the hazardous waste storage area(s). [Consider container condition, aisle spacing, container stacking, etc.]:** At the time of the inspection, two waste drums in fair condition were located on a pallet in the hazardous waste storage area. The area is paved and was covered with an overhang. Tank 61 is a 4500-gallon aboveground tank used to blend and store toluene/methanol waste prior to off-site disposal. The tank is not diked.
- (g) **If the facility is a TSDF, describe each unit and its permit status below. [If the facility has RCRA interim status, attach a copy of the Part A permit application, a copy of the request letter from EPA for the Part B application, and a copy of the facility's letter of transmittal of the Part B application. If the facility has received a RCRA Part B permit, attach a copy.]** The subject facility is not a TSDF.
- (h) **Has the facility ever held RCRA interim status, submitted a RCRA Part B permit application, or received a RCRA Part B permit at any time?**

Yes No

If "Yes", has the EPA ever conducted a RCRA Facility Assessment (RFA) or an Environmental Priorities Initiative (EPI) inspection of the facility? If so, describe below the circumstances and findings [attach copies of any written EPA materials].

- (i) Has the EPA imposed any RCRA Corrective Action requirements on the facility as part of either a Part B permit or an enforcement action?

Yes No

If "Yes", identify below the Corrective Action requirements and the current status of the facility's achievement of these requirements [attach copy of corrective action requirements].

- (j) Have there been any governmental RCRA-related inspections or investigations during the past five years?

Yes No

If "Yes", when, by whom, why, and what were the results [attach copies of appropriate documentation where available]? The NJDEPE-Division of Hazardous Waste Management conducted a partial generator inspection on December 8, 1988, and a subsequent full generator inspection on December 22, 1988.

Major findings from the December 8, 1988 inspection included failure to have waste shipped offsite within 90 days, discharge of hazardous substances from leaking drums, improper labeling of hazardous waste drums, failure to obtain NJDEPE approval to store hazardous waste in an aboveground tank, and improper completion of manifests. The December 22, 1988 inspection revealed five violations concerning notification and emergency planning requirements. A follow-up investigation by NJDEPE on February 3, 1989 was conducted to determine the status of Elan's efforts to remediate the area of leaking drums and revealed drums being segregated and repacked but many leaking drums remaining and soil contamination evident. This is the area where soil samples were collected in 1991 and 1992 by Elan Chemical Co.'s consultant.

On December 27, 1989, the NJDEPE inspected the area near No. 4 Fuel Oil Tank where approximately 100 gallons had been spilled. According to the NJDEPE, the area had been cleaned up and wastes had been removed off site.

On June 14, 1990, NJDEPE-DHWM conducted a RCRA inspection of the site and major findings focused on the storage of hazardous waste. Approximately 1600 drums in deteriorating condition and leaking were observed. In addition, stained soil areas were also observed. A follow-up inspection was performed on July 16, 1990 and a major finding included the discovery of discharge pipe protruding from the southeast corner of the property into the Passaic River. The NJDEPE inspector recommended a referral to the NJDEPE Division of Water Resources for investigation.

(k) Have there been any RCRA notices of violation or enforcement actions taken against the subject facility?

Yes No

If "Yes", when, by whom, why, penalty involved, and was compliance achieved to the satisfaction of the agency [attach appropriate documentation where available]? Notices of Violation (NOVs) were issued by the NJDEPE-DHWM in response to the above RCRA inspections. These NOVs were dated 12/8/88, 12/22/88, 2/3/89, 6/14/90, and 7/9/90 (see Attachment E).

(l) What is done with waste generated (including solid wastes, recycled materials, and hazardous waste) relative to disposal? (check below)

On-site recycling/disposal

Off-site recycling/disposal

If off-site disposal, identify below disposal locations (name, city, state) by waste type and approximate years during which disposal location (s) used.

Waste Type	Disposal Facility (Name, City, State)	Estimated Period of Usage
Spent Solvents	S&W, South Kearney, NJ	1982 - Present
Spent Solvents	Solvent Recovery Services of NJ, Linden, NJ	February and May, 1988
Chromic Acid	SCA Chemical Services, Newark, NJ	1986

(m) Has the facility or facility owner(s) ever been identified as a potentially responsible party (PRP) at any site?

Yes No

If "Yes", describe the circumstances, including estimated percentage contribution and regulatory status of case [attach appropriate and available documentation]: ENSR reviewed the Environmental Data Resources, Inc. Company PRP Reports, dated September 14, 1992, for the subject site under the names Elan Chemical Corp., Elan Chemical Company, and Elan Natural Flavorings. According to these reports, no sites were found that would list Elan as a Potentially Responsible Party (PRP).

2. Above and Underground Storage Tanks

- (a) Are there any active or inactive (but not abandoned) above or underground storage tanks present on the subject site?

Above Ground Underground
 Yes No Yes No

If "Yes", describe all above and underground storage tanks, including contents, capacity (gals), year installed, construction material, secondary containment, cathodic protection or leak detection devices installed, tank tightness test results. See Attachment F.

- (b) Are there any known underground tanks that have been abandoned in-place or removed?

Yes No

If "Yes", to 2 (b) above, describe each tank, including size, contents, year abandoned/removed, reason for abandonment/removal, and testing results:

- (c) Are there any storage tanks (hydrocarbon, mineral oil, or vegetable oil) with a capacity of (i) 42,000 gallons or more of underground storage; or (ii) 1,320 gallons or more aggregate of above ground storage, with no single container having a capacity in excess of 660 gallons?

Yes No

If "Yes", does the facility have a spill prevention control and countermeasure (SPCC) plan that reasonably reflects current conditions and that has been certified by a registered engineer within the past 3 years? [attach copy of cover page plus certification signature]

Yes No

Date of most recent SPCC plan: _____

- (d) Do any of the underground tanks (USTs) require registration under federal or comparable state UST regulations?

Yes No

If "Yes", has the facility properly registered each tank? [attach copy of registration]

Yes No

(e) Are there any USTs subject to federal or comparable state UST regulations that were installed before December 1988?

Yes No

If "Yes", is the UST in compliance with the phased-in leak detection requirements for both the tank and piping?

Yes No

If the UST is not in compliance with the leak detection requirements, describe the circumstances below:

3. Wastewater Discharges

(a) Identify and describe wastewater streams from subject facility, including effluent type (sanitary, process, storm), estimated volumes (gallons per day), and discharge point (receiving stream, sewage system, septic field, etc).

Description of Wastewater Stream	Estimated Volume in Gallons Per Day (gpd)	Description of Discharge Point
Sanitary	Unknown	Sewage System (PVSA)
Stormwater	Unknown	Pre-Treatment/Sewage System
Process Effluent	60,000 - 70,000	Pre-Treatment/Sewage System

(b) Describe the pre-treatment of wastewater streams, if any. Since 1985, stormwater runoff and process wastewater are routed to an on-site pretreatment facility located in the southwest portion of the property. The wastewater enters an aboveground concrete aeration tank and then a second tank for pH adjustment prior to discharge to the Passaic Valley Sewer Authority. Prior to 1985, stormwater runoff and process wastewater were diverted to the underground cistern prior to discharge to the municipal sewer.

Additional pre-treatment prior to that described above occurs in two 12,000-gallon aboveground tank Nos. 134 and 205 where Isopar, a treatment chemical, is added to remove toluene from wastewater.

(c) Describe whether or not the facility has received the necessary permits for each discharge point. For each permit, identify the name of issuing agency, date permit granted, expiration/renewal date, and key permit limitations/requirements [attach copies of permits]: The facility has a Sewer Connection Permit No. 20403242 issued by the Passaic Valley Sewerage Commissioners. The current permit has an effective date of 4/19/91 and an expiration date of 4/14/96. Key requirements for Elan include continuous monitoring of pH and LEL (lower explosive limit) (see Attachment G).

(d) Have there been any governmental wastewater-related inspections or investigations during the past five years?

Yes No

If "Yes", when, by whom, why, and what were the results? [attach available and appropriate documentation]: According to Elan, the Passaic Valley Sewage Authority (PVSA) takes random and monthly samples of the pre-treated effluent. ENSR reviewed monthly testing results from October 1991 through September 1992 for compliance with maximum monthly averages. Each month at least one chemical compound exceeded the maximum monthly average limit. The following compounds had exceedances: zinc (7 months); toluene (6 months); 1,2-dichloroethane (4 months); methylene chloride (2 months); and benzene (1 month). There is the potential for PVSA to require Elan to improve their treatment process.

(e) Have there been any wastewater-related notices of violations or enforcement actions taken against the facility?

Yes No

If "Yes", when, by whom, why, penalty involved, and was compliance achieved to satisfaction of agency? [attach appropriate and available documentation]:

4. Storm Water

(a) Is the facility subject to NPDES storm water regulations?

Yes No

If "Yes",

(i) Has the facility applied for and/or received a NPDES permit that covers their storm water discharges?

Received: Yes No

Applied: Yes No

If applied for, but not received, list date of application and describe the current status of the application review: The subject facility is currently in the process of obtaining the required information to apply for a permit. According to site representatives, Elan is performing topographical studies with other Doremus Avenue companies and will likely be part of a permit with area-wide companies.

(II) If permit received, identify the name of the issuing agency, date permit granted, expiration/renewal date, and key permit limitations/requirements [attach copy of permit]:

(b) Have there been any governmental storm water related inspections or investigations during the past five years?

Yes No

If "Yes", when, by whom and what were the results [attach available and appropriate documentation]?

(c) Have there been any storm water related notices of violation or enforcement actions taken against the facility?

Yes No

If "Yes", when, by whom, why, penalty involved, and was the compliance achieved to the satisfaction of the agency [attach available and appropriate documentation]?

5. Air Quality

(a) What is the attainment/non-attainment status for the air quality control region within which the facility is located relative to each of the designated criteria pollutants (check appropriate boxes below)?

Criteria Pollutant	Attainment	Non-Attainment
Sulfur Dioxide	X	
Particulates		X
Carbon Monoxide		X
Nitrogen Dioxide	X	
Ozone		X
Lead	Unknown	

(b) Describe significant point emission sources, including when each source was installed or modified (year). According to a January 1992 printout from the NJDEPE Division of Environmental Quality, the subject facility has 54 stacks including vents on storage tanks, reactors, general ventilation, and their Boiler No. 4. The years each source was installed is unknown.

(c) Describe whether or not the facility has received the necessary permits for each identified emission source (includes emission registrations where required). Identify any major permit limitations/requirements and identify any permits/registration that have lapsed and require renewal [attach copies of permits where applicable]. According to the above referenced printout for the permit status of these stacks, 40 are permanent, 8 are temporary, 5 have been deleted, and 1 is unknown. Those identified as permanent are valid for 5 years; temporary indicates a 90-day extension; and deleted indicates the permit was eliminated if the equipment is out of service or the source is no longer there. Based on our limited review of available permits, typical permit conditions are no visible emissions and no odors beyond property line.

(d) Have there been any governmental air quality-related inspections or investigations during the past five years?

Yes No

If "Yes", when, by whom, and what were the results? [attach available documentation]. According to the above referenced printout, inspections by the NJDEPE-DEQ for each stack have been conducted between 1987 and 1991.

(e) Have there been any air quality-related notices of violation or enforcement actions taken against the facility?

Yes No

If "Yes", when, by whom, why, penalty involved, and was compliance achieved to satisfaction of agency? [attach available documentation]

6. SARA Title III

(a) Is the facility required to prepare, or have available, material safety data sheets (MSDS) for any hazardous chemical under OSHA?

Yes No

If "Yes", is the hazardous chemical present at the facility in quantities at or above the specified reporting threshold?

Yes No

If "Yes" relative to threshold quantities, has the facility:

(i) Submitted an MSDS for each hazardous chemical, or a list of hazardous chemicals, to the local emergency planning committee, the state emergency response commission, and the local fire department [obtain copies of letters of transmittal]?

Yes No

(ii) Annually submitted a Tier I (Tier II if required by the state) emergency and hazardous chemical inventory form to the local emergency planning committee, the state emergency response commission, and the local fire department [obtain copies of the most recent submittal]?

Yes No

(b) Determine the following:

(i) Does the facility appear in any of the following standard industrial classifications, 20-39?

Yes No

(ii) Does the facility have 10 or more employees?

(iii) Does the facility manufacture or process a listed SARA toxic chemical above the applicable threshold?

(iv) Does the facility otherwise use a listed SARA toxic chemical above 10,000 lb/yr?

If "Yes to items (i), and (ii), and either (iii) or (iv) of Question 5(b) above, has the facility annually submitted a form R (release report) for each toxic chemical above the applicable thresholds [obtain copies of most recent submittals]?

Yes No

(c) Has the facility had a release, or releases of, a CERCLA hazardous substance or a designated extremely hazardous substance since 1987 above reportable quantities which resulted in exposure to persons beyond the boundary of the subject property?

Yes No

If "Yes", was each release reported to the local emergency planning committee and the state emergency response commission [attach copy of appropriate documentation]?

Yes No

7. PCB Containing Items/Equipment

- (a) List major PCB items (transformers, capacitors, heat transfer equipment, hydraulic equipment, etc.) and check concentration category of each item if known [attach copy of supporting analytical testing results]:

Item	< 50 ppm	50-500 ppm	> 500 ppm	Unknown
Three Exterior Transformers	X*			

* According to Elan, they have been told by PSE&G, the electrical utility, that the transformers are PCB-free.

- (b) Are all PCB items with PCB concentration levels at or above 50 ppm properly marked?

Yes No

If "No" to Question 6 (b) above, describe:

- (c) Are there any signs of leakage or staining around the PCB equipment?

- (d) Are inspections conducted of the PCB equipment?

- (e) What is the frequency of the inspections?

- (f) What is the minimum interval between the inspections?

(g) Do records exist to support inspection frequency?

(h) Are there any disconnected or out-of-service PCB items being stored?

Yes No

If "Yes", how long have they been stored on-site (days)? ___

B. Other Regulatory or Related Matters

(a) Has an asbestos survey ever been conducted at the facility?

Yes No

If "Yes", summarize key findings: Identify who or what firm performed the survey, identify when the survey was performed, and describe reason for survey [attached copy of survey findings]:

(b) Has there ever been a prior environmental audit or due diligence evaluation performed at the subject site/facility?

Yes No

If "Yes", summarize key findings: identify who or what firm performed the work, identify when study was performed, and describe reason for study [attach copy of study]:

(c) Has there ever been any prior monitoring or testing of site or facility air emissions, surface or groundwater, or soils (surface or subsurface)?

Yes No

If "Yes", summarize key findings: identify who or what firm performed the work, identify when study performed, and describe reason for study [attach copy of study]:
Surface and subsurface soils were tested in the Scrap Metal Storage Area (former Drum Storage Area) in 1991 and 1992 by Environmental Waste Management Associates (EWMA). The investigation was performed to characterize and delineate three areas of stained soil in this storage area. During the January 1992 sampling event, 8 soil borings were advanced and 2 soils samples were collected from each boring. Chromium was detected in all samples ranging from 31.4 to 4,970 ppm. Chromium concentrations were generally higher at deeper intervals. One sample, collected at 3.5-4.0 ft depth, contained ethylbenzene at a concentration above the proposed NJDEPE cleanup standards. In addition, 6 polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations above the proposed cleanup standards in samples collected between 1.5-2.0 ft in depth. A copy of a portion of the results report is provided as Attachment A.

(d) Are there any active, pending, or potential legal suits being brought against the subject facility for alleged environmental health or safety problems by past or present employees, neighbors, or other parties and not previously discussed?

Yes No

If "Yes", describe [attach copy of documentation]:

PART VII: REFERENCES

1. Persons Performing the Site Investigation (name, title, responsibility):

Donald P. Hessemer, Senior Project Manager: Site visit and report preparation
Kerry Sullivan, Chemical Engineer: Site visit
Kathy Whooley, Biologist: Local and state records search

2. Persons Interviewed (name, title, address, phone number):

David Weisman, President
Elan Chemical Co.
Newark, NJ
201-344-8014

Karal Sulimirski, Facilities Manager
Elan Chemical Co.
Newark, NJ
201-344-8014

Bill Hart, Consultant for Elan Chemical Co.
Hart Environmental Services
609-655-5807

Jodie Stein, Senior Environmental Specialist
New Jersey Department of Environmental Protection and Energy (NJDEPE)
Division of Responsible Party Site Remediation
West Orange, NJ
201-669-3960

Gary Grulich, Senior Environmental Specialist
NJDEPE - Division of Responsible Party Site Remediation
West Orange, NJ
201-669-3960

Jack Boehmer
City of Newark, Division of City Planning
Newark, NJ
201-733-8419

3. Reports and Documents Reviewed:**

- Toxicheck - Environmental Data Resources, Inc., HAZ-SEARCH/PLUS Report, September 14, 1992

Federal Records

- Environmental Protection Agency's (EPA) National Priorities List (NPL)
- EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
- RCRA Hazardous Waste Data Management System
- Resource Conservation and Recovery Information System
- Hazardous Materials Incident Report System
- Toxic Release Inventory System
- PCB Activity Database
- Toxic Substances Control Act

State Records

- Registered Underground Storage Tanks
- State Hazardous Waste Site
- Solid Waste Facilities/Landfill Sites
- NJDEPE, Division of Responsible Party Site Remediation, West Orange, NJ. Various files related to RCRA compliance and inspection activities.
- Tax Assessor's Records, Newark, NJ.
- Robinson's Atlas of the City of Newark, 1926, New Jersey (3 volumes), published by Elisha Robinson, 1927.
- Sanborn Fire Insurance Maps. 1931, 1951, 1974, 1988, for Subject Property and Surrounding Properties, Newark, NJ.
- 1987 Aerial Photo of Subject Property and Vicinity.

**We have examined and relied upon the reports and documents listed above which are based on the professional expertise or knowledge of the authors thereof. We have not conducted an independent examination of facts contained in these reference materials and have assumed that the information set forth therein is true and accurate.

-
- Suburban Regional Health Commission, West Orange, NJ. Files regarding Air Permits.
 - Preliminary Site Investigations: New Jersey Turnpike Widening from Passaic River to Milepost 105. Louis Berger & Associates, Inc., December 1986.
 - Elan Chemical Co. Various files including hazardous waste manifests, site plans, list of air permits.
 - Passaic Valley Sewerage Commissioners, Sewer Connection Permit, Permit No. 20403242.
 - Sampling Results Report, April 1, 1992. Elan Chemical Co., Prepared by Environmental Waste Management Association.

SIGNATURES AND QUALITY CONTROL REVIEW

BY: Donald P. Hessemer DATE: 10/2/92

TITLE: Senior Project Manager

QUALITY CONTROL REVIEW BY: Michael J. Workman

TITLE: ASSOCIATE DATE: 10/2/92

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
5th Fl., 401 E. State St., Trenton, N.J. 08625

184

NOTICE OF VIOLATION

ID NO. NJD 042895680 DATE 12/8/88
NAME OF FACILITY Elan Chemical Co
LOCATION OF FACILITY 268 Doremus Ave. Newark
NAME OF OPERATOR John Vassiliades - V.P. Production

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

N.J.A.C. 7:26-9.6(e) - owner/operator shall maintain
adequate space to allow unobstructed movement
of personnel fire protection equipment, spill control
equipment etc.
N.J.A.C. 7:26-7.4(b) 2 - failure to submit an annual
report detailing by manifest waste type, method
of treatment, quantities treated etc

Remedial action to correct these violations must be initiated immediately and be completed by

12/22/88. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

Edward C. Phillip
Investigator, Division of Waste Management
Department of Environmental Protection

847521259

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
5th Fl., 401 E. State St., Trenton, N.J. 08625

284

NOTICE OF VIOLATION

ID NO. NTD 042895680 DATE 12/8/88
NAME OF FACILITY ELAN Chemical Co.
LOCATION OF FACILITY 268 Doernus Ave. Newark
NAME OF OPERATOR JOHN VASSILIADIS - U.P. PRODUCTION

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NTAC 7:26-9.3(a) 1 - failure to have waste shipped off-site within 90 days.
NTAC 7:26-9.3(a) 3 - accumulation start date not marked or visible, each container not marked or labeled hazardous waste.
NTAC 7:26-9.3(b) - no approval from Department for storage of waste in an above ground tank also, tank not labeled hazardous waste.

Remedial action to correct these violations must be initiated immediately and be completed by

12/22/88. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

Edward A. Phillips
Investigator, Division of Waste Management
Department of Environmental Protection

847521260

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
5th Fl., 401 E. State St., Trenton, N.J. 08625

304

NOTICE OF VIOLATION

ID NO. NJD 042895680 DATE 12/8/88
NAME OF FACILITY ELAN Chemical Co.
LOCATION OF FACILITY 268 DOBENUS AVE NEWARK
NAME OF OPERATOR JOHN VASSILIADIS VP PRODUCTION

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION _____

NJAC 7:26-7.4(e)2 - failure to properly complete
any part of a manifest.

Manifest # NJA 0405589

Remedial action to correct these violations must be initiated immediately and be completed by

12/22/88. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

Edward C. Phillipis
Investigator, Division of Waste Management
Department of Environmental Protection

847521261

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
5th Fl., 401 E. State St., Trenton, N.J. 08625

434

NOTICE OF VIOLATION

ID NO. NJD042895680 DATE 12/8/88
NAME OF FACILITY ELAN CHEMICAL CO.
LOCATION OF FACILITY 268 DOREMUS AVE. NEWARK
NAME OF OPERATOR JOHN VASSILIADIS V.P. PRODUCTION

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION 1
N.J.S.A. 58:10-23c - discharge of a hazardous substance -
N.J.S.A. 58:10-23e - person responsible for discharge should notify the Department
discharge involves at a minimum heavy oils.

Remedial action to correct these violations must be initiated immediately and be completed by To be determined. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

Edward Phillips
Investigator, Division of Waste Management
Department of Environmental Protection

847521262

New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
2 Babcock Place
West Orange, N.J. 07052
(201) 669-3960



NOTICE OF VIOLATION

ID NO. NJDC42895680 DATE 6-14-90
NAME OF FACILITY Elan Chem Inc.
LOCATION OF FACILITY 268 Doremus Ave
NAME OF OPERATOR Newark, NJ 07105
↳ John Vassiliades

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26-7.4(h)1: Failure to receive signed copy of TSD manifest.
NJAC 7:26-7.4(h)2: Failure to submit an exception report to the Dept.
NJAC 7:26-9.3(a)1: Haz. waste accum. onsite for more than 90 days.
NJAC 7:26-9.4(d)2: Containers are in poor condition.
NJAC 7:26-9.4(d)1: Containers are not of sturdy leak-proof construction.
NJAC 7:26-9.4(c)4: Containers not securely closed.

Remedial action to correct these violations must be initiated immediately and be completed by

July 14, 1990. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$50,000 per violation.

1 # NJA057106

Joseph M. Stein
Investigator, Division of Hazardous Waste Management
Department of Environmental Protection

847521265



New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
2 Babcock Place
West Orange, N.J. 07052
(201) 669-3960



NOTICE OF VIOLATION

ID NO. NJD042895680 DATE 6-14-90
NAME OF FACILITY Elan Chem, Inc.
LOCATION OF FACILITY 268 Doremus Ave. Newark, NJ 07105
NAME OF OPERATOR John Vassiliades

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 17:27-1 et seq.) and Regulations (N.J.A.C. 17:27-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26-9.4(d)4iii: Containers improperly stored (stacked 4-high). NJAC 7:26-9.4(d)5: NO daily inspection of haz. waste storage area. NJAC 7:26-9.3(b)3: Containers are not labeled with the words "haz. waste" or "Accum. start date". NJAC 7:26-9.4(g)6ii: NO written job description of each position handling haz. waste. NJAC 7:26-9.4(g)6iii: No written description on the type amt of haz. waste training.

Remedial action to correct these violations must be initiated immediately and be completed by July 14, 1990. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$50,000 per violation.

Joseph M. Stein
Investigator, Division of Hazardous Waste Management
Department of Environmental Protection

847521266



New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
2 Babcock Place
West Orange, N.J. 07052
(201) 669-3960



NOTICE OF VIOLATION

ID NO NJSD042895680 DATE 6-14-90
NAME OF FACILITY Elan Chem Inc.
LOCATION OF FACILITY 268 Doremus Ave. Newark NJ 07105
NAME OF OPERATOR John Vassiliades

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26-9.6(e) & Inadequate aisle space (18") NJAC 7:26-9.7(g) & The contingency plan lacks a list of emerg. equipment, location, physical description & brief outline of capabilities.

Remedial action to correct these violations must be initiated immediately and be completed by July 14, 1990. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$50,000 per violation.

Investigator, Division of Hazardous Waste Management
Department of Environmental Protection

847521267

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1790
Addendum
to 6/14/90
Nov

New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
2 Babcock Place
West Orange, N.J. 07052
(201) 669-3960



NOTICE OF VIOLATION

ID NO. NJ D042895680 DATE 7-9-90
NAME OF FACILITY Slan Chemical
LOCATION OF FACILITY 268 Doremus Ave Newark NJ 07108
NAME OF OPERATOR John Vassiliades

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26-8.5(a) Failure of generator to test its waste to determine if its hazardous. NJAC 7:26-9.4(d) 4iv: Containers of haz. waste are not segregated by waste type.

Remedial action to correct these violations must be initiated immediately and be completed by July 31, 1990. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$50,000 per violation.

[Signature]
Investigator, Division of Hazardous Waste Management
Department of Environmental Protection

847521268



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

SEP 15 2003

**GENERAL NOTICE LETTER
CERTIFIED MAIL-RETURN RECEIPT REQUESTED**

David Weisman, CEO
Elan Chemical Company
268 Doremus Ave.
Newark, New Jersey 07105

RE: Diamond Alkali Superfund Site
Notice of Potential Liability for
Response Actions in the Lower Passaic River, New Jersey

Dear Mr. Weisman:

The United States Environmental Protection Agency ("EPA") is charged with responding to the release and/or threatened release of hazardous substances, pollutants, and contaminants into the environment and with enforcement responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9601 et seq. Accordingly, EPA is seeking your cooperation in an innovative approach to environmental remediation and restoration activities for the Lower Passaic River.

EPA has documented the release or threatened release of hazardous substances, pollutants and contaminants into the six-mile stretch of the river, known as the Passaic River Study Area, which is part of the Diamond Alkali Superfund Site ("Site") located in Newark, New Jersey. Based on the results of previous CERCLA remedial investigation activities and other environmental studies, including a reconnaissance study of the Passaic River conducted by the United States Army Corps of Engineers ("USACE"), EPA has further determined that contaminated sediments and other potential sources of hazardous substances exist along the entire 17-mile tidal reach of the Lower Passaic River. Thus, EPA has decided to expand the Study to include the areal extent of contamination to which hazardous substances from the six-mile stretch were transported; and those sources from which hazardous substances outside the six-mile stretch have come to be located within the expanded Study Area.

By this letter, EPA is notifying Elan Chemical Company ("Elan") of its potential liability relating to the Site pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607(a). Under CERCLA, potentially responsible parties ("PRPs") include current and past owners of a facility, as well as persons who arranged for the disposal or treatment of hazardous substances at the Site, or the transport of hazardous substances to the Site.

Internet Address (URL) • <http://www.epa.gov>

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TIERRA-B-009670

In recognition of our complementary roles, EPA has formed a partnership with USACE and the New Jersey Department of Transportation-Office of Maritime Resources ("OMR") ["the governmental partnership"] to identify and to address water quality improvement, remediation, and restoration opportunities in the 17-mile Lower Passaic River. This governmental partnership is consistent with a national Memorandum of Understanding ("MOU") executed on July 2, 2002 between EPA and USACE. This MOU calls for the two agencies to cooperate, where appropriate, on environmental remediation and restoration of degraded urban rivers and related resources. In agreeing to implement the MOU, the EPA and USACE will use their existing statutory and regulatory authorities in a coordinated manner. These authorities for EPA include CERCLA, the Clean Water Act, and the Resource Conservation and Recovery Act. The USACE's authority stems from the Water Resources Development Act ("WRDA"). WRDA allows for the use of some federal funds to pay for a portion of the USACE's approved projects related to ecosystem restoration.

For the first phase of the Lower Passaic River Project, the governmental partners are proceeding with an integrated five- to seven-year study to determine an appropriate remediation and restoration plan for the river. The study will involve investigation of environmental impacts and pollution sources, as well as evaluation of alternative actions, leading to recommendations of environmental remediation and restoration activities. This study is being conducted by EPA under the authority of CERCLA and by USACE and OMR, as local sponsor, under WRDA. EPA, USACE, and OMR are coordinating with the New Jersey Department of Environmental Protection and the Federal and State Natural Resource Trustee agencies. EPA, USACE, and OMR estimate that the study will cost approximately \$20 million, with the WRDA and CERCLA shares being about \$10 million each. EPA will be seeking its share of the costs of the study from PRPs.

Based on information that EPA evaluated during the course of its investigation of the Site, EPA believes that hazardous substances were being released from Elan's facility located at 268 Doremus Avenue in Newark, New Jersey, into the Lower Passaic River. Hazardous substances, pollutants and contaminants released from the facility into the river present a risk to the environment and the humans who may ingest contaminated fish and shellfish. Therefore, Elan may be potentially liable for response costs which the government may incur relating to the study of the Lower Passaic River. In addition, responsible parties may be required to pay damages for injury to, destruction of, or loss of natural resources, including the cost of assessing such damages.

Enclosed is a list of the other PRPs who have received Notice letters. This list represents EPA's findings on the identities of PRPs to date. We are continuing efforts to locate additional PRPs who have released hazardous substances, directly or indirectly, into the Passaic River. Inclusion on, or exclusion from, the list does not constitute a final determination by EPA concerning the liability of any party for the release or threat of release of hazardous substances at the Site. Be advised that notice of your potential liability at the Site is being forwarded to all parties on this list.

We request that you consider becoming a "cooperating party" for the Lower Passaic River

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Project. As a cooperating party, you, along with many other such parties, will be expected to fund EPA's share of the study costs. Upon completion of the study, it is expected that CERCLA and WRDA processes will be used to identify the required remediation and restoration programs, as well as the assignment of remediation and restoration costs. At this time, the commitments of the cooperating parties will apply only to the study. For those who choose not to cooperate, EPA may apply the CERCLA enforcement process, pursuant to Sections 106 (a) and 107(a) of CERCLA, 42 U.S.C. §9606(a) and §9607(a) and other laws.

Pursuant to CERCLA Section 113(k), EPA must establish an administrative record that contains documents that form the basis of EPA's decision on the selection of a response action for a site. The administrative record files, which contain the documents related to the response action selected for this Site are located at EPA's Region 2 office (290 Broadway, New York) on the 18th floor. You may call the Records Center at (212) 637-4308 to make an appointment to view the administrative record for the Lower Passaic River Project.

EPA will be holding a meeting with all PRPs on October 29, 2003 at 10:00 AM in Conference Room 27A at the Region 2 office. At that meeting, EPA will provide information about the actions taken to date in the Lower Passaic River, as well as plans for future activities. After the presentation, PRPs will be given the opportunity to caucus, and EPA will return to answer any questions that might be generated during the private session. Please be advised that due to increased security measures, all visitors need to be registered with the security desk in the lobby in order to gain entry to the office. In order to ensure a smooth arrival, you will need to provide EPA with a list of attendees no later than October 15, 2003.

EPA recommends that the cooperating parties select a steering committee to represent the group's interest as soon as possible, since EPA expects a funding commitment for the financing of the CERCLA share of the \$20 million study by mid-November 2003. If you wish to discuss this further, please contact Ms. Alice Yeh, Remedial Project Manager, at (212) 637-4427 or Ms. Kedari Reddy, Assistant Regional Counsel, at (212) 637-3106. Please note that all communications from attorneys should be directed to Ms. Reddy.

Sincerely yours,



George Pavlou, Director
Emergency and Remedial Response Division

Enclosure

cc: Jeffrey Schwartz, Esq.
Sarber Schlesinger Satz & Goldstein

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PRPs in Receipt of Notice Letters:

PRP	Legal Counsel
<p>J. Roger Hirl President and Chairman of the Board Occidental Chemical Co. Occidental Tower 5005 LBJ Freeway Dallas, Texas 75244</p>	<p>Paul W. Herring, Esq. Andrews & Kurth L.L.P. 1717 Main Street, Suite 3700 Dallas, Texas 75201</p>
<p>Joseph Gabriel Vice President of Operations 360 North Pastoria Environmental Corp. 1100 Ridgeway Avenue Rochester, New York 14652-6280</p>	<p>Philip Sellinger, Esq. Sills Cummis Zuckerman One Riverfront Plaza Newark, NJ 07102</p>
<p>Robert Ball, President Alcan Aluminum Corporation 100 Erieview Plaza, 29th Floor Cleveland, Ohio 44114</p>	<p>Lawrence Salibra, Esq. Alcan Aluminum Corporation 6060 Parkland Blvd. Mayfield Hts., OH 44124</p>
<p>Mark Epstein, President Aiden Leeds Inc. 55 Jacobus Ave. Kearny, New Jersey 07032</p>	<p>Eric Aronson, Esq. Whitman Breed Abbott & Morgan One Gateway Center Newark, NJ 07102</p>
<p>Alan Bendelius, President Alliance Chemical, Inc. Linden Avenue Ridgefield, New Jersey 07657</p>	<p>Fredi L. Pearlmuter, Esq. Cooper, Rose & English, LLP 480 Morris Avenue Summit, New Jersey 07901-1527</p>
<p>William Gentner, President The Andrew Jergens Co. 2535 Spring Grove Ave. Cincinnati, Ohio 45214</p>	<p>A. Christian Worrell III, Esq. Head & Ritchey, LLP 1900 Fifth Third Center 511 Walnut Street Cincinnati, OH 45202</p>
<p>Gary Cappeline, President Ashland Specialty Chemical Co. 5200 Blazer Parkway Dublin, Ohio 43017</p>	<p>Stephen Leermakers, Esq. Ashland Specialty Chemical Co. 5200 Blazer Parkway Dublin, OH 43017</p>
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Al Reisch, President E M Sergeant Pulp & Chemical Co. Inc. 6 Chelsea Road Clifton, New Jersey 07102	None
Mark Tucker, Esq. Essex Chemical Corp. 2030 WMDC Midland, Michigan 48674	Kenneth Mack, Esq. Fox, Rothschild, O'Brien & Frankel Princeton Pike Corp.Center 997 Lenox Drive, Building 3 Lawrenceville, NJ 08648
Todd Walker, President Fairmount Chemical Co. Inc. 117 Blanchard St. Newark, New Jersey 07105	John Ix, Esq. Porzio Bromberg & Newman 163 Madison Ave. Morristown, NJ 07962
Bradley Buechler, President Franklin-Burlington Plastics Inc. 113 Passaic Ave. Kearny, New Jersey 07032	Robert M. Becker, Esq. Kraemer, Burns, Mytelka & Lovell, P.A. 675 Morris Ave. Springfield, NJ 07081
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Francine Rothschild, President Kearny Smelting & Refining 936 Harrison Ave #5 Kearny, New Jersey 07032	None
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<p>Michael Jordan, President Westinghouse Electric Corp. 11 Stanwix Street Pittsburgh, Pennsylvania 15222</p>	<p>Roger Willis, Esq. Westinghouse Electric Corp. 11 Stanwix Street Pittsburgh, PA 15222</p>
<p>Isaac Weinberger, President Wiggins Plastics Inc. 547 Maitland Ave. Teaneck, New Jersey 07666</p>	<p>None</p>

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