

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

*N. Statement
of Plaintiff*

*Amend #1
copy on file
10/2/82*

UNITED STATES OF AMERICA,
THE STATE OF NEW YORK,

Plaintiffs,

-against-

CIVIL ACTION NO. 79-988

HOOKEr CHEMICALS AND PLASTICS CORP.:
HOOKEr CHEMICAL CORP.:
OCCIDENTAL PETROLEUM INVESTMENT CORP.:
OCCIDENTAL PETROLEUM CORP.: and
THE CITY OF NIAGARA FALLS, NEW YORK
("S" Area Landfill),

PROPOSED
INTERVENOR COMPLAINT

Defendants,

THE ECUMENICAL TASK FORCE OF THE NIAGARA FRONTIER, INC.,
THE POLLUTION PROBE FOUNDATION, and
OPERATION CLEAN NIAGARA, by Its
President, Margherita Howe,

Intervenors

THE ECUMENICAL TASK FORCE OF THE NIAGARA FRONTIER, Inc.,
THE POLLUTION PROBE FOUNDATION, and OPERATION CLEAN NIAGARA by its
President Margherita Howe, as Intervenors, allege the following by their
Attorney BARBARA MORRISON:

PRELIMINARY STATEMENT

1. Between approximately 1947 and 1975, the defendants Hooker
Chemicals and Plastics Corp., Hooker Chemical Corp., and Occidental Petroleum
Corp., disposed of more than 70,000 tons of highly toxic chemicals at the
"S"-Area landfill site in Niagara Falls, New York. The defendants dumped

March 15/83

the chemicals without regard for the safety of the site, the propensity of the chemicals to migrate from the landfill into and under the Niagara River through groundwater and along bedding planes in the bedrock, and into the Niagara Falls Water Treatment Plant facilities, contaminating the land, air, and water.

2. The defendants failed during the aforementioned period and subsequent thereto, to ensure the safety and security of the Site, properly ascertain the extent and pathways of migration of the chemical waste, or take timely action to remediate the "S"-Area landfill.

3. The escape of these chemicals into the surrounding environment has adversely affected, and continues to adversely affect the health and safety of substantial numbers of people, and presents an imminent threat of harm to others and to the surrounding environment.

4. Based upon the foregoing, the United States of America commenced a civil action against the above-named defendants on or about December 20, 1979, seeking injunctive relief. The State of New York, pursuant to previous Order of this Court, was joined as a party plaintiff to the above-entitled action.

5. The Ecumenical Task Force of the Niagara Frontier, Inc., The Pollution Probe Foundation, and Operation Clean Niagara moved for and were granted status in the above action as plaintiff-intervenors on or about 1983.

6. Intervenors seek to protect the health, safety, and environmental

interests of their respective memberships, as set forth hereafter, and ensure that any resolution of this action will specifically require complete isolation of "S"-Area landfill chemicals from the Niagara River, the Niagara Falls Drinking Water Treatment Plant facilities, and the bedrock aquifer underlying "S"-Area landfill connecting hydrogeologically to the Gorge and geologically to the Canadian regional bedrock aquifer.

Jurisdiction

7. The claims set forth herein arise under the Common Law of the State of New York, and the jurisdiction of this Court is premised upon the doctrine of ancillary jurisdiction.

Parties

8. The plaintiffs to this action are the United States of America and the State of New York. The United States of America appears on behalf of the United States Environmental Protection Agency and its Administrator.

9. The State of New York is a body politic and sovereign entity, and appears on its own behalf, as parens patrie on behalf of all residents and citizens of New York.

10. Defendant Occidental Chemical Corporation is a wholly owned subsidiary of defendant Oxy Chemical Corporation. Occidental Chemical Corporation is

incorporated in the State of New York. Occidental Chemical Corporation was formerly the Hooker Chemicals and Plastics Corporation and was originally sued under that name.

11. Oxy Chemical Corporation ("Oxy") is a wholly owned subsidiary of defendant Occidental Chemical Corporation of California. Oxy is incorporated in the State of California.

12. Occidental Chemical Holding Corporation formerly the Hooker Chemical Corporation and originally sued under that name, is a wholly owned subsidiary of defendant Occidental Petroleum Investment Corporation and is incorporated in the State of California.

13. Occidental Petroleum Investment Corporation ("OPIC") is a wholly owned subsidiary of Occidental Petroleum Corporation. OPIC is incorporated in the State of California.

14. Occidental Petroleum Corporation is a corporation organized and existing under the laws of the State of California. It has no parent organization.

15. For the purpose of this action, Occidental Chemical Corporation and the parent and affiliate Corporations identified in paragraphs 11-14 are one entity, jointly and severally liable for one another's acts and the acts of their predecessors in interest. Hereafter in this complaint, the corporate defendants

and their predecessors in interest will be referred to as "Occidental."

16. At all times relevant to this action, Occidental operates a chemical manufacturing plant in Niagara Falls, New York, which produces or produced thousands of tons of organic and inorganic chemicals for use as pesticides, herbicides, fungicides, solvents, caustics and other products each year.

17. The City of Niagara Falls, New York (the "City") is a municipality incorporated under the laws of the State of New York. The City owns property at 53rd Street and Buffalo Avenue which is located approximately 200 yards to the east of the "S"-Area landfill. The City constructed, owns, and operates a Drinking Water Treatment Plant on this property and provides drinking water to approximately 86,000 persons who reside in or near the City of Niagara Falls.

18. This Drinking Water Treatment Plant is located in close proximity to and is affected by toxic wastes migrating from "S"-Area landfill. The City has been aware or should have reasonably been aware since approximately 1969 that toxic chemicals have infiltrated the Water Treatment Plant facilities, but has subsequently failed to diligently ascertain the constituents of these chemicals and the extent of such contamination. The City has in addition failed to adequately monitor, analyze and correct the problem in order to protect the health and safety of Niagara Falls water consumers.

19. The City is named as a defendant herein to ensure that adequate remedial measures with respect to the Drinking Water Treatment Plant are completed, and that adequate analysis and monitoring of treated water are undertaken.

Intervenors

20. The Ecumenical Task Force of the Niagara Frontier, Inc. (hereafter "ETF"), is a non-profit organization incorporated under the laws of New York State. ETF was established in 1979 and is dedicated to the protection of human and natural resources from chemical and radiological contamination in the Western New York Area and within the Great Lakes ecosystem.

21. The ETF has seventy-five members who are selected annually from ten Western New York denominational institutions which formed the ETF to implement policies designed to fulfil ETF responsibilities of 'environmental stewardship' through representation of the environmental and health interests of ETF members and those individuals who are affiliated with each participating denomination. A substantial number of ETF members reside in Niagara Falls and consume water processed at the Drinking Water Treatment Plant. All members of ETF use the Niagara River and Lake Ontario for fishing, swimming, and other recreational and aesthetic purposes.

22. The Pollution Probe Foundation (hereafter "Probe") is a non-profit public interest institution incorporated under the laws of Ontario in 1969. Probe was created for the purpose of natural and human resource protection, with special emphasis on preservation and improvement of drinking water quality, especially in the Great Lakes Watershed which provides drinking water for more than four million Canadian residents.

23. Probe has approximately 1,000 members, a majority of whom reside in the Great Lakes Watershed, including the communities of Oakville, Toronto, Cobourg, Kingston, and Montreal. As such, a majority of Probe's members draw their drinking water from Lake Ontario, and a number of members draw their water from the St. Lawrence River. In addition, a majority of Probe's members use the Niagara River, Lake Ontario and the St. Lawrence River for fishing, swimming, and other recreational and aesthetic purposes.

24. Operation Clean-Niagara (hereafter "Operation Clean") is an unincorporated association in the Niagara Region of Ontario which was formed in 1979, in response to increased pollution of the Niagara River by toxic chemicals, and the consequent impacts upon the health and environment of residents of the Niagara Region. This organization actively participates in public education, and utilizes legal channels to further its goal of preventing additional deterioration of the Great Lakes ecosystem and surrounding environment.

25. Operation Clean has approximately 600 members, a substantial number of whom draw their drinking water from Lake Ontario, and all of whom use the Niagara River and Lake Ontario for fishing, swimming, and other recreational and aesthetic purposes. Margherita Howe, the President of Operation Clean, resides in Niagara-on-the-Lake, Ontario, and is authorized to bring this action on behalf of Operation Clean's membership.

THE FACTS

The Landfill Setting

26. The "S"-Area landfill, approximately seven acres in size, was a disposal site for toxic chemical wastes which is owned by Occidental. The landfill is bounded on the North and West by other Occidental property, on the South by the Robert Moses Parkway, and on the East by 53rd Street.

27. The southern boundary of "S"-Area landfill is approximately 400 feet north of the Niagara River. To the east of "S"-Area (across 53rd Street), is the Niagara Falls Drinking Water Treatment Plant, and the property line is approximately 100 feet east of the eastern boundary of "S"-Area landfill. The Water Treatment Plant Filter Building is located approximately 300 feet east of "S"-Area's eastern boundary.

28. Occidental purchased the land upon which "S"-Area landfill was built in 1947, and utilized it as a chemical waste dump site between 1947 and 1975. A majority of the estimated 75,000 tons of waste were disposed of in "S"-Area prior to 1961, after which time use of the site was diminished. Chemicals

were dumped in liquid and solid form into two parallel trenches about 15-18 feet in depth. These trenches are now covered and two settling lagoons containing liquid waste materials are positioned over the covered fill.

29. Until the 1920's or 1930's, the land upon which "S"-Area landfill now exists, was submerged by the Niagara River, whose shoreline was located several hundred feet to the north of "S"-Area. Between 1933 and 1947, the shoreline was artificially extended southward beyond what is now "S"-Area with fill material composed predominantly of sand, silt and gravel and a heterogeneous mixture of cinders, slag, fly ash, coal, metal, glass, bricks and rubber. During the 1960's, the Niagara River shoreline was further extended southward by the addition of more fill to allow for the construction of the Robert Moses Parkway.

30. The topography in the vicinity of "S"-Area generally slopes gently southward towards the Niagara River. There are several exceptions, however, such as the "S"-Area landfill itself, which is built up approximately 5 to 8 feet above the surrounding terrain. The Water Treatment Plant property in the vicinity of the Pumping Station and Filter Building is also built up approximately 5 to 6 feet above the land immediately adjacent. The Robert Moses Parkway is constructed on an east-west ridge in excess of 10 feet above the land north or south of the highway.

Geology

31. The "S"-Area landfill is situated within a permeable sandy fill material that is about 10 feet deep north of the site, and increasing to approximately

30 feet deep beneath the landfill property. The fill material under the Water Treatment Plant is also about 30 feet deep, and intermixed with miscellaneous waste materials in a sandy matrix. The permeable sandy fill material generally overlies a lower permeable clay and till layer which is as thick as 15-20 feet north of the site and less than 5 feet thick in the southern portion of "S"-Area. This clay is fractured.

32. It is highly significant that beneath at least one portion of "S"-Area landfill, there is a total absence of clay and till, and the highly permeable sandy fill directly overlies the Lockport Dolomite bedrock formation.

33. The bedrock surface and each bedding plane within the formation slopes gently to the south. Vertical fractures interconnect the southward sloping bedding planes, and form a network capable of transmitting groundwater and contaminants through the formation.

Groundwater Flow

34. Natural groundwater flow in the overburden is generally southward towards the Niagara River. Groundwater moves relatively rapidly through the permeable fill, and more slowly through the less permeable clay and till, where it exists.

35. In those portions of "S"-Area site where the sandy fill directly overlies the bedrock, large quantities of groundwater and contaminants move

vertically downward directly into the bedrock.

36. Groundwater flow also occurs from the overburden into the zone adjacent to the shore shaft of the Water Treatment Plant.

37. Once groundwater reaches the bedrock, it flows north-westward in a lateral direction, while moving deeper vertically into the rock through fractures and bedding planes. This natural groundwater flow pattern may be disrupted by a number of man-made conditions including the PASNY Conduit and industrial wells.

38. Groundwater flowing north-westward from "S"-Area may be partially intercepted by the PASNY Conduit excavation that provides a permeable flow channel to the reservoir and ultimately to the gorge and Niagara River.

39. Natural groundwater flow patterns in the vicinity of the "S" site have also been locally affected by the placement of liquid waste lagoons which are located on top of "S"-Area landfill. Leakage from beneath these lagoons has caused the development of a water table mound, from which a certain amount of radial flow occurs. The downward pressure exerted by these lagoons also increases both the velocity and quantity of groundwater flow adjacent to the "S"-Area site.

40. At certain points significant infiltration of groundwater occurs into an Occidental sewer system, which passes adjacent to the "S"-Area lagoons and landfill and discharges into the Niagara River.

41. In addition, tests have shown that groundwater flows from the bedrock

into the shore shaft of the Water Treatment Plant and also into the tunnel out to a distance of at least 500 feet from the shore shaft.

The Chemicals in the Landfill

42. There were five distinct classes and one undefined grouping of chemical compounds, in both liquid and solid forms, dumped in the "S"-Area landfill by Occidental, although no comprehensive analysis of the waste content has been done. These classes are:

1. organic phosphates (200 tons)
2. reactive acid chlorides (10,300 tons)
3. phenolic residues (1,000 tons)
4. mercaptans and sulphides (14,500 tons)
5. organochlorine compounds (37,000 tons)
6. miscellaneous unidentified residues (6,800 tons)

43. A limited number of indicator chemicals from only one class of compounds, organochlorines, are analyzed to monitor groundwater contamination of the overburden and bedrock, and the raw and finished water in the Niagara Falls Water Treatment Plant. Other classes of chemical compounds identified as present in "S"-Area landfill, which because of their physical-chemical characteristics, may be migrating more extensively than the organochlorines, have been ignored by all parties to this action.

How the Chemicals Migrate from "S"-Area Landfill

44. Chemicals move in two phases from "S"-Area into the surrounding overburden and bedrock. The dissolved aqueous phase contaminants migrate with the groundwater flow system. The undissolved, non-aqueous phase contaminants move under the influence of gravity, against, or independent of, with or against, the groundwater flow system.

45. Both liquid and solid chemicals were dumped into trenches excavated 15 to 18 feet deep into the fill materials at "S"-Area.

46. The fill materials within which the chemicals were landfilled are permeable, allowing rapid movement of large quantities of chemicals to occur through the landfill bottom. No artificial means of restricting movement of these chemicals from the landfill were constructed by Occidental.

47. Chemicals from "S"-Area landfill move generally through the overburden southward to the Niagara River. In the relatively permeable fill materials movement is rapid. Although chemical movement through the till and clay soils is slower than in the sandy fill, interconnected fractures in the clay and till facilitate movement downward into the underlying Lockport Dolomite.

48. Of even greater consequence is the rapid movement of chemicals downwards through the sandy fill into the bedrock where the clay and till are absent below the "S" site. In the Lockport Dolomite bedrock chemical movement occurs along bedding planes, through vertical joints and solutioned cavities.

49. In the Lockport Dolomite bedrock the natural groundwater flow direction is north-westward toward the Niagara Gorge, to a discharge zone located between Niagara Falls and Whirlpool Rapids. The aqueous phase chemicals will move with these natural groundwater flow patterns, except where those patterns may be disrupted by a number of man-made features that act as conduits or additional sources for groundwater flow.

Where the Chemicals Migrate

50. On the basis of the natural and artificially induced groundwater flow patterns that exist in the overburden and bedrock around "S"-Area, there are four major areas affected by chemicals migration. These are:

- a. The Niagara River
- b. Lockport Dolomite regional bedrock aquifer - United States side
- c. Lockport Dolomite regional bedrock aquifer - Canadian side
- d. The Niagara Falls Drinking Water Treatment Plant facilities

51. There has been and continues to be movement of "S"-Area chemicals directly into the Niagara River in the overburden and through the bedrock. Aqueous phase contaminants are moving with the natural groundwater flow in the overburden from "S"-Area southward into the Niagara River, which ultimately discharges to Lake Ontario and the St. Lawrence River. Chemical migration is exacerbated by the fluoride waste lagoons on "S"-Area landfill and an Occidental wastewater sewer system passing adjacent to the "S"-Area lagoons and landfill.

52. The placement of a large amount of shot rock fill along the Robert Moses Parkway may cause an additional, but undefined effect on the natural groundwater flow in the overburden. The permeable shot rock fill does not inhibit, and may actually increase, the migration of chemicals from "S"-Area to the Niagara River.

53. Non-aqueous phase chemicals of sufficiently high density move downward under the influence of gravity along the fractures and bedding planes in the Lockport Dolomite from beneath "S"-Area landfill under the Niagara River. Because the bedrock layers slope to the south, non-aqueous chemicals migrate southward along the bedding planes under and into the Niagara Falls Treatment Plant facilities or directly south toward the Canadian side of the Niagara River. These non-aqueous phase contaminants, upon reaching the Canadian side, can enter and contaminate Canadian domestic (or industrial) wells which tap the Lockport Dolomite regional bedrock aquifer.

54. Both aqueous and non-aqueous phase chemicals have migrated within the Niagara Falls Water Treatment Plant facilities. Aqueous phase chemicals move through the permeable fill into the pump station forebay and vertical shore shaft area. Non-aqueous phase chemicals move along the southerly sloping bedding planes in the bedrock to the shore shaft and intake tunnel.

55. Structural discontinuities in the shore shaft and tunnel permit the inflow of chemicals from the overburden and bedrock under the influence of suction pressure created by the operation of the pumping station. Both aqueous and non-aqueous phase chemicals have been discovered in the shore shaft and

tunnel. In addition, other avenues for chemical movement into the Water Treatment Plant facilities may exist.

Occidental's Conduct With Regard to the Wastes

56. Occidental dumped its chemical wastes in the "S"-Area by directly discharging liquids and dumping drums into parallel trenches dug approximately fifteen (15) to eighteen (18) feet deep. Liquid waste was transported to the site in trailers and emptied from the trailers into the trenches. Drums were punctured, and their contents emptied into the trenches. A railroad car containing Occidental's chemical wastes was buried in the landfill.

57. The "S"-Area trenches which were used by Occidental for the disposal of its chemical wastes have now been covered and two treatment lagoons for organofluoride waste from Occidental's Buffalo Avenue manufacturing plant have been constructed above grade on the top of the landfill and are now in operation. The presence of the organofluoride treatment lagoons over the "S"-Area landfill and leaks therefrom have created or increased a groundwater mound and hydraulic pressure which exacerbates the migration of Occidental's wastes from the site.

58. Occidental knowingly deposited its chemical wastes at the "S"-Area into material which Occidental knew and should have known was porous fill, or directly into water that had premeated the fill.

59. Occidental continued to dispose of chemical wastes which it knew and should have known would permeate the porous subsurface.

60. Occidental encountered groundwater within four feet of the surface of the "S"-Area during excavations, yet it continued to dispose of its chemical wastes in trenches dug fifteen (15) to eighteen (18) feet deep. Occidental knew or should have known that groundwater within and beneath the landfill site was hydraulically connected with and flowed into the Niagara River.

61. At the time Occidental began to dump its chemical wastes in "S"-Area landfill, and subsequent thereto, Occidental knew or should have known that these wastes included hazardous materials which cause or are suspected of causing cancer (carcinogens), birth defects (teratogens), mutations or changes in the characteristics of genes (mutagens), and/or other acute and chronic adverse conditions in human beings, including, but not limited to, reproductive injury and damage to the liver, kidneys, skin, blood, lungs, and nervous system and which are known or suspected of causing injury to plant and animal life.

62. In addition, some of the chemical wastes dumped by Hooker at the "S"-Area landfill have been broken down and altered, through the passage of time and intermingling of wastes, to form by-products and chemical compounds in addition to the chemical substances originally deposited by Hooker.

63. Although it had knowledge of the facts described herein, Occidental continued to dispose of its chemical wastes at the site and failed to monitor the site for migration of its wastes either during the landfill's active life or after its closure.

64. Occidental was aware that the City of Niagara Falls operated a Drinking Water Treatment Plant on property adjacent to the "S"-Area when Occidental

began depositing chemicals at the site. Occidental was also aware that the City built a new Drinking Water Treatment Plant within 200 yards of the "S"-Area in 1952. Yet, Occidental knowingly continued to dispose of hazardous chemical wastes at the "S"-Area after 1952.

65. Occidental knew and should have known that alteration of the site and nearby construction would locally affect the natural direction of groundwater flow from the "S"-Area and would increase the likelihood of some lateral flow towards the Drinking Water Treatment Plant property and structures.

66. Occidental failed to notify the City, the State, or users of the City Drinking Water Treatment Plant that such eastward migration could occur. Yet Occidental was notified as early as 1969 by the City of Niagara Falls and on numerous occasions thereafter that chemicals attributable to Occidental had been detected in non-aqueous accumulations found inside Drinking Water Treatment Plant structures.

67. Yet, Occidental failed and continues to fail to take appropriate measures to confine its "S"-Area chemical wastes to its own property and to prevent off-site migration to the Niagara River and Drinking Water Treatment Plant.

68. In addition, Occidental failed to warn or inform the public of the hazardous nature of the chemicals disposed of at "S"-Area landfill, of the danger of migration of those chemicals from "S"-Area landfill, or of the danger

to people and to the environment from exposure to such chemicals.

Human Health and Environmental Injury

69. The chemical wastes dumped by Occidental at the "S"-Area landfill threaten grave harm to the health, safety, and well-being of persons who are exposed to air, ground, or water contaminated by such chemicals.

70. These chemical wastes include chemicals known or suspected to have carcinogenic, mutagenic, teratogenic, neuro-toxic, or other adverse effects to animals and to humans.

71. In addition, chronic low-level exposure to these chemical wastes can cause liver abnormalities or dysfunction, and hormonal imbalances which may result in allergies, behavioral and metabolic disorders. Chronic exposure to these chemical wastes even in low-level concentrations constitutes injury to human health because it requires the body to process and metabolize highly toxic foreign substances in addition to those compounds normally detoxified by the body's natural defense mechanisms. As a result of such chronic exposures, these mechanisms are weakened or exhausted, resulting in greater susceptibility to apparently unrelated diseases and disorders.

72. Chemical wastes which have migrated from the "S"-Area landfill, in both aqueous and non-aqueous form, have contaminated and continue to contaminate the Niagara Falls Water Treatment Plant facility.

73. These chemical wastes have entered and continue to enter the Water Treatment Plant facilities by migration into the shoreshaft, intake line, forebay, and pretreatment channels. Some of these chemical wastes, in non-aqueous form, have entered the intake structure and pretreatment building, where such accumulations act as independent and additional sources of contamination within the plant facility.

74. Chemical analyses of samples taken from the water intake system indicate that the chemical wastes which have infiltrated the system are Occidental's wastes, and are identical to those buried in "S"-Area landfill.

75. ETF members and all others who consume or ingest Niagara Falls City Water have suffered, currently suffer, will suffer, and are threatened with adverse health effects as described in paragraphs 70 and 71 above, as a result of past and continuing exposure to "S"-Area contaminants.

76. The chemical wastes emanating from "S"-Area landfill have, in whole or in part, caused and do and will continue to cause an increase in concentration levels of such Occidental waste in the water column of Lake Ontario, which threatens grave harm to persons who consume or ingest such water.

77. Members of Probe and Operation Clean who reside in communities which draw water for public supplies from Lake Ontario have suffered, continue to suffer, and will suffer, or are threatened with adverse health effects as described in paragraphs 70 and 71, as a result of past and continuing exposure to "S"-Area contaminants.

78. In addition, continuing discharge of "S"-Area contaminants into the Niagara River will deteriorate water quality in Lake Ontario and the St. Lawrence River. Fish in the Niagara River, Lake Ontario, and the St. Lawrence River have been contaminated, and continue to be contaminated by Occidental's chemical wastes, which in whole or in part emanate from "S"-Area landfill, and which pose a severe hazard to humans, animals, and birds who consume such fish.

79. Members of ETF, Probe and Operation Clean, among others, have suffered, continue to suffer, and are threatened with adverse health effects from ingestion of fish which have been contaminated with "S"-Area chemicals, in the Niagara River, Lake Ontario, and the St. Lawrence River. In addition, the discharge of "S"-Area contaminants into the Niagara River has inhibited, impaired, restricted, threatened, and prevented, and continues to inhibit, impair, restrict, threaten and prevent use and enjoyment of the Niagara River, Lake Ontario, and the St. Lawrence River and their environs for recreational and aesthetic purposes by Intervenors' members and others.

80. Chemical wastes are also migrating in non-aqueous form southward through the bedrock below and beneath the Niagara River toward the Canadian shoreline. This contaminant movement threatens grave harm to the groundwater resources in southern Ontario, including the area of Niagara Falls, Ontario. Members of Operation Clean who maintain and utilize wells which tap the regional bedrock aquifer in that area for drinking water and other purposes will be adversely affected by exposure to such chemicals.

81. Occidental has failed to take actions which are necessary and adequate

to permanently remedy and abate the existing and threatened harm to Intervenor's membership and others, from the presence of hazardous chemical wastes at "S"-Area landfill and their migration and threat of migration therefrom.

82. The continuing presence of hazardous, noxious, and offensive chemical wastes at "S"-Area landfill, and their migration and threat of migration therefrom, causing harm and threatening to cause harm to Intervenor's membership and others, and to land and water resources utilized by Intervenor's membership, constitute a continuing public nuisance, in accordance with the common law of the State of New York.

First Cause of Action for Public Nuisance

83. Intervenor's repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

84. The disposal of dangerous chemical wastes at the "S"-Area landfill by Occidental constituted an ultra hazardous and abnormally dangerous activity on the part of each corporate defendant.

85. Occidental, by disposing of dangerous chemical wastes at the "S"-Area landfill, created the continuing public nuisance described in paragraph 84.

86. Occidental, by disposing of dangerous chemical wastes at the "S"-Area landfill, has caused and continues to cause injury to Intervenor's and their members as described in paragraphs 69 through 82 herein.

to permanently remedy and abate the existing and threatened harm to Intervenor's membership and others, from the presence of hazardous chemical wastes at "S"-Area landfill and their migration and threat of migration therefrom.

82. The continuing presence of hazardous, noxious, and offensive chemical wastes at "S"-Area landfill, and their migration and threat of migration therefrom, causing harm and threatening to cause harm to Intervenor's membership and others, and to land and water resources utilized by Intervenor's membership, constitute a continuing public nuisance, in accordance with the common law of the State of New York.

First Cause of Action for Public Nuisance

83. Intervenor repeats and realleges paragraphs 1 through 82 as if fully set forth herein.

84. The disposal of dangerous chemical wastes at the "S"-Area landfill by Occidental constituted an ultra hazardous and abnormally dangerous activity on the part of each corporate defendant.

85. Occidental, by disposing of dangerous chemical wastes at the "S"-Area landfill, created the continuing public nuisance described in paragraph 84.

86. Occidental, by disposing of dangerous chemical wastes at the "S"-Area landfill, has caused and continues to cause injury to Intervenor and their members as described in paragraphs 69 through 82 herein.

Second Cause of Action for Public Nuisance

87. Intervenor's repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

88. In the initial and continuing choice of the "S"-Area landfill as a chemical dumpsite, in the manner of preparing the site for chemical waste disposal, in the manner of disposal of chemical wastes at the "S"-Area landfill, and in the manner of terminating waste disposal operations at the "S"-Area landfill, Occidental failed to act in a manner which would prevent the migration of chemicals out of the landfill.

89. By virtue of the negligent acts and omissions set forth above, Occidental has negligently created the continuing public nuisance described in paragraph 88.

90. By reason of any one, some, or all of the foregoing negligent acts and omissions, Intervenor's and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82 herein.

Third Cause of Action for Public Nuisance

91. Intervenor's repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

92. Since it began its chemical waste disposal operations at the "S"-Area

Occidental has negligently created and maintained the continuing public nuisance described in paragraph 96.

98. By reason of one, some or all of the foregoing acts and omissions, intervenors and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82.

Fifth Cause of Action for Public Nuisance

99. Intervenors repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

100. At all times relevant hereto, Occidental knew that adequate protective measures had not been taken and that chemical wastes were migrating, or were substantially certain to migrate into groundwater and soils in the vicinity of the "S"-Area landfill, into the Niagara River, and under the Niagara River in the bedrock, into the Niagara Falls Water Treatment Plant facilities, so as to interfere substantially with the health, safety, and well-being of Intervenors' members and others, and the environment of the State of New York and the Province of Ontario.

101. Despite the knowledge set forth in paragraph 100, Occidental, in initially choosing and continually using the "S"-Area landfill as a chemical dumpsite, in preparing the site for chemical waste disposal, in disposing of chemical wastes at the landfill, and in the manner of terminating waste disposal operations at the landfill, failed to prevent migration of chemical wastes out

landfill, and continuing thereafter, Occidental failed to and continues to fail to monitor, safeguard, contain or remove the chemical wastes dumped at the "S"-Area landfill so as to prevent migration of chemical wastes out of the landfill.

93. By virtue of the negligent acts and omissions set forth above, Occidental negligently created and maintained the continuing public nuisance described in paragraph 92.

94. By reason of one, some, or all of the foregoing negligent acts and omissions, Intervenors and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82.

Fourth Cause of Action for Public Nuisance

95. Intervenors repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

96. From the time it first dumped chemical wastes at the "S"-Area landfill, and continuing thereafter, Hooker failed to warn or inform the public of the hazardous nature of the chemicals disposed of at the "S"-Area landfill, or the likelihood of migration of those chemicals from the "S"-Area landfill, or of the hazard to people and the environment from exposure to such chemicals.

97. By virtue of the negligent acts and omissions set forth above,

of the landfill.

102. By virtue of the intentional acts and omissions set forth above, Occidental has intentionally created and maintained the continuing public nuisance described in paragraph 101.

103. By reason of one, some or all of the foregoing intentional acts and omissions, Intervenor and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82 herein.

Sixth Cause of Action for Public Nuisance

104. Intervenor repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

105. At all times relevant hereto, Occidental knew that adequate protective measures had not been taken and that chemical wastes were migrating, or were substantially certain to migrate into groundwater and soils in the vicinity of the "S"-Area landfill, into the Niagara River, under the Niagara River in the bedrock, and into the Water Treatment Plant facilities, so as to interfere substantially with the health, safety and well-being of Intervenor's members and others, and the environment of the State of New York and the Province of Ontario.

106. Despite the knowledge set forth in paragraph 105, Occidental failed and continues to fail to monitor, safeguard, contain, or remove the chemical

wastes dumped at the "S"-Area landfill so as to prevent migration of chemical wastes out of the landfill.

107. By virtue of the intentional acts and omissions set forth above, Occidental has intentionally created and maintained the continuing public nuisance described in paragraph 106 .

108. By reason of one, some, or all of the foregoing intentional acts and omissions, Intervenors and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82 herein.

Seventh Cause of Action for Public Nuisance

109. Intervenors repeat and reallege paragraphs 1 through 82 as if fully set forth herein.

110. At all times relevant hereto, Occidental knew that adequate protective measures had not been taken and that chemical wastes were migrating or were substantially certain to migrate into groundwater and soils in the vicinity of the "S"-Area landfill, and to the Niagara River, under the Niagara River through the bedrock and into the Niagara Falls Water Treatment Plant facilities, so as to interfere with the health, safety, and well-being of Intervenors' members and others, and the environment in the State of New York and in the Province of Ontario.

111. Despite the knowledge set forth in paragraph 110, Occidental failed and continues to fail to warn or inform the public of the hazardous nature of

the chemicals disposed of at the "S"-Area landfill, of the danger of migration of those chemicals out of the "S"-Area landfill, or of the danger to people and the environment of exposure to such chemicals.

112. By virtue of the intentional acts and omissions set forth above, Occidental has intentionally created and maintained the public nuisance described in paragraph 111.

113. By reason of one, some or all of the foregoing intentional acts and omissions, Intervenor and their members have suffered and continue to suffer the injuries set forth in paragraphs 69 through 82.

Eighth Cause of Action for Assault

114. Intervenor repeat and reallege paragraphs 1 through 113 as if fully set forth herein.

115. At all times relevant hereto, Occidental unlawfully, knowingly and intentionally did permit and continues to permit chemical wastes from "S"-Area landfill to migrate into the surrounding environment, and has thereby subjected and continues to subject Intervenor and their members to severe and persistent apprehension of injury to their health and the health of their descendants

(through mutagenic and teratogenic effects) as a result of chronic and continuing involuntary exposure to "S"-Area contaminants.

116. The apprehension experienced by Intervenor and their members is intensified because of their specialized knowledge of the nature and import of chronic and continuing exposure to "S"-Area landfill contaminants as discussed in paragraph 115.

Ninth Cause of Action for Battery

117. Intervenor repeat and reallege paragraphs 1 through 116 as if fully set forth herein.

118. At all times relevant hereto, Occidental unlawfully, knowingly and intentionally did permit and continues to permit chemical wastes from "S"-Area landfill to migrate into the surrounding environment. As a result, Intervenor's members have suffered and continue to suffer involuntary bodily intrusions of "S"-Area chemicals in trace or greater concentrations.

PRAYER FOR RELIEF

Wherefore, Intervenor respectfully request the following relief:

- A. That the court issue a mandatory permanent injunction ordering that:
1. The Occidental defendants shall conduct a sampling and analytical program to determine the geologic, hydrogeologic, chemical and geochemical characteristics in the vicinity of the "S"-Area landfill and the Drinking Water Treatment Plant and to define completely the areal and vertical extent of chemical (both aqueous and non-aqueous phase liquids) migration in soils, bedrock, groundwater and surface water in proper sequence:
 - a. definition of the geologic framework
 - b. definition of hydrogeologic framework
 - c. complete characterization of chemicals present in "S"-Area landfill
 - d. geochemical study (i.e., determination of how the contaminants buried in "S"-Area landfill move in the hydrogeologic flow system)
 - e. selection of appropriate indicator chemicals
 - f. definition of all areal and vertical contaminant plumes
 - g. selection and/or placement of chemical monitor wells on basis of proper plume definition
 - h. design and implementation of a long-term monitoring program, for all subsurface water affected by "S"-Area contaminants.
 2. The Occidental defendants shall conduct a sampling and analytic program to determine the nature and extent of chemical migration from

"S"- Area landfill into the Water Treatment Plant facilities, and do adequate field investigation, including x-ray scan testing, of the facility to ascertain whether remediation and modification, or relocation, of the existing plant is necessary. Specifically, the following actions must be taken:

- a. complete identification of contaminants in the raw and finished water
- b. selection of proper indicator chemicals representative of all classes of chemicals present
- c. design and installation of a long-term monitoring program for all raw and finished water processes at the Drinking Water Treatment Plant supplied to consumers by the City of Niagara Falls

The City shall cooperate fully with the implementation of the sampling and monitoring program described above, to the extent that it addresses chemical contamination of the Drinking Water Treatment Plant facilities.

All monitoring programs specified in 1. herein above, shall include on-site and off-site monitoring wells into each water-bearing geologic zone. The location and design of monitoring wells and locations and frequency of monitoring shall be established with the approval of plaintiffs and intervenors. Monitoring may be discontinued only if EPA and the Court agree that it is no longer necessary. The City shall cooperate fully with the sampling and monitoring program described above to the extent that it requires monitoring of chemical contamination of subsurface and raw and finished drinking water at the City Drinking Water Treatment Plant.

3. Based on the information obtained in the sampling, analytical and monitoring programs, the Occidental defendants shall perform a study analyzing the relative effectiveness of available remedial alternatives. This study shall include the development of appropriate three-dimensional, multi-phase mathematical models for use:

a. in confirming

1) groundwater flow in the vicinity of the "S"-Area landfill and the Drinking Water Treatment Plant

2) the extent of chemical migration from the "S"-Area landfill and contamination of the groundwater, soils, bedrock, the Niagara River and the Niagara Falls Drinking Water Treatment Plant facility

b. in determining the effectiveness of potential remedial programs to abate the chemical migration of "S"-Area contaminants in the environment, and to protect the City Drinking Water Treatment Plant and drinking water supply.

Such models as discussed in 3 (a) (1-2) above, may not be used in lieu of appropriate field studies and analyses necessary to define the contaminant plume. These models must utilize actual boundary conditions, hydraulic flow parameters, and geochemical and physical parameters which have been accurately measured in the field and in the laboratory. This will in turn enable the models to accurately predict the adequacy of proposed remedial options (as set forth in 3(b) above).

The City shall cooperate in the implementation of such a program to the extent that it addresses the City Drinking Water Treatment Plant facility.

These evaluations and, where appropriate, the mathematical models shall address the efficacy and need for all potentially applicable technology, including but not limited to:

- (a) Grout curtain walls to contain the "S"-Area landfill and protect the City Drinking Water Treatment Plant;
- (b) On-site leachate collection and dewatering systems, including but not limited to draw-down wells, tile drains, and lateral drains;
- (c) Excavation and site removal of chemical wastes, contaminated soils, river sediments and bedrock;
- (d) Treatment and destruction technology for collected contaminants, including but not limited to granular activated carbon and incineration, and disposal or destruction of residues;
- (e) Construction of a new drinking water intake system into the Niagara River for the City drinking water supply;
- (f) Construction of a supplemental intake system for the City drinking water supply to be utilized as needed during remedial activities;
- (g) A granular activated carbon system or an appropriate technology combination to remove contaminants from the drinking water supply;
- (h) Construction of a new drinking water treatment plant at a new location;
- (i) Cleaning the distribution system that is presently used for the provision of drinking water to the public and the removal of contaminants collected therein.

The study, including the mathematical models, and all background data and information used in their development shall be submitted to and be subject to

approval by plaintiffs and intervenors at each appropriate stage of its development.

4. On the basis of the information obtained in the studies described in subparagraphs 1, 2, and 3 above, the Occidental defendants shall prepare and implement a remedial program which contains or removes the "S"-Area landfill contaminants, cleans up chemicals which have already migrated from the site, and remediates or relocates the City of Niagara Falls Drinking Water Treatment Plant. Such a program shall be prepared and submitted to plaintiffs and intervenors for their approval.

5. The Occidental defendants shall perform, for as long as is necessary, any additional remedial measures which EPA or the Court determine to be necessary to protect public health and the environment, and the City shall fully cooperate in the implementation of such remedial measures as is necessary.

B. That the Court order the Occidental defendants to perform sampling and monitoring to determine the extent and degree to which the Niagara River sediment in the vicinity of the "S"-Area has been contaminated by the migration of chemicals from "S"-Area, including but not limited to:

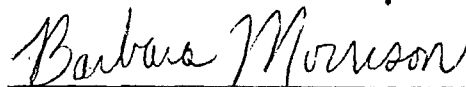
1. sampling and monitoring to determine the extent and degree to which aquatic organisms and other organisms in the environment contain or have been exposed to chemicals attributable to "S"-Area.

2. preparation and implementation of a remedial program which shall address and eliminate the intake of contaminants by aquatic and other organisms.

- C. That the Court order the defendants to obtain a bond, surety or other appropriate means to insure that funds will be available to finance the measures ordered in subparagraph A if the defendants become insolvent.
- D. That the Court order the Occidental defendants to provide plaintiffs, intervenors and the Court with sixty (60) days notice of any proposed sale of any portion of the "S"-Area landfill site and to file in the local land records of Niagara County, New York a certified copy of any interim or final judgment entered in this action.
- E. That the Court retain jurisdiction in this matter until such time as all remedial measures have been effectuated.
- F. That the Court grant to intervenors all other relief that the Court finds just and appropriate.

Dated: Buffalo, New York
March 15, 1983.

Respectfully submitted,



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