

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
U.S. DISTRICT COURT
FILED AT PARKERSBURG, W. VA.

JUN 20 1983

BARBARA CANTWELL CHRISTMAN,
et al.,

Plaintiffs,

v.

AMERICAN CYANAMID COMPANY,

Defendant.

THOMAS F. STAFFORD, CLERK

Civil Action
No. 80-0024-P

**DEFENDANT AMERICAN CYANAMID COMPANY'S
FIRST NONCONFIDENTIAL RESPONSES TO
PLAINTIFFS' SECOND INTERROGATORIES**

Pursuant to Federal Rule of Civil Procedure 33,
defendant provides the following First Responses to Plaintiffs'
Second Interrogatories.*/

GENERAL OBJECTIONS

OBJECTION 1

Cyanamid objects to definition 1 on page 2 of
Plaintiffs' Second Interrogatories which defines "Cyanamid" or

*/ Cyanamid will supplement these responses only to the extent
required by Federal Rule of Civil Procedure 26(e).

Assisting in the compilation of material used in the
preparation of the responses to Plaintiffs' Second Interroga-
tories were: C. Ballard, J.C. Caporossi, R. Heilman, W. Fead,
G.E. Mercer, W.E. Mercer, P. Shopene, J. Tobin, J. Noble, R.
Smith, J. Calitri, M. Friedman, C. Peterson, R. Clyne, L. Long,
* /

"defendant" to refer to American Cyanamid Company and all of its divisions or departments, predecessors or successors, corporate subsidiaries, and its agents, employees, servants or representatives. Defendant will use the term "Cyanamid" or "defendant" in the following response to refer to American Cyanamid Company, the only defendant in this action, and not to any other entity.

OBJECTION 2

Cyanamid objects to definition 3 and Interrogatory 82 of Plaintiffs' Second Interrogatories to the extent it seeks identification of the custodian(s) of any documents identified in response to these interrogatories on the ground that it imposes an onerous and undue burden on defendant. Such information also is entirely irrelevant unless it is necessary for purposes of establishing the admissibility of a document at trial. To the extent custodian information is necessary to establish the admissibility of a document at trial, defendant will attempt to provide the information at the appropriate time.

OBJECTION 3

Defendant objects to any interrogatories that seek information protected by the attorney-client privilege or the work product rule.

OBJECTION 4

The Court has held that plaintiffs are entitled only to Willow Island plant-wide discovery and to any data used at corporate headquarters directly or indirectly to develop the medical policy at issue in this case as originally announced and/or later applied at the Willow Island plant. Christman v. American Cyanamid Co., No. 80-0024-P(H), slip op. at 4, (N.D.W.Va. March 24, 1982). Therefore, unless otherwise noted, Cyanamid objects to any interrogatories seeking discovery on a broader basis than stated above on the ground that such information is irrelevant and unduly burdensome.

39. With regard to the study of teratogenic effects of acrylamide (AMD) referred to in document number 01120:

- a. state when the study was commenced; and
- b. identify the individuals conducting the study by name, title and address.

Answer: a. The study was commenced sometime in 1979.
b. The study was conducted by Dr. Peter S. Spencer and Dr. H.H. Schaumburg of the Albert Einstein College of Medicine, Bronx, New York.

This study will be produced in response to Request 74.

40. The handwritten notations on the final page of document number 20227 state:

Wouldn't it be worthwhile to split these into two groups (1) $\bar{e}$ respirators and (2) $\bar{s}$ and demonstrate effectiveness of respirator program (in addition to [illegible] study)?

- a. supply the illegible word in the above quoted paragraph, and
- b. state whether the respirator program effectiveness study suggested in the above-quoted paragraph was ever conducted. If so:
 - i. identify the author(s), title and date, and recipients of the study; and
 - ii. describe any changes in Willow Island's respirator program implemented as a result of the study.
- c. If the respirator program effectiveness study discussed above was not conducted:
 - i. identify the person(s) responsible for deciding not to conduct the study; and
 - ii. state the reasons therefor.

Answer:

- a. Chicago.
- b. The study was never conducted.
- c. Dr. J. Tobin and J. Caporossi were responsible for the decision. The study was not conducted because it was not deemed technically feasible. It was possible to compare employees on the same job since they were all subject to the same personal protective equipment requirements.

41. With reference to document number 20249:
 - a. identify the meaning of the initials in the upper left hand corner;
 - b. identify the author and custodian(s) of the document; and
 - c. state the meaning of "file 3149" in the upper right portion of the document, identifying:
 - i. the custodian of the file;
 - ii. the location of the file;
 - iii. the subject matter of the file; and
 - iv. the title, author, date and recipient of each document in the file.

Answer: a. Both of the initials in the upper left-hand corner of document 20249 are abbreviations for the files where document 20249 was to be filed. "CMF" is the abbreviation for the Central Management File and "S&IH" is the abbreviation for the Safety and Industrial Hygiene file.

b. See Objection 2. George R. Koehler is the author of the document.

c. (i)-(iv) "File 3149" was one of the files in George R. Koehler's personal filing system. To the best of his knowledge, the file contained information about the blood lead levels of Cyanamid workers. In early 1980, File 3149 was merged into the central management files. Consequently, it is now impossible to determine or describe the exact contents of the file. However, a review of the files into which File 3149

was merged, resulted in the identification of some additional documents that belonged to File 3149. These documents were produced as part of document 20223 in June 1981 in response to Request 2(a).

42. a. State whether the Occupational Health Committee of American Cyanamid Company or any member(s) of it or any employee of American Cyanamid ever met or communicated with any of the following individuals: Dr. Killian, Dow Chemical Company; Dr. Sidney Lerner, University of Cincinnati; Dr. Marvin Legator, University of Texas; Dr. Green, Environmental Protection Agency (EPA), or with any other experts and consultants not otherwise employed by the company.

b. If the answer to section (a) of this interrogatory is affirmative, for each expert or consultant:

- i. state the date, subject matter and purpose of each meeting or communication;
- ii. summarize the substance of each meeting or communication; and
- iii. identify all documents relating or referring in any way to any meeting or communication described above.

Answer: This interrogatory seeks information regarding any communication by any Cyanamid employee with any expert on any topic. As such, it seeks information that is irrelevant to this action and whose production would impose an undue burden

on Cyanamid. Cyanamid therefore objects to Interrogatory 42 to the extent it seeks information and documents regarding Cyanamid employees' contacts with experts and consultants other than in connection with the development, adoption, modification or implementation of its medical protection policy that is at issue in this case or meetings of its Occupational Health Committee ("OHC") with such experts and consultants regarding the assessment of hazards to the reproductive health of employees.

Cyanamid already has provided identification of experts consulted in connection with the development, adoption, modification and implementation of this policy. See Cyanamid's Response to Interrogatory 27. Cyanamid will provide information and documents relating to meetings of its OHC with such experts and consultants regarding the assessment of hazards to the reproductive health of employees.

a. The OHC had meetings with the following experts and consultants regarding the assessment of hazards to the reproductive health of Cyanamid employees: Dr. D.J. Kilian, University of Texas; Dr. Gary M. Williams, American Health Foundation; and Dr. William J. Waddell, Department of Pharmacology and Toxicology, University of Louisville. The OHC did not have meetings with Dr. Sidney Lerner, Dr. Martin Legator or Dr. Green.

b. (i)-(ii)(1) On April 3, 1980, Dr. D.J. Kilian addressed the OHC and others in Wayne, New Jersey. Dr. Kilian

discussed the subjects of genetic toxicology and cytogenic testing.

(2) On May 23, 1980, Dr. Gary M. Williams addressed the OHC and others in Wayne, New Jersey. Dr. Williams discussed methodologies in short-term mutagenicity testing, interpretation of data from such tests, and its correlation with actual in vivo experience.

(3) On January 23, 1981, Dr. William J. Waddell addressed the OHC and others in Wayne, New Jersey. Dr. Waddell discussed teratology and reproductive toxicology research.

The purpose of the above meetings was to provide OHC members with expert information to assist them in appropriately identifying the existence and nature of certain reproductive hazards and in developing guidelines and standards that would be meaningful in predicting and controlling substances posing such hazards.

(iii) The relevant portions of responsive documents relating or referring to the above meetings will be produced in response to Request 90(c).

43. With reference to each scientific report identified in document number 01067, pages 2-7, state:

- a. the name of the person(s) receiving the report;
and
- b. the date(s) on which it was reviewed.

Answer: The results of the studies listed in document 01067 were considered by the members of the Occupational Exposure

Review Committee (OERC) between June 1978 and April 1979 in connection with the preparation and review of monographs on the five substances identified on pages 2-7 of document 01067. See Defendant American Cyanamid's First Response to Plaintiffs' Interrogatory 25(g)(5). Cyanamid objects to providing information about which members of the committee received and reviewed each of more than 60 studies and the exact date this may have occurred on the ground that it imposes an onerous and undue burden on defendant.

44. Describe in detail the nature and purpose of documents numbered 20229 and 20239-41, identify the author(s), provide a complete description of the design of the study reflected in the documents, and summarize the conclusion of the study.

Answer: Documents 20229 and 20240 ("Medical Control Summary"), and 20241 were prepared by personnel in the Medical Department at the Willow Island plant. Documents 20239 and the remaining portions of document 20240 were prepared by William A. Fead in preparation for document 20229 and 20240 ("Medical Control Summary"). All of these documents were generated by Cyanamid for use in preparation for Marshall v. American Cyanamid Co., No. 79-2438. The information in documents 20229 and 20240 ("Medical Control Summary") was gathered by the Willow Island Medical Department by reviewing the medical files of Willow Island plant employees and identifying the number of Willow Island employees that complained of the physical problems

listed during the years identified. The study demonstrated that symptoms of lead intoxication were non-specific by establishing that employees not occupationally exposed to lead exhibited these symptoms with equal or greater frequency than employees occupationally exposed to lead.

45. With reference to document number 101290, specify Cyanamid's response to the problem of benzene exposures as outlined on pages 4-5, including, without limitation, engineering and process changes, improvements, and housekeeping programs. For each such engineering or process change, improvement or other program, state:

- a. the date of implementation;
- b. the cost; and
- c. the resulting reduction in benzene exposure.

Answer: a. Defendant's engineering response to the problem of benzene exposures as outlined on pages 4-5 of document 101290 was the preparation, approval, and implementation of a capital order number OC-4124 (document 101291).

This capital order included the installation of an improved ventilation system at the MNB nitrators, nitrator sampling stations, and benzene sampling station. An automatic self-contained benzene specific gravity meter was installed. Also, changes in piping and venting of benzene containing tanks were made.

This order was written in the first half of 1978, approved on June 26, 1978, and implemented to a major extent in

the summer of 1979. All work was completed in early 1980 and the order was reported closed June 26, 1980, by the engineer. Accounting books were closed on the order on December 31, 1980.

Implementation was delayed until 1979 due to the long delivery of the major pieces of equipment and the need to have the shop shut down and cleaned out for the work to be accomplished.

b. The total cost to implement this capital order was \$55,582.

c. Reductions in benzene exposures have been steady during the period 1976-1981; however, it is not possible to attribute the reduction to any single factor or change.

46. With reference to documents numbered 20027 and 20028, state where and to whom these speeches were delivered.

Answer: The speeches contained in documents 20027 and 20028 were delivered at the following meetings or events:

- (1) A Pharmaceutical Manufacturers Association meeting in Washington, D.C.;
- (2) A post-graduate course for nurses sponsored by the Executive Management Institute;
- (3) A National Safety Conference in Chicago, Illinois; and
- (4) A conference entitled "The Special Problems of Women Workers," sponsored by the Center for Industry and Health Care of Boston University in Boston, Massachusetts.

47. Explain what the word "This" in the first sentence of document number 20034 refers to.

Answer: See Objection 4. Cyanamid objects to this interrogatory because it seeks information regarding implementation of its medical protection policy at facilities other than the Willow Island plant. Such information is irrelevant to this action.

48.

- a. State whether "safety factors" or "safety margins" are established for exposure to all chemicals in use at American Cyanamid facilities (see, e.g., document number 20131 (table II)), and, if not, state the criteria used to decide whether to calculate a safety factor for a particular chemical exposure.
- b. Explain the function of the "safety factor," state the date when the concept was first employed by defendant, and identify the person who developed the concept or recommended its use by defendant.
- c. Identify each instance in which a "safety factor" or "safety margin" for chemical exposure has been calculated or employed, and for each:
 - i. describe fully the method of calculation by which the "safety factor" was obtained;

- ii. describe fully the method of calculating or establishing each intermediate step upon which the "safety factor" is based, including without limitation, the methods by which the "safe daily dose" and the permissible exposure level were set;
 - iii. identify the individual(s) responsible for each step in the calculation;
 - iv. state the date on which the calculations were completed;
 - v. state the "safety factor" or "safety margin" established for females of childbearing potential and for males; and
 - vi. identify all documents referring to "safety factors" or "safety margins" or to any step in the calculation thereof.
- d. State whether the same "safety factor" or "safety margin" is used for all chemical exposures for which the concept is employed and, if not, explain in detail why different levels are established for different chemical exposures.
- e. Provide a list of all scientific and scholarly references relied on to develop or implement the

use of the "safety factor" or "safety margin" as used by defendant.

Answer: See Objection 4. Defendant objects to this interrogatory to the extent it seeks information unrelated to defendant's medical protection policy or the implementation of that policy at the Willow Island plant. Such information and documents are irrelevant to this action, and their production would impose an undue burden on Cyanamid.

a-b. Cyanamid has employed "safety factors" or "margins of safety" in connection with the establishment of occupational exposure limits for women of childbearing potential. The purpose "safety factors" or "margins of safety" were relied on for has been to provide additional protection to the fetus against exposure to those substances within defendant's medical protection policy. "Safety factors" or "safety margins" were first employed by Cyanamid in connection with the specification of exposure limits for substances within its medical protection policy in October 1977. This was done at the direction of Dr. R.M. Clyne.

c.(i)-(v) In October 1977, defendant's central medical department, at the direction of Dr. R.M. Clyne, specified levels of exposure to those substances then within its medical protection policy. Exposures in excess of the specified levels were viewed as meaningful for purposes of implementing its medical protection policy. Defendant believed that maintaining the exposure of female employees of child-

bearing potential at or below the specified afforded additional protection to the fetus. These exposure limits were restated, with certain clarifications, in November of 1977. See documents 01857 and 00973, produced in January 1981 in response to Request 1(a).

Defendant's use of "safety factors" or "safety margins" was further refined by its Occupational Exposure Review Committee (OERC). Defendant estimated "Safe Exposure" levels for methotrexate, thio-TEPA, hydrazine hydrate, hydrazine sulfate, and diamox. The "Safe Exposure" level was a level below the lowest level of exposure at which the relevant data indicated the existence of an effect. The estimation of a "Safe Exposure" level reflected a judgment, based on an assessment of the available relevant data regarding the substance, as to a level of exposure that would not produce an effect. The estimated "Safe Exposure" level afforded a factor of safety relative to the level of exposure at which the relevant data indicated the existence of an effect.

The monographs on the five substances currently within Cyanamid's medical protection policy and on diamox also reflect the calculation of "safety margins." These "safety margins" reflect a comparison between the maximum exposure at the permissible exposure limit (PEL), calculated using standardized conversion factors for body weight (50 kg), the average volume of air inspired for an eight-hour period (10 m3), and the "Safe Exposure" levels discussed above. In the case of lead, a maximum possible absorption was estimated based

on the assumption that 10% of the lead ingested at the PEL would be absorbed. This afforded a safety margin of five when compared to the maximum permissible addition to the daily body burden of lead from food accepted by the World Health Organization.

Dr. Jack Noble was responsible for the calculation of "safety factors" or "margins of safety" as developed by the OERC. These calculations were completed in the period between August 1978 and April 11, 1979.

vi. See monographs on the substances identified in (i)-(v) which previously have been produced in February 1981 as document 00986 in response to Request 1(a).

d. The same "safety factor" or "safety margin" was not used for all substances within Cyanamid's medical protection policy. See answer to c.

e. See response to Interrogatory 25(i), part II (A-D). Cyanamid's health professionals also relied on information obtained in the course of their professional experience.

49. Identify all female laboratory workers at Willow Island who, since 1970, were routinely exposed to lead or lead chromate. For each such worker:

a. state the inclusive dates of employment in the laboratory;

- b. state the percentage of time exposed to lead or lead chromate and explain in detail the method for calculating this percentage;
- c. describe in detail any actions taken by Cyanamid to reduce exposure to lead and chromate; and
- d. describe all tests and studies monitoring exposure to lead and chromates including, without limitation, air sampling, blood testing and physical examination; state the frequency of each such test or study, and identify all documents containing the results of each such test or study.

Answer: a-b. To the best of Cyanamid's present knowledge, the following identifies permanent female laboratory workers at Willow Island who, since 1970, were assigned to laboratory areas where lead and lead chromate analysis occurred routinely and the dates during which they were assigned to those laboratory areas.

<u>Name</u>	<u>Dates</u> ^{*/}
Terrie Davis (Piersol)	10/25/77 - 9/16/78
Debbie C. Allen	5/1/74 - 5/1/75
Pavanne P. Canary	8/23/73 - 5/16/74
Jo Ann Stewart	8/11/75 - present
Mary Anne Chambers (Poole)	9/1/78 - 10/31/82

^{*/} No lead and lead chromate analysis occurred routinely after the Pigments Department closed in January 1980.

Sharon Czajkowski	6/7/76 - 4/1/80
Rozella Baum	6/16/77 - 4/1/79 7/16/79 - 1/8/81
Rebecca Garst (Cutlip)	7/22/74 - present
Denise Tillery (Robinson)	6/1/76 - present
Sally L. Demyan	2/9/76 - 4/30/76
Sally A. Whited	12/16/81 - 5/15/82
Brenda K. Sams	6/10/74 - 8/8/75
JoAnna L. Rose	6/1/76 - 9/30/76

In addition, to the best of Cyanamid's present knowledge the following identifies permanent female laboratory workers who, since 1970, routinely ran pigments process samples in the laboratories during the dates and for the percentage of time stated below:

<u>Name</u>	<u>Date</u>	<u>Percentage of Time</u> ^{*/}
Pavanne P. Canary	8/23/73 - 5/16/74	80-90%
Deborah C. Allen	5/1/74 - 5/1/75	80-90%
Terri L. Davis (Piersol)	10/25/77 - 9/16/78	80-90%
Sharon Czajkowski	9/1/78 - 4/1/80	10-15%
Jo Ann Stewart	2/1/76 - 11/1/77	10-15%
	7/16/79 - 5/1/80	10-15%
Mary Anne Chambers (Poole)	7/16/79 - 5/1/80	10-15%

The percentage of time exposed to lead is an estimate based upon the knowledge of plant personnel of the laboratory

*/ No routine lead or lead chromate exposure occurred after the Pigments Department closed in January 1980.

positions held by these persons and the processes they were required to perform while holding those positions.

c. To minimize exposure to lead and lead chromate, the importance of good personal hygiene was reinforced through periodic safety meetings and close supervision of laboratory employees. When a process involved the possible emission of substantial quantities of lead particulates, employees were instructed to perform the process in a fume hood or near exhaust ventilation. Dry waste generated by the laboratory process was stored in a sealed container. Liquid waste was stored in a sealed container or properly discarded. Laboratory aprons and gloves were furnished to all employees. Employees washed regularly with soap and water. When a sample spilled it was cleaned up immediately either by vacuuming, sweeping or wiping the area clean. Every day the floor in the laboratory was treated with an oily compound to eliminate dust. Employees were supplied with respirators in the event they would be exposed to significant quantities of lead dust.

d. Lead and lead chromate exposure was monitored by the plant through blood lead testing and air sampling. Blood lead tests were administered to laboratory employees once a year until such time as lead no longer was used. Personal air sampling occurred periodically throughout 1978 and 1979. Area sampling occurred in December 1978. Cyanamid will produce the results of lead blood testing and exposure monitoring in the laboratories in response to Request 90(e). See response to Request 90(e).

Laboratory employees also received regular physical examinations which included those items identified in response to Interrogatory 9. The results of physical examinations of laboratory employees are part of confidential medical records which, pursuant to company policy, Cyanamid objects to producing without releases from the employees involved. However, Cyanamid is attempting to obtain authorizations from those employees identified above to release information relating to results of examinations from their medical files and will make such information available to plaintiffs for those employees from whom releases are obtained.

50. Document number 20142 refers to the possible use of a release "that could be signed by [a] female if she insists she wants to remain on job."

- a. Describe discussions regarding feasibility of such a release;
- b. state what efforts were made to develop such a release;
- c. summarize all conclusions drawn regarding the effectiveness of such a release;
- d. identify all persons involved in developing a release and analyzing its effectiveness, specifying the role played by each; and
- e. identify all documents discussing, analyzing or referring in any way to the use and/or effectiveness of such a release.

Answer: a. Cyanamid held discussions concerning whether a release would be effective and/or desirable.

b. Apart from these discussions, no efforts were made to develop such a release.

c. Cyanamid concluded that serious questions existed as to the effectiveness of such a release and that such a release would not be desirable.

d. See answer to Interrogatory 50(b). The following individuals analyzed the effectiveness of a release and decided that a release would not be desirable:

J.I. Wyer, Esquire, Vice President and
General Counsel

D.C. Droste, Esquire, Director of the Law
Division

M.H. Martin, Esquire, Attorney, Legal
Department

E.C. Roth, Esquire, Attorney, Legal
Department

e. See Objection 3. The documents, which discuss, analyze or refer to a release, are:

(1) Memorandum dated September 6, 1977, from E.C. Roth, Legal Department, to C.L. Brandrup. Cyanamid asserts the attorney-client privilege for this document.

(2) Memorandum dated May 16, 1978 from M.H. Martin to J.I. Wyer. Cyanamid believes that this document is protected by the attorney-client privilege and the work product rule.

51. With reference to document number 20140, identify the employee who, in 1971, was displaced by vision problems and retained "his old rate until the rates of his new [job] . . . caught up", and state:

- a. his department, job and hourly pay prior to displacement;
- b. the length of time the former pay rate was retained;
- c. the difference between the hourly rates of pay in the former and janitorial positions;
- d. the basis for the employee's grievance; and
- e. the reason for departing from "past practice and the labor agreement."

Answer: a-b. Martin Luther Hart, a retired employee of the Willow Island plant, is the employee referred to in document 20140. On June 16, 1969, Mr. Hart was transferred from an "Operator C" position in the Pigments Department to a "Stock Room Attendant" position in the Stores Department due to a medical restriction resulting from limited vision. In the Pigments Department, Mr. Hart was a W-4 and was paid \$3.20 per hour. In the Stores Department, he was a W-3 and was paid \$3.12 per hour.

On August 11, 1969, as settlement of a grievance he filed, Mr. Hart was transferred from his position in the Stores Department to a Janitor position in the Janitors Department. In the Janitors Department, he was a W-1 but in settlement of

the grievance, he was paid \$3.20 per hour. His pay rate was retained until his dollars caught up with him, i.e., when the pay rates for other W-1's reached the level of his red-circled wages as a result of the annual raises given to production employees. Mr. Hart's dollars caught up with him in May 1972.

c. At the time of his transfer to the Stores Department, there was a difference of eight cents between the hourly rate he received in the Pigments Department and the hourly rate he received in the Stores Department. At the time of his transfer to the Janitors Department, there was a difference of twenty-nine cents between the hourly rate he received in the Pigments Department and the hourly rate received by others in the Janitors Department.

d-e. Mr. Hart filed this grievance because he wanted to continue working in the Pigments Department. The plant agreed to retain his rate in settlement of his grievance.

52. Identify all other Willow Island employees who were displaced from their jobs to jobs with lower pay and who were retained at the higher rate of pay for any period of time. For each such employee, state:

- a. his/her department, job and hourly pay prior to displacement;
- b. the length of time the former pay rate was retained;

- c. his/her department and job following displacement and the ordinary rate of pay for that job; and
- d. the reason(s) for the rate retention.

Answer: Cyanamid already has identified employees temporarily removed due to chemical exposure and their job titles prior to the restricted period in response to Plaintiffs' Interrogatory 7. Employees temporarily transferred due to a medical restriction received rate retention during the restricted period. Cyanamid objects to providing each employee's hourly pay prior to a temporary transfer on the ground that it imposes an undue burden on Cyanamid. Cyanamid is unable to provide information about the length of time the pay rate was retained or the employee's position during the restricted period. See response to Interrogatory 7.

To the best of Cyanamid's knowledge, the only employees that have received rate retention, other than those described above and the employee identified in response to Interrogatory 51, are Denise Cline and Mary Carpenter. In October 1978, Denise Cline was transferred from a Grind and Blend Operator position in the Pigments Department to a Janitor position in the Utility Pool. She was a W-4, earning \$6.62 per hour in the Pigments Department. She moved to a W-1 Janitors position that paid \$6.15 per hour. Ms. Cline was told that her W-4 rate would be retained for 90 days and then would be subject to review. Because she expressed a desire to remain in

the Janitor position at the end of the 90 day period, rate retention was discontinued.

In October 1978, Mary Carpenter was transferred from a Production Laborer position in the Pigments Department to a Janitor position. Because Mary Carpenter was transferred from a W-1 position in the Pigments Department to a W-1 position in the Janitors Department at the time the Willow Island plant implemented the medical protection policy, the rate retention did not change her rate of pay.

Rate retention was provided to employees moved out of the Pigments Department in October 1978 pursuant to defendant's medical protection policy.

53. Identify the position(s) and responsibilities of J.A. Zinke, Frances Scholten, F. Terenzi, W.A. Fead, and L.D. Holder since first employed by Cyanamid, and state the educational and professional qualifications of each.

Answer:

A. J.A. Zinke

1. Education and Professional Qualifications:
 - a. B.S. 1963 (Life Sciences) -- Barnard College, New York;
 - b. M.B.A. 1976 (Finance) -- Fordham University, New York.
2. Positions with Cyanamid:
 - a. Hired 5/9/77 as Research Specialist. Resigned 8/15/78. Duties included assisting with the development of public affairs programs.

B. Frances Scholten

1. Education and Professional Qualifications:
 - a. A.B. 1940 (Chemistry) -- Wilson College, Chambersburg, Pa;
 - b. 1949-51 -- Courses in student personnel administration - Teachers College, Columbia;
 - c. M.L.S. 1961 -- Rutgers University;
 - d. 1962-68 -- graduate courses - Rutgers, Patterson, Montclair 1974 -- accounting courses - adult school, Wayne;
 - e. 1958-73 -- Librarian, Glen Rock Junior-Senior High School;
 - f. 1944-58, 1973-74 -- secretarial and attendance positions, Glen Rock Schools.
2. Positions with Cyanamid:
 - a. February 1982 - present -- Librarian, Chemicals Group;
 - b. 9/16/74 - 2/82 -- Librarian, Central Medical Department and Information Resources Department of Environmental Services Division;
 - c. 1942-44 -- Secretary, sales office, Calco (American Cyanamid);
 - d. 1940-42 -- Lab Assistant, Calco.

C. F. Terenzi

1. Education and Professional Qualifications:
 - a. B.S. 1953 (Chemical Engineering) -- Rensselaer Polytechnic Institute, Troy, New York;
 - b. M.S.E. 1955 (Plastics Engineering) -- Princeton University, Princeton, N.J.;

- c. Ph.D. 1958 (Chemical Engineering) -- Princeton University, Princeton, N.J.;
- d. 1960-70 -- Lecturer and Instructor - High Polymer Engineering, Princeton University;
- e. 1964 -- Organized and taught course in chemical engineering of high polymers, University of Connecticut.

2. Positions with Cyanamid:

- a. 4/81 to present -- Director, Environmental Affairs & Manufacturing Technology for Chemicals Group;
- b. 11/78 - 4/81 -- Manager of Manufacturing Technology and Environmental Services. Divisional level responsibility for manufacturing technologies/plant technical programs, environmental health, science and toxicologic programs, capital projects and engineering, major environmental operations, management of ICD;
- c. 11/75 - 11/78 -- Manager of Manufacturing Technology and Services. Responsibilities very much like 2(b);
- d. 5/74 - 11/75 -- Manager of Manufacturing, Chemical Products Department, Wayne. Direct line responsibility for three major manufacturing plants under ICPD control;
- e. 6/72 - 5/74 -- Manager, Special Projects, Wayne. All ICPD processes;
- f. 9/70 - 6/72 -- Technical Director, Molding & Extrusion Compounds, Stamford;
- g. 9/69 - 9/70 -- Manager, R&D Thermoplastic Department, Plastics Division, Stamford;
- h. 9/64 - 9/69 -- Manager, Thermoplastics, R&D Section,

Stamford. Administration and technical direction of three groups;

- i. 2/61 - 9/64 -- Group Leader, Thermoplastics Section, Plastics & Resins Division. Directed engineering research activities;
- j. 9/57 - 7/58 -- Research Chemical Engineer, Stamford.

D. W.A. Fead

1. Education and Professional Qualifications:

- a. 1940-42 -- attended Dartmouth College, Hanover, N.H.;
- b. B.S. 1944 (Physics) -- University of Michigan, Ann Arbor, Mich.;
- c. 1944-47 -- Graduate courses in Electrical Engineering, Metallurgy - Princeton University, M.I.T., Los Alamos University, University of Michigan;
- d. 1968 -- Executive Program, Graduate School of Business, Columbia University;
- e. Numerous other management training courses.

2. Positions with Cyanamid:

- a. 9/81 to present -- Manager, Cost Reduction, Chemicals Group. Cost reduction and energy conservation activities of Polymer Products and Fibers Divisions, environmental and industrial hygiene consultation;
- b. 4/81 - 9/81 -- Manager, Environmental Affairs, Chemicals Group. Managing environmental specialists in areas of air, water, and solid wastes for approximately thirty-seven plants and other facilities;

- c. 9/74 - 4/81 -- Manager of Manufacturing and Marketing Services, Bound Brook. Managed division-wide functions, assisted president;
- d. 11/72 - 9/74 -- Manufacturing Manager, Consumer Products Division. Managed manufacturing and distribution;
- e. 2/68 - 11/72 -- Vice President, Manufacturing, Shulton, Inc. [acquired by American Cyanamid Company, 4/71]. Responsible for domestic production, quality assurance, purchasing, package development, engineering, production planning, inventory control, customer service, traffic, distribution, shipping;
- f. 1/62 - 2/68 -- Manager of Manufacturing, Shulton, Inc. Many of the responsibilities described in 2(e);
- g. 8/62 - 12/62 -- Assistant Manager of Manufacturing, Shulton, Inc.

E. L.D. Holder

- 1. Education and Professional Qualifications:
 - a. B.S. 1957 (Chemical Engineering) -- University of Wisconsin;
 - b. Employed by Monsanto Co. until 1977.
- 2. Positions with Cyanamid:
 - a. 5/1/80 - 6/30/81 -- Production Manager, Elastomers and Rubber Chemicals Department, Bound Brook;
 - b. 6/1/77 - 5/1/80 -- Production Manager, Willow Island.

54. With reference to Document number 01000:

- a. summarize the report on "measures being taken at the Organic Chemicals Division plants in Chicago and Willow Island to protect all personnel

against possibly harmful exposure to lead and lead chromate;"

- b. summarize the responses to all questions following the report; and
- c. identify all documents summarizing, containing, referring, or relating to the report.

Answer: a. The report, developed principally by Mr. W. Andresen and his staff, advised the Executive Committee of efforts undertaken to study airborne lead dust control and to implement feasible engineering modifications and other measures where appropriate. Included in the report was a discussion about the exposure created by: dry sweeping of lead dust, employee noncompliance with protective clothing requirements and protective equipment rules or procedures and the handling of pigments in areas where ventilation might not be sufficient. Many of these measures are set forth in detail in studies produced in response to plaintiffs' previous requests. See e.g., documents 52205-12, 52036-38, and 101280.

b. Due to the passage of time, defendant's representatives are unable to recall the specific questions asked and the specific responses given. Defendant's representatives recall that, in general, most questions related to the measures being taken to protect the workers at Chicago and Willow Island from lead dust and the cost of implementing the measures. The responses were directed to Cyanamid's recommendations regarding

measures needed to protect the workers and how those recommendations would be implemented.

c. Defendant is unable to identify any documents in addition to the minutes (document 01000, produced in February 1981 in response to Request 1(a)) other than the Secretary of the Executive Committee's notes relevant to this subject. Relevant portions of this document are being produced in response to Request 90(g).

55. a. Identify each chemical or compound for which Cyanamid has established differential standards in the same manner that such differential standards were established for methotrexate (see document number 20086) and, for each, identify the person(s) responsible for establishing the standard;
- b. summarize all discussions pertaining to establishing differential standards in general and for particular substances including, without limitation, an identification of the participants and dates; and
- c. identify all documents containing, analyzing and referring to differential standards for exposure.

Answer: a. Cyanamid's Occupational Health Committee "has established differential standards in the same manner that such standards were established for methotrexate (see document number 20086)" for lead, hydrazine hydrate and hydrazine sulfate.

b. Defendant objects to this interrogatory insofar as it requests information regarding "all discussions pertaining to establishing differential standards in general . . ." (emphasis added) on the grounds that the requested information is so broad and undefined that responding would impose an unduly onerous and inordinate burden. Defendant further objects to summarizing all such "general" discussions as being irrelevant to the issues presented in this case and beyond the scope of discovery permitted under the March 24, 1982 Order of the Court.

Without waiving the foregoing objection, defendant states that to the best of its knowledge, the following individuals may have been involved in discussions of the establishment of "differential standards in the same manner that such standards were established for methotrexate (see document number 20086)" regarding substances within its medical protection policy at various times after May 19, 1980: Mr. Joseph Caporossi, Dr. Marvin Friedman, Dr. Jack Noble, Mr. C.T. DeLong, and Mr. R.W. McCollum.

Cyanamid's Occupational Health Committee also considered the establishment of "differential standards in the same manner that such standards were established for

methotrexate (see document number 20086)" at its meetings of January 23, 1981; February 27, 1981; March 11, 1981; April 24, 1981; May 29, 1981; and July 24, 1981.

c. Defendant objects to this interrogatory insofar as it requests identification of "all documents containing, analyzing and referring to differential standards for exposure," (emphasis added) on the grounds that the requested information is so broad and undefined that responding would impose an unduly onerous and inordinate burden, and that such information is irrelevant to the issues presented in this case and beyond the scope of discovery permitted under the March 24, 1982 Order of the Court.

Without waiving the foregoing objection, defendant will identify documents relating to the establishment of "differential standards in the same manner that such standards were established for methotrexate (see document number 20086)" regarding substances within its medical protection policy. These documents are 20086; 20089; 20085; 20041; 20091 produced in June, 1981, in response to Requests 1(c); Minutes of Meetings of the OHC on 1/3/81; 2/27/81; 3/11/81; 4/24/81; 5/29/81; 7/24/81; Memorandum from J.C. Caporossi to Plant Managers, Plant I. H. Coordinators, June 4, 1981, Permissible Exposure Limits and Control Levels for Chemical Substances; and Memorandum from C.T. DeLong to Holders of I. H. Manuals, Cyanamid Chemicals Group, Industrial Hygiene Standard No. 3:

Permissible Limits for Chemical Substances, September 30, 1982. Relevant portions of documents, which have not previously been produced, will be produced pursuant to Request 90(h). See response to Request 90(h).

56. With reference to document number 20089, state whether the "Company level [for lead] for females of childbearing capability" was changed subsequent to May 29, 1980.

- a. If so, state the subsequent levels and summarize the reasons for the change.
- b. If not, summarize the reasons for retaining the levels current as of May 29, 1980.
- c. Summarize all discussions pertaining to a change in the company's level for lead for females of childbearing capacity subsequent to May 29, 1980, including, without limitation, an identification of participants and dates; and
- d. identify all documents analyzing, summarizing or in any way referring to an actual or potential change in the company's level for lead for females of childbearing capacity subsequent to May 29, 1980.

Answer: a-b. The Cyanamid exposure level for females of childbearing capacity was not changed subsequent to May 29, 1980. Defendant retained its lead exposure level for women of childbearing capacity because it believed the level was protective of the fetus.

c. No discussions occurred subsequent to May 29, 1980, which pertained to a change in the defendant's lead exposure standard for women of childbearing capacity.

d. No documents dated subsequent to May 29, 1980, exist which analyze, summarize or refer to a potential change in defendant's lead exposure standard for women of childbearing capacity.

57. With reference to page 2 of document number 20204, identify "O'Brien" by full name and position within the company and describe his/her responsibilities.

Answer: Document 20204 refers to Robert G. O'Brien. At the time document 20204 was prepared, Mr. O'Brien was an attorney with Cyanamid's Law Division.

58. Did American Cyanamid or any of its employees review or obtain copies of any studies on benzene exposure conducted or sponsored by Dow Chemical Company? If so,

- a. identify each such study by author, date, title and recipients;
- b. summarize all communications concerning the referenced study, identifying the participants and the date(s) on which the communications occurred;
- c. describe in detail all changes in administrative, process, engineering, housekeeping and monitoring functions and all controls

implemented as a result of or in response to any study identified above and state the date and cost of implementation.

Answer: See Objection 4. Cyanamid objects to this interrogatory to the extent that it seeks information on studies regarding benzene exposure conducted or sponsored by Dow Chemical Company that were not reviewed by Cyanamid or its employees in connection with Cyanamid's medical protection policy or in connection with efforts to reduce exposure to benzene at the Willow Island plant, on the ground that such information is irrelevant to the issues in this case and would be unduly burdensome to produce. Cyanamid will respond to this interrogatory with respect to studies on benzene exposure conducted or sponsored by Dow Chemical Company that were reviewed by Cyanamid in connection with its medical protection policy or in connection with efforts to reduce exposure to benzene at Cyanamid's Willow Island plant.

To the best of its knowledge, there were no studies on benzene exposure conducted or sponsored by Dow Chemical Company that were reviewed by or of which copies were obtained by defendant or any of its employees in connection with its medical protection policy or in connection with efforts to reduce exposure to benzene at its Willow Island plant.

59. Has American Cyanamid ever performed (free) erythrocyte protoporphyrin (FEP or EP) tests on any employees exposed to lead?

a. If so:

- i. identify by facility, department and job all individuals upon whom such tests were performed;
- ii. for each group of employees identified above, state the period of time during which such tests were performed; and
- iii. identify the laboratories where such tests were processed.

b. If not:

- i. state whether the company ever considered performing FEP or EP tests;
- ii. state the reasons for determining not to perform such tests, if any, and identify the person(s) responsible for the determination;
- iii. summarize all communications relating to the use of such tests including, without limitation, an identification of the participants and dates; and
- iv. identify all documents referring in any manner to performance of EP or FEP tests.

Answer: See Objection 4. Cyanamid objects to this interrogatory to the extent it seeks information about FEP or EP testing of employees other than at the Willow Island plant. Such information is irrelevant to this action and would

be unduly burdensome to produce. Cyanamid will produce relevant information with respect to the Willow Island plant.

a. Defendant has never performed (free) erythrocyte protoporphyrin (FEP or EP) tests on any employee exposed to lead at its Willow Island plant.

b. (i) Defendant has never considered performing FEP or EP tests at its Willow Island plant.

(ii) The FEP test was not considered because other more intensive surveillance procedures were in use at Willow Island. Dr. Robert Clyne and Dr. John Tobin were the individuals responsible for deciding which surveillance procedures would be utilized at Willow Island.

(iii)-(iv) No communications occurred nor were any documents created relating or referring in any manner to the use or performance of FEP or EP tests at Willow Island.

60. State the period during which the Company has performed pre-employment blood lead tests, and describe the circumstances under which pre-employment blood lead tests were performed including, without limitation,

- a. whether they were performed on all applicants for employment;
- b. if not, which applicants received such tests;
- c. whether the tests were voluntary or mandatory for employment;
- d. the purpose of performing such tests;

- e. whether employees who received such tests ever received subsequent blood lead tests if they did not work in the pigments department and, if so, which employees received subsequent tests and why; and
- f. identify all documents provided to employees regarding pre-employment blood lead tests.

Answer: See Objection 4. Cyanamid objects to this interrogatory to the extent it seeks information regarding facilities other than the Willow Island plant as being irrelevant and unduly burdensome.

a-f. Pre-employment blood lead tests were performed by the plant between 1974 and 1979. During that period, all applicants for permanent employment that received a pre-employment physical also received a blood lead test.^{*/} The tests were mandatory. The tests were performed to establish a base line blood lead level for each employee. Subsequent lead blood tests were given to employees who were occupationally exposed to lead for the purpose of protecting employee health. Defendant is unaware of any documents provided to employees regarding pre-employment blood lead tests.

61. List each occasion subsequent to September 16, 1977, if any, on which an employee or committee of American Cyanamid considered, studied or reviewed the properties and

^{*/} This amends Defendant's Response to Plaintiffs' Interrogatory 9.

effects of carbon disulfide in an effort to determine whether the company should establish a permissible exposure limit for its employees or any group of them. Identify each such occasion by date and the name of the person(s) or committee(s) involved, and summarize the conclusions reached and the reasons therefor. Identify all documents relating in any way to Cyanamid's study and consideration of carbon disulfide exposure levels and hazards associated therewith.

Answer: During the period from July-August 1978, the Members of the OERC reviewed carbon disulfide. The OERC decided not to recommend a permissible exposure limit for females of child-bearing potential that was different from that for other employees.

Carbon disulfide was considered for further review in connection with the establishment of a permissible exposure limit for all workers by Chemical Group personnel in October 1980 and by Cyanamid's OHC on April 24, 1981 and May 29, 1981; no conclusions were reached at those times. On September 30, 1982, the Chemicals Group adopted the OSHA limits for carbon disulfide as the Cyanamid permissible exposure limits for that compound.

Relevant portions of documents relating to setting permissible exposure limits for carbon disulfide will be produced pursuant to Request 90(1).

62. State whether document number 01862 is the statement read by Glenn Mercer to female production workers at

meetings held in April, 1978, referred to in his deposition. If not, identify the document number of such statement.

Answer: Document 01862 is the statement read by Glenn Mercer to female production workers at meetings held in April 1978.

63. Identify each job category or department at defendant's Chicago plant where any employee is exposed to lead, and for each such department or job:

- a. state the number of women who have been employed annually since 1971;
- b. state whether the company has had a blood or air lead testing or monitoring program in effect at any time since 1975; if so, describe in what respects, if any, those blood or air lead testing and monitoring programs differ from the blood and air lead testing and monitoring programs used at Willow Island; and
- c. state whether the industrial hygiene, safety, or any other program to minimize employees' exposure to lead or to reduce the hazard of such exposure differs in any respect from the programs used at Willow Island, and if so, describe the differences in detail;
- d. identify all documents which defendant relied upon in answering questions 9-13 on pages 5 and 6 of document number 20326;

- e. identify individual(s) who are familiar with the particulars of the efforts to protect employees from over-exposure to lead at both the Willow Island and Chicago plants and those who are responsible for such efforts at the Chicago plant;
- f. describe in detail the special test program using powered air purifying respirators and supplied air respirators, referred to in document number 20326, page 5, including without limitation:
 - i. the purpose of the program;
 - ii. the individuals who designed and implemented the program;
 - iii. when the program was in effect;
 - iv. the results of the program;
 - v. the cost of the program;
 - vi. the design of the program, including the numbers of employees who participated and their sex, the departments in which they worked, any monitoring or exposure levels deemed relevant to the study, the specifics about any control group, etc.
- g. identify any documents containing, reflecting or referring to the special test program referred to in (f) above;

- h. identify each and every citation issued by the U.S. Department of Labor referred to in Appendix II of Document No. 20326;
- i. itemize the costs of compliance with each item of the Settlement Agreement attached as Appendix II to document number 20326;
- j. describe fully the "major engineering control program" referred to at Section IV, page 5, of Appendix II to document number 20326, state when the program was undertaken and completed, state the cost of the program, and describe in detail the nature of the "substantial reduction in air-borne lead exposure" referred to therein;
- k. identify the individual(s) who have full knowledge of the citations and settlement agreement referred to in (h), (i) and (j), above;
- l. identify all individual(s) who participated in the preparation of document number 20326 and describe the role of each, where possible specifying specific questions as to which each individual provided information;
- m. with regard to the two clerical employees referred to on page 6, ¶12, of document number 20326, state for the period 1975-1980, the names of the employees, the results and dates of each blood lead test, the results and dates of any

air sampling, and identify all documents containing the results of such blood tests and air sampling;

- n. list, by trade and generic name, all substances and products used and produced by Cyanamid's Chicago plant that contain lead or its compounds.

Answer: Defendant objects to this interrogatory to the extent it seeks information about job categories other than production workers on the ground that such information is not relevant to the issues in this lawsuit. Subject to and without waiving that objection, defendant provides the following information on production worker job categories:

- litharge operator
- process operator
- blender/packer
- utility

a. Defendant objects to this interrogatory on the ground that information about the employment of women at facilities other than Willow Island is irrelevant to the issues in this lawsuit.

b. Defendant has had blood and air-lead testing programs in effect during the relevant period. Both programs are substantially similar to those that were used at Willow Island. Blood sampling at the Chicago plant is done every

month or every other month depending upon the employee's blood lead level; air sampling is done on a quarterly basis.

c. The programs are substantially similar.

Differences were in details of execution, such as motivation rewards and personal techniques of each supervisor, but not in the principles of good personal hygiene, work practices to minimize exposure and use of respirators for dust conditions. Respirators are used full-shift at Chicago, but were employed on a less-than-full-shift basis in the Pigments Department at Willow Island. Different types of respirators were used at different periods in the two facilities.

- d.
9. Handwritten note from H.C. Gaffney to W.A. Fead, dated October 20, 1980.
 10. Handwritten note from H.C. Gaffney to W.A. Fead, dated October 20, 1980.
 11. Handwritten note from H.C. Gaffney to W.A. Fead, dated October 20, 1980.
 12. Undated handwritten notes of G.R. Koehler and chart entitled "Chicago Plant-Blood Leads 1980."
 13. Handwritten notes of W.A. Fead, dated October 23, 1980, and sketch entitled "Building 24: Area Sampling Results at Locations Marked by an "X" in Units of ug/m³ Lead." Handwritten note from H.C. Gaffney to W.A. Fead, dated October 20, 1980.

Relevant portions of these documents are being produced pursuant to Request 90(m).

e. J. Caporossi

W. Fead

G. Koehler

J. Tobin

T. DeLong

R. McCollum

C. Hellings

W.V. Andresen

H.C. Gaffney and those working under his supervision.

f. (i) The purpose was to reduce blood-lead levels and protect employee health.

(ii) The program was a group effort by J. Caporossi and his staff and H. Gaffney and his staff. Mine Safety Appliances Inc. had some involvement in the powered air-purifying respirator test and the supplied-air respirator program.

(iii) The powered air-purifying respirator test was accomplished in 1979-80. The supplied-air respirator program was fully implemented in February-March 1982.

(iv) The powered air-purifying respirator test results were unsatisfactory. The respirator was defective and the blood lead levels rose. Because of depressed production schedules and the short time period that the supplied-air

respirator program has been in effect, the results of that program have not been assessed.

(v) The powered air-purifying respirator test cost approximately \$1,900. The air-supplied respirator program had a capital cost of \$31,000 and an annual operating cost of \$1,000.

(vi) Defendant objects to this interrogatory to the extent it seeks information about the employment of women at facilities other than Willow Island. Such information is not relevant to this lawsuit. Subject to and without waiving this objection, defendant provides the following information: The powered air-purifying respirator test involved the preliminary testing for effectiveness on certain respirator units. Four employees from the production area participated in the test. Monitoring of blood-lead levels and sampling of air lead levels indicated that the units were not effective.

The supplied-air respirator program involves the use of a respirator that can be connected to a supplied-air source. When disconnected, the air is filtered through a cartridge attached to the respirator. All of the production employees participate in the program. The program has not been in place long enough for the Company to evaluate the results.

g. Memorandum from G.R. Koehler to H.C. Gaffney,
dated December 10, 1980

Undated handwritten notes (one page)

Petition for Modification of Abatement in OSHRC

Docket No. 78-23

Memorandum from J. Caporossi to S. Jaraczewski, dated
February 13, 1980

Undated handwritten notes (six pages)

Purchase requisition

Undated handwritten notes (one page)

Memorandum from H.C. Gaffney to M.A. Taylor, dated
September 12, 1980

Document, dated January 23, 1981

Letter from M.G. Kemplin to W. Miller, dated
December 10, 1980

Memorandum from R.W. McCollum to H.C. Gaffney, dated
September 3, 1980

Memorandum from M.G. Kemplin to H.C. Gaffney, dated
February 13, 1981

Memorandum from H.C. Gaffney to M.A. Taylor, dated
April 30, 1981

Memorandum from M.G. Kemplin to H.C. Gaffney, dated
December 4, 1980

Letter from H.C. Gaffney to W.E. Funcheon, Jr., dated
September 3, 1981

Letter from N.D. Yin to H.C. Gaffney, dated November 12,
1982

Respirator Information Notice, dated November 15,
1982

Handwritten notes of T. DeLong, dated May 1981 (two
pages)

Memorandum from G. Koehler to R. McCollum, dated
November 20, 1980

Memorandum from R.W. McCollum to H.C. Gaffney, dated
September 30, 1980

Handwritten notes, dated August 28, 1980 (three
pages)

Undated handwritten notes (two pages)

Undated handwritten notes (one page)

Undated handwritten notes (one page)

Memorandum from H.C. Gaffney to M.G. Kemplin, dated
January 22, 1981

Salesmen's card, handwritten note, dated December 5,
[no year] and data sheet for powered air-purifying respirator

Document entitled "Section I: Employee Profile and
Exposure Data"

Document Entitled "Section II: Technology Related
Information"

Letter from J. Caporossi to OSHA, dated November 9,
1982

Relevant portions of these documents are being
produced in response to Request 90(m).

h. OSHA Citation B1069 (March 4, 1976)

OSHA Citation F3898 (December 9, 1977)

i. COSTS OF COMPLIANCE WITH SETTLEMENT AGREEMENT IN
OSHRC DOCKET NO. 78-23

Item	Cost (\$K)	
	Capital	Annual

a. Engineering Modifications

Air pallet system to charge litharge to ribbon blender	81	1.0
Overhaul South ball mill	28	--
New mill (enclosed) Item	52	--
	<u>Cost (\$K)</u>	<u>Annual</u>
	<u>Capital</u>	
*Overhaul P&S drier to seal & balance		1.0
Install unused dust collector to P&S drier	22	--
Replace two dust collectors in Bldg. 19	75	25

b. Respiratory Protection

New airline system	31	1
Quantitative fit testing	11	0.6
*Qualitative fit testing	--	37.0
*Respirator replacements	--	8.0
Cartridge replacement and respirator cleaning	--	21.0

c. Hygiene Facilities

Personal vacuum cleaner for clothing	0.6	11.7
*Lunchroom with positive ventilation system		10.0
Locker room with street & work clothes section, showers, positive pressure	13.1	35.0

*Personal hygiene items, soaps, towels, shampoo		--	2.5
d. <u>Housekeeping</u>			
*Protective clothing, including purchase and laundry		--	19
Item		<u>Cost (\$K)</u> Capital	Annual
Daily housekeeping inspection - one per shift for 3 shifts		--	7.5
*e. <u>Air Monitoring</u>			
Analytical cost		--	6.8
Industrial hygiene cost		--	20.0
In-plant sampling time		--	12.0
Employee time-off job for pump checks, changes		--	2.2
*f. <u>Administration</u>			
15% of plant manager, engineer, and maintenance supervisors		--	18.0
*g. <u>Medical Exams</u>			
Annual physical exams		--	2.8
Blood leads			
Employee time off		--	1.0
Analytical costs		--	16.8

*/ Reflects cost of program that existed prior to the OSHA citation but was affirmed as an item of the settlement agreement.

*h. Training

Employee Time

--

7.2

j. The program involved the implementation of recommendations made in an engineering study by J. Caporossi. The program was undertaken in 1976 and completed in 1978. The program had a capital cost of \$266,000 and an annual operating cost of \$16,300. The nature of the reduction in airborne lead exposure which coincided with the implementation of these engineering modifications is a reduction in average airborne lead exposure from a range of somewhere in the vicinity of 150 ug/m3 to somewhere in the vicinity of 100 ug/m3 over a period of time. Subsequently, the average airborne lead exposure level increased to the 135-140 ug/m3 range. It is impossible to determine any decrease in airborne lead particulate concentration attributable to a specific engineering control installed due to the many factors that contribute to airborne lead concentrations.

k. H. Gaffney

A. Kimball

W. Fead

J. Caporossi

l. Coordination, assembly and final authorship were accomplished by W. Fead. The following contributed information

*/ Reflects cost of program that existed prior to the OSHA citation but was affirmed as an item of the settlement agreement.

to specific questions and/or provided comment and review of the document.

H. Gaffney (2, 6, 8, 9, 10-13, 15, 17-18, 22,

28, and supplemental questions)

G. Koehler (4, 5, 8, 12 and 15)

R. McCollum (7, 15)

J. Felter (1-3, 21, 23-27)

R. Anderson (20)

M.A. Taylor (19)

J. Caporossi

R. O'Brien

F. Atlee

R. Rau

m. Defendant objects to this interrogatory on the ground that it seeks information irrelevant to the issues in this lawsuit.

n. The basic lead products used and produced at the Chicago plant are:

CYASTAB Basic Lead Carbonate
Electrical Grade 15

CYASTAB Heat Stabilizer 712
(a dibasic lead phosphite)

CYASTAB Heat Stabilizer 810
(a highly basic lead sulfate)

CYASTAB Heat Stabilizer 908
(a dibasic lead phthalate)

CYASTAB Litharge
(lead oxide (PbO))

64. With reference to the engineering controls listed in response to Interrogatory 30 of Plaintiffs' First Interrogatories to Defendant, state:

- a. the date of implementation;
- b. the cost of implementation;
- c. the cost of maintenance;
- d. the location;
- e. whether the control replaced an existing device or part thereof for controlling airborne concentrations of lead particulates or represented a new capital investment;
- f. whether implementation was a result of or in connection with any studies or analyses and, if so, the author(s), date and title of each study or analysis;
- g. whether specific tests or analyses were performed to determine the effectiveness of the control; and
- h. the reduction in airborne concentrations resulting from implementation.

Answer: The answers to this interrogatory are contained in Attachment A.

65. Identify and describe in detail the "programs [initiated] over the past few years to increase the number of women hired" referred to in the third paragraph of document

number 20079, page 2, and explain how the 33% increase mentioned in the same paragraph was calculated, providing the underlying data for the calculations.

Answer: See Objection 4. Cyanamid objects to this interrogatory because it seeks information regarding the hiring of employees other than at the Willow Island plant. Such information is irrelevant to this action and would be unduly burdensome to produce. The Court already has held that plaintiffs are not entitled to discovery regarding the hiring of employees at facilities other than the Willow Island plant.

66. With reference to document number 20076:

- a. summarize all discussions and decisions made by Central Medical regarding medical surveillance of workers exposed to DMF, including, without limitation, identification of all participants and dates;
- b. state whether a pilot program for monitoring DMF exposure was implemented at the Saugus plant or any other Cyanamid plant and, if not, state the reasons therefor; and
- c. identify all documents referring or relating in any manner to the use of or to the monitoring of exposure to DMF at any Cyanamid plant.

Answer: Cyanamid objects to parts (b) and (c) of this interrogatory to the extent that it seeks information relating to exposure monitoring for DMF at facilities other than Cyanamid's Willow Island plant. Such information is irrelevant to this action and its production would impose an undue burden on Cyanamid. Cyanamid will provide any information referring to exposure monitoring for DMF at the Willow Island plant.

a. The subject of the medical surveillance of DMF was discussed only once. That discussion occurred at the meeting of the Occupational Health Committee on September 5, 1980. The following individuals were present at that meeting: J.M. Salsbury, W.P. Brown, J.C. Caporossi, M.A. Friedman, H. Kiltie, M.H. Martin, J.F. Noble, C.A. Peterson, J.F. Noland, F.D. Timmons and J.F. Terenzi. After the September 5th meeting, C.A. Peterson wrote and sent a summary of the meeting to Dr. R.M. Clyne.

b. See Objection 4. Defendant objects to this interrogatory to the extent that it seeks information regarding exposure monitoring of DMF at locations other than Willow Island.

c. See Objection 4. Defendant objects to this interrogatory to the extent it seeks information regarding the use or monitoring of DMF at locations other than Willow Island. Relevant portions of documents relating to defendant's Willow Island facility are being produced in response to Request 90.

67. State the precise request given to the Literature Services Department or to any other department, division or company that resulted in each of the following documents, and identify by name and title the person(s) making each such request, the date on which it was made, and the person(s) responding to the request:

a. 01051-59

Answer: Cyanamid is unable to determine the precise requests. These documents resulted from a request from Dr. R. Clyne during or before April 1978. Dr. Anne O'Brien responded to the requests.

b. 20178, p. 4.

Answer: Cyanamid is unable to determine the precise request. Page 4 resulted from a request from Dr. J. Noble which was responded to by Frances Stratton with the assistance of Dr. Anne O'Brien sometime before August 1978.

c. 20181, p. 7.

Answer: Same as the response to (b) above.

d. 20182, p. 89

Answer: Cyanamid is unable at this time to provide the requested information concerning this document. Cyanamid will supplement its response should that information become available.

e. 20183, pp. 7-9

Answer: Cyanamid is unable at this time to provide the requested information concerning this document. Cyanamid will supplement its response should that information become available.

f. 20185, pp. 10-11

Answer: Same as the response to (b) above.

g. 20186, p. 9

Answer: Cyanamid is unable to determine the precise request. To the best of defendant's knowledge, this document resulted from a request from Dr. Jack Noble sometime before August 1978. Ms. Frances Stratton responded to the request.

h. 20187, pp. 11-12

Answer: Cyanamid is unable to determine the precise request. Page 11 of this document resulted from a request by Dr. R. Clyne during or before April 1978. Dr. Anne O'Brien responded to the request. With respect to page 12, see response to (g) above.

i. 20188, pp. 18-19

Answer: For page 18, see the response to (b) above. Cyanamid is unable to determine the precise request and the requestor of the literature search represented on page 19. The search was

prepared sometime in September 1973 by someone in the Literature Services Department of Lederle Laboratories.

j. 20189, p. 9

Answer: See response to (g) above.

k. 20190, pp. 7-8

Answer: Cyanamid is unable at this time to provide the requested information concerning this document. Cyanamid will supplement its response should that information become available.

l. 20194, p. 7

Answer: See response to (g) above.

m. 20195, pp. 12-13

Answer: Cyanamid is unable to determine the precise request. These pages resulted from a request from Dr. R. Clyne during or before April 1978. Dr. Anne O'Brien responded to these requests.

n. 20198, pp. 16-19

Answer: For page 16, see response to (g) above. For pages 17-19, see response to (b) above.

o. 20199, pp. 12-24; 33-37

Answer: Cyanamid is unable to locate the precise requests. The documents resulted from a request from Dr. Noble sometime before July 27, 1978. Frances Stratton responded to the request. She obtained the information from the National Library of Medicine in Bethesda, Maryland.

p. 02002-04

Answer: See Objection 3. Cyanamid is unable to locate the precise request. Defendant identified these documents in response to Interrogatory 25(i) and produced them in response to Request 1(h) of Plaintiffs' First Request for Production of Documents. These documents were collected by F. Scholten at the direction of defendant's counsel, Steptoe & Johnson Chartered, sometime in late 1980 or early 1981 in the course of preparation of defendant's response to Request 1(h).

q. 01986-02000

Answer: Same as the response to (p) above.

r. 02021-31

Answer: Same as the response to (p) above.

s. 02043-48

Answer: Same as the response to (p) above.

68. Identify all documents reviewed by each of the following deponents in preparation for his/her deposition:

- a. Dr. Kenneth Owen;
- b. Dr. Richard Hille;
- c. Ms. Patricia Shopene;
- d. Mr. Ralph Clay;
- e. Mr. Glenn Mercer;

Answer: Cyanamid objects to summarizing the contents and identifying the date, author, signer, addressee, type of document, and custodian of each document reviewed by the deponents identified above. Providing this information imposes an onerous and undue burden on Cyanamid. To the best of Cyanamid's knowledge, the following list includes the production number or identifying information for all documents reviewed by the deponents in preparation for their depositions.

- a. Dr. Kenneth Owen:

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b. Dr. Richard Hille

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Owen Exhibit 7
Owen Exhibit 6

c. Ms. Patricia Shopene

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d. Mr. Ralph Clay

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20850
42401-42518 (Excerpts)
43123-43279 (Excerpts)
43970-71
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44006
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44288-89
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Article XXIX of the Collective Bargaining Agreement

Defendant American Cyanamid Company's First Supplemental Responses to Plaintiffs' First Interrogatories

Defendant's First Objections To Plaintiffs' First Interrogatories

Defendant's Second Objections to Plaintiffs' First Interrogatories

Defendant American Cyanamid Company's Second Supplemental Nonconfidential Responses to Plaintiffs' First Interrogatories

Affidavit of Jack E. White filed with Defendant American Cyanamid Company's Opposition to Plaintiffs' Intervenor's Motion for Class Certification

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan. April 9, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan. May 8, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan - June Report. May 31, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan - July 1979. July 12, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan - August 1979. August 21, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan - September 1979. September 10, 1979.

Memorandum from Kunkle to Brown: Lead Exposure Standard Compliance Plan - October 1979. October 2, 1979.

Memorandum from Clyne to All Division Presidents and Directors, All Plant Managers, All Plant Physicians: Revised New Standard for Lead. December 21, 1978.

The following are excerpts from the file in Marshall v. American Cyanamid Company, No. 79-2438, which were produced to the plaintiffs in February 1981 in response to Request 19:

Interrogatory No. 96 and Cyanamid Response to Interrogatory No. 96

Memorandum: C.S. Hellings' Visit Report.
October 26, 1973.

Interrogatories No. 33-42 and Cyanamid responses to Interrogatories No. 33-42 and attachments

Memorandum from Clay to Willow Island Employees: Safety - Respiratory Protection. December 19, 1977.

Interrogatories No. 100-03 and Cyanamid responses to Interrogatories No. 100-03

Report: C.S. Hellings Safety Visit to Willow Island. April 12, 1972.

Report by Caporossi and Hellings: Industrial Hygiene Evaluation, Chrome Pigments, Willow Island. April 1977.

OSHA Deposition of Jack E. White

Cyanamid Safety Standard No. 6: Respiratory Protection. June 1, 1972.

OSHA Inspector Worksheets

e. Mr. Glenn Mercer

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20673
20699
41346-48
42401-42518 (Excerpts)
43123-43279 (Excerpts)
43970-71
44001
44016
44263
44264
44285-89
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Article XXIX of the Collective Bargaining Agreement
Defendant American Cyanamid Company's First Supplemental Responses to Plaintiffs' First Interrogatories
Defendant's First Objections to Plaintiffs' First Interrogatories
Defendant's Second Objections to Plaintiffs' First Interrogatories
Defendant American Cyanamid's Second Supplemental Nonconfidential Responses to Plaintiffs' First Interrogatories.
Affidavit of Jack E. White filed with Defendant American Company's Opposition to Plaintiffs-Intervenors' Motion for Class Certification

75. As to AFI and Surfactants departments and the janitorial pool during the period January 30, 1978, to October 2, 1978,

- a. identify each individual employed in such departments and jobs, and for each state:
 - i. his/her plant-wide seniority date (continuous service status);
 - ii. his/her departmental seniority date or status;
 - iii. his/her department, job title and job classification or wage grade (e.g., W-1, W-2, etc.);
 - iv. the complete details of any job or status of change during the period referenced above;
 - v. as to any individual who filled a vacancy in the referenced period, whether s/he bid on the vacant position or was assigned to it in some other fashion;

- v. as to any individual who filled a vacancy in the referenced period, whether he/she bid on the vacant position or was assigned to it in some other fashion;
- b. List each vacancy which occurred and
 - i. identify the individuals who filled it, and
 - ii. describe how the individual came to fill the vacancy, i.e., by bid, assignment, transfer request or otherwise.
- c. Identify which jobs, if any, women would be permitted to hold under the terms of the corporate medical policy relating to female production workers as originally announced in January 1978.

Answer: Cyanamid objects to producing this information about employees other than permanent hourly production employees on the grounds that such information is irrelevant and that producing it would be unduly burdensome.

a-b. The following lists the permanent hourly production employees working in the AFI department between January 30, 1978, and October 2, 1978. It also lists each employee's plant-wide seniority date,^{*/} job title, wage grade, the details of any status change during the above-referenced period and the manner in which the following persons acquired vacancies, if

^{*/} There are no departmental seniority dates at the Willow Island Plant.

applicable. In addition it also indicates each vacancy that occurred during that period, identifies the individuals who filled each vacancy and describes how each vacancy was filled. See also documents produced in response to Request 77.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
F.G. Truscott	5/28/51	Wet End Operator	W-7	
C.W. Dearth	8/29/49	AFI Operator	W-9	
M.G. Little	9/1/49	AFI Operator	W-9	
H.W. Kirkbride	9/19/49	AFI Operator	W-9	
B.D. Mayfield	9/26/49	AFI Operator	W-9	
J.A. Berga	12/6/49	Relief Operator	W-8	
W.H. Snider	4/30/51	Wet End Operator	W-7	On 6/23/78 employee became acting shift foreman on temporary assignment due to vacation and illness coverage.
L.H. Johnson	4/24/57	Boardman	W-3	
W.S. Richardson	7/15/54	Dry End Operator	W-6	
T.D. Jacobs	5/22/74	Blend and Materials Man	W-3	On 4/28/78 employee successfully bid to Maintenance Helper position in Maintenance Department.
J.M. Negley, Jr.	10/7/74	Dry End Operator/ Wet End Operator	W-6 W-7	On 5/1/78 employee moved to W-7 position as a result of reorganization.
C.J. Yates	12/2/75	AFI Helper	W-4	
C.R. Moler	3/31/76	Boardman	W-3	At beginning of period employee

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
				worked as Boardman in AFI; between 4/20/78 and 5/8/78 employee assigned to work as Filter and Dryer Helper in Pigments due to surplus in AFI and lack of successful bidder for Pigments. Between 5/8/78 and 6/13/78 employee was "Operator C" in Pigments due to increased production schedule. On 6/13/78 employee successfully bid into Boardman position in AFI.
W.B. Flesher	1/31/73	Wet End Operator	W-7	
J.D. Poling	8/13/73	Boardman AFI Helper	W-3 W-4	On 2/8/78 employee successfully bid to Boardman position. On 6/7/78 employee began working as AFI Helper due to increased production schedule.
G.L. Mohr	6/5/78	Materials Man	W-2	On 7/3/78 employee reassigned to Pigments.
R.E. Feick	12/9/77	Boardman	W-3	On 7/18/78 employee successfully bid to Boardman position.
B.D. Settle	10/22/74	Boardman	W-3	On 7/18/78 employee successfully bid to Boardman position.
G.E. Maston	10/22/74	Boardman AFI Helper	W-3 W-4	On 7/10/78 employee moved to W-4 position due to reorganization resulting from J. Riggs' transfer to Maintenance.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
F.V. Page, Jr.	11/13/74	AFI Helper Dry End Operator	W-4 W-6	On 7/10/78 employee moved to W-6 position due to reorganization resulting from J. Riggs' transfer to Maintenance.
G.L. Stewart	11/13/74	Dry End Operator	W-6	
J.D. Snyder	8/4/75	Dry End Operator	W-6	
R.G. Shepherd	8/24/66	Wet End Operator	W-7	On 4/28/78 employee successfully bid to Maintenance Helper position in Maintenance.
R.J. Riggs	8/30/66	AFI Helper Dry End Operator	W-4 W-6	On 6/7/78 employee became Dry End Operator due to increase in production schedule. On 7/13/78 employee assigned to Maintenance as a result of request for transfer.
C.E. Bartlett, Jr.	12/7/75	AFI Helper	W-4	On 9/19/78, employee resigned.
R.A. Thompson	2/12/76	AFI Helper Boardman; Blend & Materials Man	W-4 W-3 W-3	On 4/21/78 employee became Boardman due to reduced production schedule. On 5/6/78 employee replaced a successful bidder in Special Chemicals. On 6/13/78, employee successfully bid to Boardman position in AFI. On 6/30/78 employee became Blend and Materials Man in AFI.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
W.D. Echard	3/15/73	Boardman	W-3	On 7/17/78 employee assigned to Boardman position because no successful bidder and because surplus in BN. On 7/18/78 employee assigned to Catalyst.
S.A. Poynter	3/20/73	Boardman	W-3	On 7/17/78 employee assigned to Boardman position because no successful bidder and surplus in BN. On 7/17/78 employee assigned to Catalyst.
K.D. Schinke	12/9/77	Boardman	W-3	On 9/26/78 employee successfully bid to Boardman position.
J.C. Adams	12/9/77	Blend & Materials Man	W-3	On 9/22/78 employee successfully bid to Blend and Materials Man position.
C.G. Way	12/9/77	Boardman	W-3	On 9/22/78 employee successfully bid to Boardman position.

The following lists the permanent hourly production employees working in the Surfactants Department between January 30, 1978 and October 2, 1978. It also lists each employee's plant-wide seniority date,^{*/} job title, wage grade, the details of any status change during the above-referenced period and the manner in which the following persons acquired vacancies, if applicable. In addition it also indicates each vacancy that occurred during that period, identifies the individuals who

^{*/} There are no departmental seniority dates at the Willow Island Plant.

filled each vacancy and describes how each vacancy was filled.
See also documents produced in response to Request 77.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
R.M. Hescht	1/31/49	Surfactant Operator	W-7	
P.R. Edge	10/21/50	Surfactant Operator	W-7	
C.R. Sweeney	12/4/50	Surfactant Operator	W-7	
L.B. Webb	8/17/51	Surfactant Operator/ Helper	W-5	
R.J. McCloy	4/28/59	Surfactant Operator/ Helper	W-5	
D.R. Gates	8/27/65	Surfactant Operator/ Helper	W-5	
M.J. Lemley	8/28/67	Surfactant Operator/ Helper	W-5	On 7/10/78 employee began training to become shift super- visor in Special Chemicals.
L.W. Shingleton	10/23/67	Surfactant Operator/ Helper	W-5	

The following lists the permanent hourly production employees working in the Janitors Department between January 30, 1978 and October 2, 1978. It also lists each employee's plant-

wide seniority date,^{*/} job title, wage grade, the details of any status change during the above-referenced period and the manner in which the following persons acquired vacancies, if applicable. In addition it also indicates each vacancy that occurred during that period, identifies the individuals who filled each vacancy and describes how each vacancy was filled.

See also documents produced in response to Request 77.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
H.M. Maston	8/29/49	Janitor	W-1	
M.L. Hart	4/3/50	Janitor	W-1	
D.J. Boone	1/10/78	Janitor	W-1	
B.W. Pribble	11/13/74	Janitor	W-1	
E.B. Hollister	11/13/74	Janitor	W-1	
C.W. Ingram	8/18/66	Janitor	W-1	
V.D. Smith	12/2/75	Janitor	W-1	
J.D. Murray	3/23/76	Janitor	W-1	
M.A. Martin	3/4/77	Janitor	W-1	
S.H. Horner	1/10/78	Janitor	W-1	On 4/20/78 employee assigned to Special Chemicals.
E.M. Perkins	11/26/53	Janitor	W-1	
J.L. Danielson	1/10/78	Janitor	W-1	On 4/20/78 employee assigned to Pigments position due to no successful bidder.

^{*/} There are no departmental seniority dates at the Willow Island Plant.

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
J.B. Jameson, Jr.	1/10/78	Janitor	W-1	On 4/20/78 employee assigned to Pigments due to no successful bidder.
H.E. Butcher	7/20/48	Janitor	W-1	
H.D. Westbrook	3/14/74	Janitor	W-1	
D.W. Dotson	1/10/78	Janitor	W-1	On 3/23/78 employee assigned to Janitors after displaced from BN by more senior employee. On 4/20/78 employee assigned to Pigments position for which there was no successful bidder.
M.L. Mollohan	1/10/78	Janitor	W-1	On 3/23/78 employee assigned to Janitors after displaced from Special Chemicals by more senior employee. On 4/10/78 employee assigned to Catalyst position for which there was no successful bidder.
D.R. Malthaner	11/15/77	Janitor	W-1	On 3/23/78 employee began working in Janitors. On 3/27/78 employee resigned.
R.C. Bailes	1/10/78	Janitor	W-1	On 2/8/78 employee bid to Catalyst. On 3/23/78 employee returned to Janitors. On 4/6/78 employee successfully bid to Catalyst.
J.M. Winans	5/19/78	Janitor	W-1	
R.D. McPherson	8/16/78	Janitor	W-1	

<u>Name</u>	<u>Seniority Date</u>	<u>Job Title</u>	<u>Wage Grade</u>	<u>Explanation of Status Change</u>
M.D. Smith	12/9/77	Janitor	W-1	On 8/15/78 employee assigned to Utility Pool per employee request. Employee was surplus Catalyst.
E.L. Garner	9/11/78	Janitor	W-1	On 9/20/78 employee began working in Janitors after production training.
T.L. Bishop	9/11/78	Janitor	W-1	On 9/20/78 employee began working in Janitors after production training due to reactivation of Utility Pool.
I.D. Talkington	9/11/78	Janitor	W-1	On 9/20/78 employee began working in Janitors after production training due to reactivation of Utility Pool.
R.A. Dye	9/11/78	Janitor	W-1	On 9/20/78 employee working in Janitors after production training due to reactivation of Utility Pool.
M.J. Carpenter	7/18/74	Janitor	W-1	On 10/2/78 employee assigned to Utility Pool.
D.L. Cline	10/6/76	Janitor	W-1	On 10/2/78 employee assigned to Utility Pool.

c. Under the terms of the corporate medical policy as originally announced in January 1978, women production workers would be permitted to work in jobs in the Aureomycin and the Surfactants Departments and Janitors at the Willow

Island plant subject to the provisions of the collective bargaining agreement.

76. State the Standard Industrial Classification (SIC) codes applicable to Willow Island by job or department, as appropriate.

Answer: The following are the Standard Industrial Classification Codes that the plant considers current, and the departments to which they apply:

<u>Code</u>	<u>Department</u>
2869	Special Chemicals
2865	Beta Naphthol Aniline
2843	Surfactants
2819	Catalyst
2833	Aureomycin
2879	Special Chemicals

77. State whether at any time since 1970, the Corporate Medical Department or any other department or employee of American Cyanamid issued instructions regarding the inclusion or exclusion of lead-related injuries or of lead-related work restrictions from the OSHA log of Occupational Injuries and Illnesses. If so,

- a. summarize the instructions;
- b. identify, by name and title, the persons responsible for formulating and issuing the instructions;

- c. state the reason(s) why the instructions were given;
- d. state whether the instructions represented a change in existing policy and, if so, the reasons for the change;
- e. identify all person(s) receiving the instructions, stating the manner in which and date on which they were communicated and identify by name and title the person(s) who made the communication;
- f. identify all documents containing, referring or relating in any way to any instructions identified above.

Answer: See Objection 4. Cyanamid objects to this interrogatory to the extent it seeks information about instructions given to facilities other than its Willow Island plant as being irrelevant to this action and unduly burdensome to produce.

a-b. The Willow Island plant received instructions to stop including in the OSHA log removals resulting from high blood lead levels. Defendant does not know who formulated or issued these instructions.

c. The instructions were given because the company believed that medical removals due to the results of blood lead tests did not constitute work injuries or illnesses as defined by OSHA. Therefore, the plant was never required to include them in the OSHA log.

d. The instructions did not constitute a change in policy. They simply constituted a clarification of the requirements for completing the OSHA log.

e. Patricia A. Shopene received the instructions. Ms. Shopene believes she communicated those instructions to Betty Wickenhoffer. Defendant does not recall who communicated these instructions to Ms. Shopene. Defendant also does not recall the date those instructions were communicated to the Willow Island plant, but estimates that such instructions were communicated to the Willow Island plant between January 1972 and January 1974.

f. To the best of defendant's knowledge, there do not exist any documents referring or relating to these instructions. Dr. John Tobin and Ms. Shopene believe that the Central Medical Department may have communicated the instructions orally to the Willow Island Medical Department.

78. Identify by manufacturer, model, and year each x-ray machine used by Willow Island Medical Department at any time since 1974. For each machine,

- a. state the inclusive dates of use;
- b. state the procedures for which used;
- c. identify by name and title the person(s) operating the machine;
- d. describe in detail all procedures, devices and equipment used to monitor and to limit the radiation exposure of the operator of the machine and of the individual being x-rayed.

Answer: The Willow Island plant uses an x-ray machine manufactured by the Picker Company. The model or serial number is 6123B. Defendant is unable to determine the year it was manufactured.

a-c. In 1974, the Willow Island plant was using this X-ray machine for regular chest x-rays and for chest x-rays and x-rays of extremities if the Willow Island plant physician(s) so requested. Ms. Betty Wickenhoffer and Ms. Pat Shopene, the nurses employed in the Medical Department at the Willow Island plant, operated the machine.

d. The operators of the machine stand behind a stationery lead shield while taking x-rays to limit radiation exposure. The operators also wear a "Guard Ray" film badge while taking x-rays. That badge is submitted to the R.S. Landover, Jr. & Co. each month. That company then reports to the Willow Island plant the level of radiation each operator was exposed to during the previous month.

For the protection of the person being x-rayed, the plant x-ray machine is inspected periodically. A sign is posted inside the x-ray room advising female employees to notify the Willow Island Medical Department x-ray operator if the employee is pregnant or believes she may be pregnant. The Medical Department also will delay taking x-rays of persons that advise the operator that they have received x-rays recently.

79. Describe in detail the code used to classify applications for employment at Willow Island by type of

employment sought, including without limitation a list of each code reference and its meaning, the method by which applications were coded, the criteria used in deciding how to code or classify each application, any instructions in coding and/or filing applications, any changes in the coding system, and the individuals who were responsible for coding applications.

Answer: Cyanamid objects to providing code references assigned to applications other than applications for entry-level unskilled production and maintenance (P&M) positions on the ground that such information is irrelevant. The following are the code references applicable to unskilled P&M positions.

H-1. Laborer

H-2. Production Helper

H-3. Janitor - Utility Pool

Since May 7, 1982, the plant has ceased accepting applications for employment. Prior to May 7, 1982, an application was marked with the appropriate designation at the time the plant received the application. Generally, the plant assigned a designation based upon a review of the completed application and an examination of the applicant's previous education, experience and interest.

Applications from female applicants were maintained in separate files and coded in accordance with these procedures.

Between 1965 and 1980, P.K. Cooper, Ruth Heilman, and Carla Conaway were primarily responsible for coding applica-

tions. Glenn Mercer and Carl Johnson occasionally coded applications. Between 1980 and 1982, Ruth Heilman and Carla Conaway coded applications.

80. The documents numbered 20173-20199 are compilations of handwritten and printed materials. For each,

- (a) identify the author and date of the handwritten portions of each page where handwritten material appears; and
- (b) identify the person responsible for compiling the document, the date of compilation and the custodian(s) of the document.

Answer: a. Documents 20173-20199 include approximately 203 pages which contain some form of handwritten material.

Cyanamid, therefore, objects to providing the author and date of each of the handwritten portions of each page where handwritten material appears as being unduly burdensome. However, without waiving this objection, Cyanamid states that the authors of the handwritten portions of these documents are either Dr. Jack Noble, Dr. Charles E. Traitor, Dr. D. Allen or Ms. Debra Kay and that these handwritten portions were made by them during the time periods stated in the response to part b of this interrogatory.

b. See Objection 2. These documents were compiled by Dr. Charles E. Traitor, Ms. Debra Allen and Mr. Joseph Cordero at the direction of Dr. Jack Noble. Defendant believes that the compilation of these documents began in July 1978.

81. Explain the redactions in the following numbered documents, stating the subject matter of the redacted material, the reason for the redaction, and the nature and basis of any claim of privilege:

a. 00972

Answer: To the best of defendant's knowledge, document 00972 was not redacted.

b. 01912 through 01960

Answer: Cyanamid redacted information concerning chemicals to which the medical protection policy was not applied at Willow Island.

c. 101283

Answer: To the best of defendant's knowledge, document 101283 was not redacted.

d. 101289

Answer: To the best of defendant's knowledge, document 101289 was not redacted.

e. 20115

Answer: See Objection 4. The subject matter of the redacted material in document 20115 is information regarding steps taken to implement the medical protection policy at facilities other than Willow Island. The information has been redacted because it is irrelevant to this action as held by the court in its March 24, 1982 Opinion and Order.

f. 20204

Answer: See Objection 3. The subject matter of the redacted material in document 20204 is communications between American Cyanamid Company and its legal counsel regarding the implementation of the medical protection policy at Willow Island. The basis of the redaction is the attorney-client privilege which protects communications between the company and its in-house counsel.

g. 20205

Answer: See Objection 3. The subject matter of the redacted material in document 20205 is communications between American Cyanamid Company and its legal counsel regarding the implementation of the medical protection policy at Willow Island. The basis of the redaction is the attorney-client privilege which protects communications between the company and its in-house counsel.

h. 20433 (page 1 of cover memo)

Answer: To the best of defendant's knowledge, document 20433 was not redacted.

i. 20583

Answer: To the best of defendant's knowledge, document 20583 was not redacted.

j. 01857

Answer: Document 01857 was not redacted.

k. 101289

Answer: To the best of defendant's knowledge, document 101289 was not redacted.

l. 50614

Answer: Information redacted from document 50614 does not pertain to the production of lead pigments and, therefore, is irrelevant to this lawsuit.

m. 50866

Answer: To the best of defendant's knowledge, document 50866 was not redacted.

n. 50880

Answer: To the best of defendant's knowledge, document 50880 was not redacted.

82. Identify the following numbered documents by author, custodian(s), recipient(s), date and purpose, as indicated.

Answer: To the extent that the subparts to this interrogatory seek identification of the "custodian(s)" of documents, see Objection 2.

a. 00984 (author, custodian(s))

Answer: D.R. Brown is the author of the monographs and Marilyn H. Martin is the author of the minutes of the meeting that comprise document 00984.

b. 00986 (author, custodian(s)) (all attachments)

Answer: Dr. Jack Noble is the author of the attachments to document 00986.

c. 01003 (handwritten portions) (author, custodian(s))

Answer: G.P. Bywater is the author of the handwritten notes on document 01003.

d. 01006 (handwritten portions) (author, custodian(s))

Answer: C.L. Brandrup is the author of the handwritten portions of document 01006.

e. 20173 (handwritten portions) (author, custodian(s), date)

Answer: See answer to Interrogatory 80.

f. 20174 (handwritten portions) (author, custodian(s))

Answer: See answer to Interrogatory 80.

g. 20176 (handwritten portions) (author, custodian(s))

Answer: See answer to Interrogatory 80.

h. 20000 (handwritten portions) (author, custodian(s))

Answer: W.P. Brown is the author of the handwritten portions of document 20000.

i. 20003 (author, custodian(s), purpose)

Answer: To the best of defendant's knowledge, William Fead is the author of document 20003. He believes that it was written to summarize Cyanamid's understanding of lead exposure at Willow Island.

j. 20007 (date, purpose, custodian(s), author)

Answer: To the best of defendant's knowledge, document 20007 was written by Cyanamid's Corporate Public Affairs Office for Dr. Robert M. Clyne in preparation for responding to questions

raised in television or radio programs devoted to the medical protection policy. Document 20007 probably was written between January 1979 and February 21, 1979.

k. 20010 (purpose, date, author, custodian(s))

Answer: To the best of defendant's knowledge, Donald C. Droste is the author of document 20010. Mr. Droste prepared document 20110 as notes for his own use describing what occurred at a meeting with representatives of the Interfaith Center on Corporate Responsibility. Document 20010 was written in January or February 1980.

l. 20015 (date)

Answer: Dr. Robert Clyne is the author of document 20015. He is unable to recall the date on which he wrote it.

m. 20018 (each of the seven attachments) (author, custodian(s))

Answer: D.R. Brown is the author of the seven attachments.

n. 20019 (each of the seven attachments) (author, custodian(s))

Answer: There were no attachments to document 20019.

o. 20024 (author, custodian(s))

Answer: Dr. Harriet Kiltie is the author of document 20024.

p. 20026 (author, custodian(s), date, purpose)

Answer: Cyanamid is unable to determine the author, date and purpose of document 20026.

q. 20029 (handwritten portions) (author, custodian(s))

Answer: G.P. Bywater is the author of the handwritten notes on the first page of document 20029. E.H. Knappe is the author of the handwritten notes on the remaining pages of document 20029.

r. 20032 (author, custodian(s), date)

Answer: H.H. Hofmaier is the author of the document. Mr. Hofmaier believes he wrote the document sometime between June 20, 1978 and July 1, 1978.

s. 20033 (author, custodian(s), date, purpose)

Answer: C.L. Brandrup is the author of document 20033. He wrote it at or prior to the September 7, 1976 meeting of the Executive Committee. The document contains Mr. Brandrup's notes which he made for his use in connection with that meeting.

t. 20035 (typed and handwritten portions)
(author, custodian(s), date)

Answer: Cyanamid is unable to determine the author and date of the typed and handwritten portions of document 20035.

u. 20043 (author, custodian(s), purpose)

Answer: Dr. Robert Clyne is the author of document 20043. The purpose of the document was to record events in 1976 regarding the development of the medical protection policy.

v. 20104, p. 3 (date)

Answer: Document 20104 was prepared on November 13, 1978.

w. 20117 (author, custodian(s), date, purpose)

Answer: William Fead is the author of document 20117. He prepared it for his own use to record discussions among corporate management regarding the implementation of the medical protection policy at Willow Island.

x. 20118 (author, custodian(s), date, purpose)

Answer: William Fead is the author of document 20118. He prepared it for his own use to determine the situation at Willow Island with respect to the medical protection policy. Document 20118 bears the date "11/7/77."

y. 20131 (attachment 1)(author, custodian(s), date)

Answer: R.W. McCollum is the author of document 20131. To the best of Cyanamid's knowledge, it was written some time in April, 1980.

z. 20143 (author, custodian(s), purpose)

Answer: Dr. Robert Clyne is the author of document 20143. It is an outline of a speech.

aa. 20146 (author, custodian(s), date, purpose)

Answer: Dr. Harriet Kiltie is the author of document 20146. She wrote it on September 8, 1979 to record for her own use information on what occurred at a meeting of the OERC.

bb. 20151-53 (author, custodian(s))

Answer: William Fead is the author of documents 20151-53.

cc. 20199, pp. 5-6 (text and handwritten portions)
(author, custodian(s), date)

Answer: Dr. Jack Noble is the author of both the text and handwritten portions of document 20199. The text of the document was written on approximately March 20, 1979. Dr. Noble believes he wrote the handwritten portions of the document sometime during the period between March 22, 1979 and April 11, 1979.

dd. 20202 (handwritten portions) (author,
custodian(s))

Answer: To the best of defendant's knowledge, Marilyn H. Martin is the author of the handwritten portions of document 20202.

ee. 20203-05 (author, purpose, custodian(s))

Answer: William Fead is the author of documents 20203-05. He prepared them for his own use to record information gathered in meetings and phone conversations relating to the implementation of the medical protection policy at Willow Island.

ff. 20207 (identify by each line) (author, custodian(s), date)

Answer: Dr. Robert Clyne is the author of the dark writing on Document 20207. He wrote the note sometime in June or July of 1978. C.L. Brandrup is the author of the note on the bottom of the page. He wrote the note on June 27, 1978. Dr. John Tobin is the author of the remaining writing. He wrote the document sometime in June 1978.

gg. 20211 (author, custodian(s), date, purpose)

Answer: G.A. Forlenza is the author of document 20211. Defendant has been unable to determine the date it was written or its purpose.

hh. 20212 (author, custodian(s), date, purpose, recipients)

Answer: William Fead is the author of document 20212. He prepared it for his own use in discussions that occurred after the complaint was filed in this case. Mr. Fead does not recall the date it was prepared or whether he provided copies to anyone.

ii. 20213-14 (author, custodian(s), purpose)

Answer: William Fead is the author of documents 20213-14. He prepared them for his own use to record information with respect to implementation of the medical protection policy at Willow Island.

jj. 20215 (author, custodian(s), date, purpose)

Answer: William Fead is the author of document 20215. He prepared it for his own use in connection with the medical protection policy as it applied at Willow Island. Defendant has been unable to determine the date of this document.

kk. 20225 (handwritten portions)(author,
custodian(s))

Answer: William Fead is the author of the handwritten portions of document 20225.

ll. 20226 (author, custodian(s), date, purpose)

Answer: William A. Fead is the author of document 20226. He prepared 20226 on or about June 13, 1979 to compile information for his own use in preparation for responding to the EEOC during its investigation of the charges filed by plaintiffs in this case.

mm. 20249 (author, custodian(s), purpose)

Answer: George R. Koehler is the author of document 20249. The purpose of the document was to assemble information about the blood lead levels of women at the Willow Island plant.

nn. 20250 (author, custodian(s))

Answer: William Fead is the author of document 20250.

oo. 20251-52 (author, custodian(s), date)

Answer: To the best of defendant's knowledge, either Henry Shotwell or Hiram Van Blarigan is the author of document 20251. Defendant has been unable to identify the handwriting on page 1 of document 20252. To the best of defendant's knowledge either Henry Shotwell or Hiram Van Blarigan is the author of pages 2, 5, 7, 8 and 9 of document 20252 and Fletcher Brown is the author of pages 3 and 4 of document 20252. Defendant is unable to determine the date on which documents 20251-52 were prepared.

pp. 20300 (date)

Answer: To the best of defendant's knowledge, document 20300 was prepared sometime between April and May 1978.

qq. 20317-18 (author, custodian(s), date, purpose)

Answer: E.C. Carman and Bill Brunyate are the authors of document 20317. They wrote the document sometime between September 21 and October 10, 1979. The purpose of the document

was to reduce R. Chamberlain's recommendations to engineering designs and to cost them out.

E.C. Carman is the author of document 20318. The document was probably written in early August 1979. The purpose of the document was to prepare for R. Chamberlain's plant visit on August 9, 1979.

rr. 20324 (author, date, purpose, custodian(s))

Answer: Defendant has been unable to determine the author, date and purpose of document 20324.

ss. 20338 (author, custodian(s), date and purpose)

Answer: Joseph Caporossi is the author of document 20338. He is unable to recall the exact date and the purpose of the document. However, he believes that he may have written document 20338 sometime during the period between July 1978 and September 1979, and that the document represents notes he made after reading a paper, article or study.

tt. 20339 (author, custodian(s))

Answer: Donald C. Wagner is the author of document 20339.

uu. 20356 (author, custodian(s))

Answer: E.J. Dean, Jr. is the author of the handwritten portions of this document. William A. Fead is the author of the typewritten portions of this document.

vv. 20433 (p. 1 of cover memo) (date)

Answer: Dr. Robert Clyne is the author of document 20433. He is unable to recall the date on which he wrote it.

ww. 20502 (date)

Answer: To the best of defendant's knowledge, document 20502 was prepared sometime between April 1978 and August 1978.

xx. 20575 (author, custodian(s))

Answer: Glenn Mercer is the author of document 20575.

yy. 20579 (author, custodian(s), purpose)

Answer: E.J. Dean, Jr. is the author of document 20579. It describes a meeting at Willow Island regarding implementation of the policy at Willow Island.

zz. 20580 (author)

Answer: Carl Johnson is the author of document 20580.

aaa. 20583 (author, custodian(s), date and purpose)

Answer: Defendant is unable to identify the author, date or purpose of document 20583.

bbb. 20591 (author, purpose, custodian(s))

Answer: Donald C. Wagner is the author of document 20591. He prepared it to record information regarding the implementation of the medical protection policy at Willow Island.

ccc. 20593 (date, author, custodian(s), purpose)

Answer: Donald C. Wagner is the author of document 20593. He prepared it between September 1, 1978 and October 2, 1978 for his own use to prepare for implementation of the medical protection policy.

ddd. 20644-45 (author, custodian(s), date)

Answer: Donald C. Wagner is the author of documents 20644-45. He does not recall when documents 20644-45 were prepared.

eee. 44264 (author, custodian(s), recipients)

Answer: Defendant has been unable to identify the author of document 44264. To the best of defendant's knowledge, Dr. John Tobin and Dr. Robert M. Clyne, are the only recipients of document 44264.

fff. 44285 (handwritten portions)(author,
custodian(s))

Answer: Lee Long is the author of the handwritten portions of document 44285.

ggg. 44287 (handwritten portions)(author,
custodian(s))

Answer: Lee Long is the author of the handwritten portions of document 44287.

hhh. 44288 (handwritten portions) (author,
custodian(s))

Answer: Lee Long is the author of the handwritten portions of document 44288.

iii. 50748 (author, custodian(s), purpose)

Answer: To the best of defendant's knowledge, Ken Claire may have written document 50748 in preparation for the closing of the Pigments Department at Willow Island.

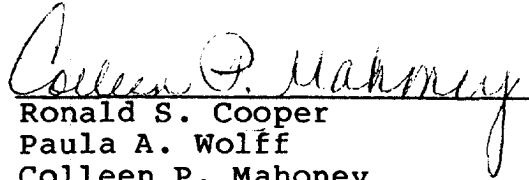
jjj. 50890-91 (author, custodian(s), purpose)

Answer: G.W. Busch is the author of the text of 50890-91. He wrote documents 50890-91 to estimate the cost effectiveness of alternative means of complying with the proposed OSHA lead standard.

kkk. 50897-98 (author, custodian(s), purpose)

Answer: G.W. Busch is the author of the text of documents 50897-98. He wrote documents 50897-98 to estimate the cost effectiveness of alternative means of complying with the proposed OSHA lead standard.

Respectfully submitted,



Ronald S. Cooper
Paula A. Wolff
Colleen P. Mahoney
STEPTOE & JOHNSON
Chartered

1250 Connecticut Ave., N.W.
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(202) 862-2000

Counsel for American Cyanamid
Company

Of Counsel:

Donald C. Droste
Marilyn H. Martin
Legal Department
American Cyanamid Company
Berdan Avenue
Wayne, New Jersey 07470

Dated: January 17, 1983

A. DATE OF IMPLEMENTATION	B. COST OF IMPLEMENTATION	C. COST OF MAINTENANCE	D. LOCATION	E. IMPROVE EXISTING OR NEW INVESTMENT	F. RESULT OF STUDY OR ANALYSES BY	G. TESTS TO DETERMINE EFFECTIVENESS	H. REDUCTION IN AIRBORNE CONCENTRATIONS
1. Employee Clean-up Station; Vacuum System OC-5664	Dec., 1974	\$ 2460	5% of Capital Investment	3rd Floor Bay 4, Bldg. 85	New Capital	Operational Tests After Installation	Same Reply As To OSHRC Inter- rogatories (copy attached)
2. OC-1216 Central Vacuum	Dec., 1974	\$26300	"	2nd Floor Bay 8, Bldg. 86	Replaced Portable System	C. S. Hellings Plant visit week of 10/1/73 for purpose: (*see below)	"
3. OC-1216 Dust Collector and Operating Duct- work	Dec., 1974	\$13185	"	1st and 2nd Floors Bays 5 & 7 Bldg. 85	Improve Ventilation	C. S. Hellings *"	"
4. OC-1216 Dust Collector and Ventilation Duct- work	Dec., 1974	\$11340	"	North Dock Bay 9, Bldg. 86	Improve Existing Facility	C. S. Hellings *"	"
5. OC-1216 Screw Conveyor	Dec., 1975	\$ 975	"	2nd to 1st Floor, Bay 7, Bldg. 85	New Capital	C. S. Hellings *"	"
6. GPO-0203 Modifications to Dust Collector Duct	March, 1976	\$ 818	"	2nd and 3rd Floors, Bay 6, Bldg. 85	Improve Existing System	No Operational Tests After Installation	"
7. MDRO-0242 Exhauster	March, 1976	\$ 452	"	2nd Floor, Bay 10, Bldg. 86	Replacement	No Operational Tests After Installation	"
8. MDRO-0321 Replacement Motor for Vibrator	June, 1976	\$ 155	"	2nd Floor, Bay 10, Bldg. 86	Replacement of Wornout Equipment	No Operational Tests After Installation	"
9. MDRO-0339 Replace Exhaust Enclosure	Dec., 1976	\$ 2700	5% of Capital Investment	3rd Floor, Bay 10, Bldg. 86	Improve by Replacement	No Air Flow and Operational Tests	"
10. OC-3357 Airslide Conveyors	March, 1977	\$ 4000	"	2nd Floor, Bay 9, Bldg. 86	Replacement of Wornout Equipment	No Operational Tests After Installation	"

*"Investigate Pigment Manufacturing Operations to Determine Causes of High Airborne Lead Levels Detected and Recommend Controls."

A. DATE OF IMPLEMENTATION	B. COST OF IMPLEMENTATION	C. COST OF MAINTENANCE	D. LOCATION	F. IMPROVE EXISTING OR NEW INVESTMENT	F. RESULT OF STUDY OR ANALYSES BY	G. TESTS TO DETERMINE EFFECTIVENESS	H. REDUCTION IN AIRBORNE CONCENTRATIONS
11. GP0-0527 Sump Pump	Dec., 1977	\$ 200	5% of Capital Investment	1st Floor, New Capital Bay 7, Bldg. 86	No	Operational Tests After Installation	Same Reply As To OSHRC Inter- rogatories (copy attached)
12. GP0-0492 Seperate Circuit for Dust Collector	Feb., 1978	\$ 400	"	2nd Floor, New Capital Bay 9, Bldg. 86	No	Operational Tests After Installation	"
13. OC-3346 Ventilation Ductwork	March, 1978	\$ 6700	"	1st Floor, Replacement Bays 7, 8, 9, 10, Bldg. 85	No	Operational Tests After Installation	"
14. GP0-0689 Vacuum Cleaner	May, 1978	\$ 300	"	Bldg. 86 New Capital Warehouse	No	Operational Tests After Installation	"

INTERROGATORIES OSHRC DOCKET NO. 79-2438, REGION III

1. e. the reduction of airborne concentrations of lead particulates achieved by the installation of each such control.

ANSWER: It is impossible to determine any decrease in airborne lead particulate concentration attributable to a specific engineering control installed due to the many factors which contribute to airborne lead concentrations. These factors include production levels, code in production, changes in operator duties and operator personal work habits. Attached are plots of airborne lead concentration (TWA) versus time for specific operator classifications. In most instances the plotted points are erratic and statistically of little value in determining any possible downward trend.

- f. the person(s) at American Cyanamid who decided to implement each such control;

ANSWER: The Pigments Department Operating Committee which is comprised of the following personnel:

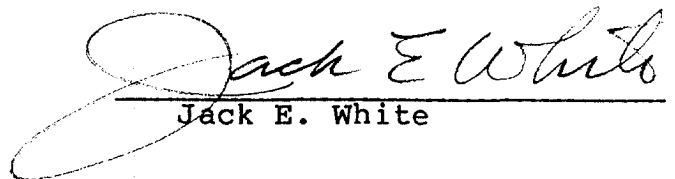
- 1) Area Manager
- 2) Department Superintendent
- 3) Department Engineer
- 4) Chief Chemist
- 5) Industrial Engineer
- 6) Building 85 General Supervisor
- 7) Building 86 General Supervisor
- 8) Maintenance Supervisor
- 9) Development Laboratory Group Leader
- 10) Applications Laboratory Supervisor

August 9, 1979

AFFIDAVIT

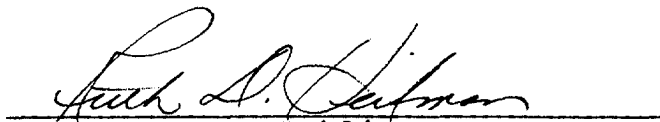
The undersigned, being first duly sworn states as follows:

My name is Jack E. White. I am the Plant Manager of American Cyanamid Company's ("Cyanamid") Willow Island, West Virginia plant. The information in the foregoing Defendant American Cyanamid Company's First Nonconfidential Responses to Plaintiffs' Second Interrogatories 45, 49, 51, 52, 60, 62, 64, 66(c), 68, 75, 76, 77, 78, 79, 81(a-c), 82(oo), 82(pp), 82(qq), 82(ww-zz), 82(aaa), 82(eee) is based on my own personal knowledge, or on the records and files and knowledge of personnel in appropriate Cyanamid offices and departments. I am informed and believe that the matters stated in those answers are true, and on that basis, I aver that they are true to the best of my knowledge, information and belief.



Jack E. White

Sworn to before me this 20th day of January 1983

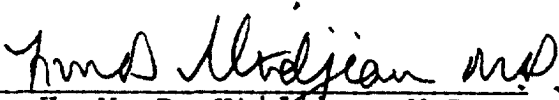


Notary Public

AFFIDAVIT

The undersigned, being first duly sworn, states as follows:

My name is H. M. D. Utidjian. I am Corporate Medical Director of American Cyanamid Company. Except with respect to the responses to those interrogatories identified in the accompanying affidavit of Jack E. White, the information in the foregoing Defendant American Cyanamid Company's First Nonconfidential Responses to Plaintiffs' Second Interrogatories and to Interrogatories 82(oo), 82(uu), and 82(eee) is based on my own personal knowledge, or on the records and files and knowledge of personnel in appropriate Cyanamid offices and departments. I am informed and believe that the matters stated in those answers are true, and on that basis, I aver that they are true to the best of my knowledge, information and belief.


H. M. D. Utidjian, M.D.

Sworn to before me this 20th day of January 1983



Notary Public

CAROL EHM
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires August 10, 1984

N41702.03

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Defendant American Cyanamid Company's First Nonconfidential Responses to Plaintiffs' Second Interrogatories was this 21st day of January 1983, mailed, first class postage prepaid, to counsel for plaintiffs:

Joan E. Bertin, Esq.
American Civil Liberties Union
Foundation
132 West 43rd Street
New York, New York 10036

Geoffrey M. Kalmus, Esq.
Kramer, Levin, Nesser, Kamin & Soll
919 Third Avenue
New York, New York 10022

Robert E. Wages, Esq.
Assistant General Counsel
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Paula A. Wolff
STEPTOE & JOHNSON
Chartered
1250 Connecticut Avenue, N.W.
Washington, D.C. 20036

N41702.04

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

To all to whom these presents shall come. Greeting:

By virtue of the authority vested in me by the Archivist of the United States, I certify on his behalf,
Under the seal of the National Archives and Records Administration, that the attached reproduction(s) is
a true and correct copy of documents in his custody.



NA1702.05

SIGNATURE	
NAME	DATE
Robert J. Plowman	5/22/2001
TITLE	
Assistant Regional Administrator	
NAME AND ADDRESS OF DEPOSITORY	
National Archives Mid-Atlantic Region 900 Market Street Philadelphia, PA 19107	