STATEMENT FROM MONSANTO COMPANY

The Public Broadcasting System's "NOVA" television program, "A Plague on Our Children," presented an inaccurate and slanted look at some serious problems of the chemical industry. Unfortunately, the program left the impression that the industry as a whole and Monsanto in particular are unconcerned and irresponsible -- an implication that is untrue and irresponsible in itself.

The bias of the program's producer, Robert Richter, was cited by The New York Times television reviewer, who wrote: "There is no doubt that Mr. Richter sympathizes with the critics, typified by Barry Commoner, the author and activist."

Furthermore, a number of statements in the program made by Dr. Commoner about Monsanto were either incorrect or reflected only a portion of the truth.

Monsanto acknowledges that there are problems associated with chemicals -- either through their misuse or through some earlier industry practices which today's technology has shown to be inadequate. Monsanto agrees these problems exist, and we have repeatedly spoken out for a cooperative effort by industry, government, academia and other groups to address the problems in a cooperative fashion. Those who simply shout from the sidelines add nothing to solving the problems that exist, and indeed are counterproductive.

Monsanto has consistently endorsed reasonable regulation of chemicals; further, there is ample evidence* our company has a commitment to health and environmental protection. We denounce implications to the contrary.

To set the record straight on specific details of the NOVA program: Monsanto has been and is very concerned about the environmental problems posed by polychlorinated biphenyls (PCBs). We believe that the history of Monsanto's involvement with PCBs demonstrates concern and an effort to deal with the problems responsibly.

Production of PCBs was begun in 1929 -- not to "invade markets of previous substances," as Dr. Commoner said, but to provide increased fire resistance and improved insulating fluids in electrical transformers. Mineral oil, the only known alternative, had stability and flammability problems that made it a potential hazard.

---

*(Monsanto has some 840 managers, scientists and technicians working exclusively on worker, product and environmental safety. In 1978 we spent nearly $200 million on this work. We have established a top-level Environmental Policy Staff to manage the impact of our business on the environment and the worker. We have completed a $12 million toxicology laboratory for long and short-range health effect studies.

We've mounted a $500,000 program to help finance the academic training of toxicologists and to reduce the present acute shortage. We were instrumental in founding the Chemical Industry Institute of Toxicology, which does long-range testing of materials used throughout our industry, as well as basic research into areas like carcinogenesis. And we are now pioneering the development of a major new computerized system to monitor worker health and environmental exposure.)

Dr. Commoner said that Monsanto knew by 1933 "from the effects on their own workers that they were dealing with a very dangerous substance."

The facts show that, in 1933 when the skin disease, chloracne, began appearing among workers in the PCB plant at Anniston, Alabama, the company immediately launched a medical investigation. As a result, steps were taken to change to a closed manufacturing process in which all chemical reactions occur in a sealed system, which in turn alleviated the problems. The appearance of chloracne -- which is a painful but curable skin disease -- did not lead Monsanto at that time to suspect that PCBs were "a very dangerous substance."

In the late 1960s, the first signs of environmental problems turned up in two separate events -- one in Sweden, the other in Japan. The latter was referred to in the NOVA program, though the report was in error. In 1968, Japanese-produced PCBs had been pumped through a leak directly into rice oil; about 1,300 Japanese became ill from eating the rice oil. There were no stillbirths or miscarriages linked with the incident, as reported in the NOVA program. The Swedish findings -- based on new analytical techniques -- suggested that small traces of PCBs were accumulating in fish.

When scientific investigations first confirmed the presence of PCBs in the U.S. environment in 1970 -- and before the potential impact was determined -- Monsanto

voluntarily began a program to terminate sales of PCBs to open applications and to limit supply of PCBs to the electrical power distribution industry, as dielectric fluids in "closed" or sealed systems such as transformers and capacitors. Preventive steps were also taken in the manufacturing, labeling and transport of PCBs.

In 1972, Monsanto's voluntary program was reviewed by a Federal Interdepartment Task Force, which supported and endorsed it.

Near the end of 1975, the then EPA Administrator Russell Train said he would not ask Monsanto to stop production of PCBs because that would shut down the electrical power industry and the railroads in short order.

The NOVA host announcer said the "sale and manufacturing of PCB was banned as of 1979," and Dr. Commoner said, "The action was taken far too late." What neither bothered to mention was that Monsanto had voluntarily withdrawn from the business in 1977.

Monsanto's plan to totally end production was announced by the company in October, 1976. At that time the company pointed out that fire insurance, building and electrical codes and regulations in many parts of the country have traditionally required the use of PCBs in high density population uses where violent electrical failure involving a flammable fluid could result in a catastrophic fire or explosion. The company also explained that the phaseout period was constrained by the necessary testing and perfecting

by the electrical industry of acceptable replacement products, which had not existed earlier.

Production of PCBs by Monsanto was halted in July, 1977.

The disposal of PCBs today is under the jurisdiction of the U.S. Environmental Protection Agency. Although PCBs are no longer imported into the United States, they are still produced by firms in Germany, France, Spain, Italy and certain eastern European countries.

There has never been a documented case of human dealth or irrecoverable harm from PCBs. Also, the National Institutes of Health reported in April of 1978 that the most commonly used PCB product was not carcinogenic in rat feeding tests (see attached NIH news release).

---

In speaking about the Toxic Substances Control Act, Dr. Commoner said, "As far as I can tell, the industry is going to squeeze every loophole out of that situation that they can." Monsanto in fact supported and urged Congressional approval of the Act in 1976.

At that time, Mr. Hanley said, "As part of Monsanto's responsibilities to society, we recognize and support the need to adhere to tough and reasonable standards to control toxic substances. We hope that this legislation will be signed into law by President Ford and implemented in a reasonable and effective manner through government and industry cooperation."

The NOVA program also described an incident in North Carolina, in which PCB contaminated oil was dumped along rural roads. The program did not report that those who were responsible, from a small waste disposal firm, were convicted and given jail sentences.

---

The NOVA program also visited Monsanto's Nitro, West Virginia, site, where a health study is being carried out on workers who were exposed to trace amounts of the toxic impurity, dioxin, during production of the chemical 2,4,5-trichlorophenol (2,4,5-T).

The study discussed in the program is sponsored by the United Steel Workers union, in cooperation with New York's Mount Sinai Medical Center. The program did not mention that Monsanto has also funded a health study there, under the complete control of Dr. Raymond Susskind, director of the Institute of Environmental Health at the University of Cincinnati and a recognized authority on the effects of dioxin exposure. That study began over two years ago, in mid-1977. It is being done, in part, in hopes to confirm the findings of our own on-going medical monitoring program that there are no serious long-term health problems -- and also to assist the World Health Organization in its attempt to find answers to medical questions surrounding exposure to dioxin. The University of Cincinnati study is the first of its kind, and the results are scheduled for publication soon in a medical journal. The entire problem has been

a continuing subject of interest in medical circles for many years, and Monsanto resents the NOVA implication that the matter has been covered up. Rather, the Nitro experience is being used as a case study to assist health authorities throughout the world in assessing the health implications of dioxin exposure.

In a slighting reference to the Mount Sinai Medical Center study, the program's host said, "In this case, Monsanto is cooperating...." In fact, the directors of the study from Mount Sinai earlier this year wrote to the Nitro plant manager: "We wish to thank you and the members of your staff for the welcome extended to members of the Mount Sinai research team during the plant tour on April 5th. We appreciate the thoroughness and excellent organization of the tour and most especially the time given to us."

---

Monsanto particularly resents a statement by Anthony Mazzocchi, a union representative: "Industry's claim that they don't wish to hurt people is just a pious platitude." He said, "I suggest that the sophisticated (corporate) apparatus is there to disguise, and to obfuscate and to conceal." And he said, "Science in service of people would be protection; but science in service of corporations can never protect, it can only conceal."

These statements are untrue, irresponsible and intentionally inflammatory. The chemical industry has long emphasized worker safety. In 1977, the industry's frequency rate

for recordable injuries and illnesses was 60% of that for all U.S. industry. And Monsanto's record is less than half the average of the chemical industry.

Monsanto achieved that safety record by recognizing potential hazards and taking steps to safeguard our workers. During the past decade and longer, as our scientific knowledge evolved we have identified potential chronic hazards. As our knowledge has increased, steps have been taken to protect employees from chronic risks, just as they have been protected from acute risks.

Industry scientists have developed most of the sensitive and precise instruments now used in chemical testing. Much of the data about the effects of chemicals on health and the environment is being developed in industry laboratories.

---

Other portions of the NOVA program have been criticized as inaccurate or misleading, and certainly as not presenting the best scientific knowledge available on troublesome issues. One such criticism, by the Council for Agricultural Science and Technology, is attached.

-oOo-