

Edgar J. Marston III  
EXECUTIVE VICE PRESIDENT  
AND GENERAL COUNSEL



September 29, 1994

Ohio Hazardous Waste Facility Board  
1700 WaterMark  
Post Office Box 1049  
Columbus, OH 43266-0149

In re Southdown., Inc.  
Case No. 91-NF-0700

Ladies and Gentlemen:

In August 1992 Clement International, Inc. completed a risk **assessment on Southdown's cement manufacturing facility in Fairborn, Ohio**. Thereafter, a number of the people who worked on the Southdown risk assessment at Clement left that firm and joined other risk **assessment** firms, including the Weinberg Consulting Group Inc. When the HWFB **staff first** raised questions in March 1994 concerning certain technical **aspects** of the **fire** and explosion scenario in the Fairborn risk assessment, Southdown engaged the Weinberg Group to assist it in **addressing** those concerns. Following receipt of the **highly** critical Opinion and Fii Orders of the **HWFB** effective September 19, 1994, Southdown engaged the Battelle Memorial Institute to assist it in **assessing** not only the **merits** of HWFB's technical criticisms of the fire and explosion scenario but also the Weinberg Group's responses to those criticisms. Based upon the results of **Battelle's preliminary** review, Southdown now believes that some of HWFB's criticisms merit further consideration. Accordingly, Southdown **respectively** requests that **HWFB** grant Southdown's Motion for Reconsideration **that** is being filed contemporaneously with this letter and suspend the effectiveness of HWFB's Orders **until Southdown** can complete a comprehensive reevaluation of the **fire** and explosion scenario by **Battelle** or some other firm of comparable stature. Southdown wishes to review and discuss with the HWFB and its **Staff the** selection of such a peer review consultant as soon as possible if the HWFB grants Southdown's motion for reconsideration.

On a personal note, I want to assure **HWFB** that neither I nor, to my knowledge, any other employee of Southdown, our legal counsel or our governmental **affairs** counsel was aware of the possible merits of some of HWFB's criticisms until my meeting on the afternoon of September 27, 1994 with a representative of Battelle. Since none of the foregoing persons is a risk **assessment expert**, prior to that meeting each of us had relied in good faith upon the advice of Southdown's risk assessment advisors to the effect that **HWFB's** criticisms were generally not meritorious. I thought we

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were **justified** in continuing to rely upon our **experts** because of their national reputation and the indication I received in August 1994 from Barry **Dellinger**, a professor of **electro-optics** at the University of Dayton, **that**, based upon his review of the **relevant** items in the record and his general **knowledge** of combustion **matters**, "the fire and explosion scenario outlined in Southdown's risk assessment meets the general standard of reasonableness normally applied to such evaluations."

I hope you will find **this** explanatory letter **useful**.

Cordially,

  
Edgar J. Marston III

EJMIII:lh

cc: Judith French-Ben-y, Chairwoman HWFB  
Warren W. Tyler, HWFB  
Donald L. **Mason**, Esq., HWFB  
Dr. E. Scott **Bair**, HWFB  
Dr. Neville G. Pinto, HWFB  
Gerry Ioannides, Past **Chairman**, HWFB  
Robert **Shostak**, **Counsel** for GEC  
James Saunders, Bath Township  
David Northrup, Counsel for Greene County Commissioners  
Alan G. Anderson, Counsel for Viage of Yellow Springs  
Dt. **Paul McStallworth**, Xenia Township  
John K. **McManus**, Attorney General's Office

**EXHIBIT C**

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AFFIDAVIT OF HAROLD BARRETT DELLINGER

STATE OF OHIO               :  
                                  :  
                                  :    ss  
COUNTY OF MONTGOMERY:

Harold Barrett Dellinger, being first duly cautioned and sworn, deposes and states as follows:

1. I have personal knowledge of the matters contained herein.
2. I am the group leader of environmental sciences and engineering and professor of electro-optics at the University of Dayton.
3. My curriculum vitae is attached and includes a presentation on "Determination of the Thermal Decomposition Properties of 20 Selected Hazardous Organic Compounds", Incineration and Treatment of Hazardous Waste at Tenth Annual Research Symposium at Fort Mitchell, Kentucky, April 3-5, 1994, Industrial Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio.
4. I have performed various services related to the permitting of the Southdown, Inc. ("**Southdown**") facility in Fairborn, Ohio (Fairborn facility). I consulted with the Greene Environmental Coalition and I was a special consultant to RAPCA regarding Southdown's air permit, which included the risk assessment terms. After concluding my work with RAPCA, I began performing work for Southdown related to emissions minimization for the **Fairborn** facility. The RAPCA supervisor consented to my relationship with Southdown, and it was understood that because of this relationship, I could no longer consult with RAPCA on Southdown matters.
5. Since 1992, my staff and I have collaborated with Southdown researchers on a variety of matters including the combustion of hazardous wastes in a preheater cement kiln, such as Southdown's **Fairborn** facility, and the chlorination of hydrocarbons that are evolved from the raw material in the preheater of a dry process cement plant. Southdown has made **\$300,000.00** in unrestricted contributions to the University of Dayton since 1992 to fund our research.

6. On July 19, 1994, I met with Edgar J. Marston, III Southdown's Executive Vice-President and General Counsel, to render a periodic report to Southdown regarding our research activities. This is the first meeting that I have had with Mr. Marston since prior to March 23, 1994. At the end of our meeting, I mentioned to Mr. Marston that:
  - A. In February, 1994, I was contacted by two individuals who identified themselves as staff members of the Ohio Hazardous Waste Facility Board ("HWFB"). These individuals ("HWFB staff members") asked to meet with me regarding some questions on an accidental fire and explosion scenario contained in a risk assessment. Both individuals may have given me business cards which I have not been able to locate. At the time of my July 19, 1994, meeting with Mr. Marston I did not remember the names of the HWFB staff members. However, I have since identified them as Robert Brown, the current acting executive director of HWFB, and Robert G. Teer, a member of the HWFB staff.
  - B. On March 15, 1994, I met with the HWFB staff members for approximately one and one-half hours in Cincinnati, Ohio, where I was giving a presentation at U.S. EPA's annual research conference.
  - C. They asked me detailed, technical questions regarding a fire and explosion scenario contained in an unidentified risk assessment, which they showed me in conjunction with their questions. They did not identify the facility to which the risk assessment pertained.
  - D. During our meeting on March 15, 1994, I asked them whether the risk assessment in question pertained to the Southdown facility (a.k.a. Southwestern Portland Cement Company) in Fairbom, Ohio. I informed them that I would not feel comfortable in answering their questions about a risk assessment on the Southdown facility because I was involved in the permitting process for that facility and because of the University of Dayton's ongoing relationship with Southdown. If they had advised me that their questions related to the Southdown facility, I would not have answered the questions and I would have ended the meeting.

- E. They assured me that their questions and the risk assessment at issue were not related to the Southdown facility.
  - F. After reading in the local newspapers about the basis of the denial of Southdown's application for a permit to store hazardous waste at its Fairbom facility by HWFB on March 23, 1994, I became concerned that I had been duped into providing information that contributed materially to the denial of **Southdown's** permit application.
7. I have recently reviewed the following information:
- A. Fire and explosion scenario contained in the risk assessment for Southdown's facility (Appendix I, Evaluation of Waste Fuel Fire Scenario, prepare by Clement International; hereinafter "Appendix I");
  - B. **HWFB's** questions regarding Appendix I, issued March 15, 1994;
  - C. Southdown's Responses to **HWFB's** Questions on Southdown's Risk Assessment, filed March 23, 1994;
  - D. Pages 45 through 101 from the transcript of the HWFB meeting on March 23, 1994;
  - E. Copies of overheads used by Mr. Brown at the March 23, 1994, HWFB meeting; and
  - F. A memorandum prepared by Sarah Foster and Paul Chrostowski of the Weinberg Consulting Group regarding Mr. Brown's presentation at the March 23, 1994, HWFB meeting.
8. Based on my general knowledge of combustion matters and my review of the items referred to in Paragraph 7 above, I believe that the fire and explosion scenario outlined in **Southdown's** risk assessment meets the general standard of reasonableness normally applied to such evaluations. The HWFB staff members did not examine **Southdown's** fire and explosion scenario in view of the enormous scientific complexities and uncertainties inherent in modeling a large fire and the ultimate purpose for which the risk assessment was prepared.
9. The issues raised by the **HWFB** staff members at our March 15, 1994, meeting are virtually identical to those raised by Mr. Brown in his presentation at the March 23, 1994, HWFB meeting. I want to emphasize that

my critique of the fire and explosion scenario to the HWFB staff members on March 15, 1994 was more balanced than Mr. Brown's presentation at the HWFB meeting. Mr. Brown's presentation appears to only incorporate criticisms and does not recognize the difficulties in developing a detailed comprehensive fire and explosion model. I relayed these same opinions to the HWFB staff members at our March 15, 1994 meeting, and it appears that Mr. Brown did not elect to include these comments in his March 23, 1994 presentation.

10. Further Affiant sayeth naught.

*Harold Barrett Dellinger 8/9/94*  
Harold Barrett Dellinger

Sworn to before me and subscribed in my presence this 9th  
day of August, 1994.

*[Signature]*  
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Notary Public  
FRANK MERRILL  
ATTORNEY AT LAW  
NOTARY PUBLIC STATE OF CALIFORNIA

**BARRY DELLINGER**

Group Leader, Environmental Science and Engineering  
Professor of **Electro-Optics**  
University of Dayton

**EDUCATION:**

B. S. Degree, Chemistry, University of North Carolina, 1971  
Ph.D. Degree, Physical Chemistry, Florida State University, 1975

**PROFESSIONAL AFFILIATIONS:**

American Chemical Society  
Air Pollution Control Association  
Coalition for Responsible Waste Incineration

**HONORS:**

EPA Scientific Technological Achievement Reward (STAR) Award, 1991  
Charles A. Lindberg Foundation Certificate of Merit, 1989  
**Wohlleben-Hochwalt** Outstanding Researcher Award, 1988  
National Science Foundation Graduate Fellow, 1971-1973  
National Science Foundation Summer Trainee, 1970  
University Fellow, 1967-1971  
Phi Beta Kappa, 1969

**EXPERIENCE:**

Dr. Dellinger is Group Leader of Environmental Science and Engineering at the University of Dayton Research Institute where he is directly involved in research as well as responsible for technical direction and management of a team of professional scientists and engineers. His group is currently involved in research into the thermal and photochemical decomposition properties of organic materials and incineration of hazardous wastes. This work involves the development of laboratory data and theoretical models that can be used to determine the thermal stability of various organic materials as well as predict the products of incomplete combustion resulting from thermal or photolytic exposure. His current activities include development of extended combustion and pyrolysis chemical reaction kinetic models: **experimental** studies of molecular growth reactions; measurement of elementary reaction rates of **hydroxyl** radical over extended temperature ranges; and research on the photochemistry, spectroscopy, and engineering **scale-up** of a solar **thermal/photolytic** process for toxic waste destruction.

He has served on numerous EPA program review committees, technology evaluation panels, and is frequently sought as a consultant on incineration by government, industry, and environmental organizations. He is currently serving as Technical Committee Chairman for the 3rd International Congress on Toxic Combustion By-Products, a member of the Technical Organizing Committee for the