

DECLARATION OF JEAN OSPITAL

I, Jean Ospital, declare:

1. I am the Health Effects Officer for South Coast Air Quality Management District ("SCAQMD"). The following facts are of my own personal knowledge and, except as stated otherwise, if called as a witness, I could and would testify competently thereto.

2. This Declaration is made in support of Imperial County and Imperial County Air Pollution Control District Response and Opposition to Petition for Unconditional Writ of Supersedeas.

3. Attached hereto as Exhibit I-1 is a copy my curriculum vitae.

4. I have over 20 years of technical and managerial experience working on environmental problems in the private, governmental, and academic sectors. I have held positions in the Environmental Affairs and Research and Development Divisions of Southern California Edison, as a consultant in environmental health, and on the research faculty at UCLA where I conducted research on the health effects of air pollutants on lung biochemistry. I have extensive experience in applying technical information to the regulatory process of developing and complying with environmental regulations. I have served in numerous capacities working on environmental issues and regulations at both the national and state levels.

5. I earned my bachelor's degree in chemistry from the University of California, Santa Barbara. I hold a master's degree in Public Health, Health Education and Behavioral Sciences, as well as a doctorate in Public Health, Environmental Health Sciences from the University of California, Los Angeles.

6. I have been employed by SCAQMD as the Health Effects Officer since 2000. My responsibilities include identifying air toxics and methods for reducing emissions, and then I report my findings to the

SCAQMD Governing Board and staff. The key areas I focus on are health issues stemming from diesel, particulate matter, and air toxics. I also work with other government agencies on studies on air pollution and its effects on health.

7. Because of growing concern on the link between air pollution and asthma, the SCAQMD established a consortium of researchers to conduct research to better characterize the relation between air pollution exposure and asthma. The goal of the Asthma and Outdoor Air Quality Consortium is to conduct research to better understand the relation between air pollution and asthma and to ensure protection of public health. Several such studies have been funded by the SCAQMD.

8. Airborne particles less than 10 micrometers in diameter ("PM10") pose a health concern because of their small size these particles can pass through the nose and throat and into the lower respiratory tract and lungs. The toxicity of particles varies with the composition of the material.

9. Both California and the federal government have established health-based ambient air quality standards for PM10. These ambient air quality standards for PM10 are designed to protect the most sensitive groups of people, including infants and children, the elderly and persons with heart or lung disease.

10. Wind-blown dust is a recognized source of PM10 in the air. A portion of the Salton Sea is within the SCAQMD's jurisdiction and as such, I am familiar with the fact that the exposed shoreline at the Salton Sea can be a source of PM10 emissions in the Riverside and Imperial Counties.

11. Air pollution, including PM10, is linked to respiratory illnesses, asthma exacerbations, and asthma hospitalizations. Studies have found links between air pollution and preterm birth, infant mortality, deficits in lung growth, and the development of asthma. The risk of these health effects is greatest in the elderly and the very young.

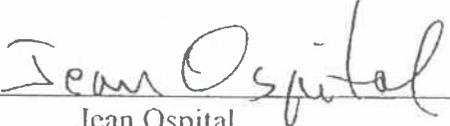
12. Exposure to elevated concentrations of PM is associated with increased hospital and doctor visits for bronchitis, asthma, cardiac and respiratory tract disease and increased numbers of premature deaths.

13. Children are more vulnerable to the adverse effects of air pollution than are adults. Lung development continues through adolescence and the developing lung is susceptible to damage after exposure to environmental toxicants. Children have increased exposure to many air pollutants compared with adults because of higher minute ventilation per body mass. Higher levels of physical activity of children also increase the breathing rate. Because children spend more time outdoors than do adults, they have increased exposure to outdoor air pollution.

14. A recent study by the University of Southern California's medical school studying health effects of air pollution on children in southern California found that children living in communities with elevated air pollution had lungs that showed a decreased growth in lung function. By the time the children graduated from high school, a higher proportion of children in the communities with elevated particulate pollutants had significant decrease on lung function. This study demonstrates the vulnerability of young people to the health effects associated with pollution.

15. The California and federal Ambient Air Quality Standards – which are the standards I discussed above in paragraph 9 – are designed to protect public health. To protect from public health effects caused by air pollution, the NAAQS need to be achieved and maintained.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was executed this 30 day of March, 2010, at Diamond Bar, California.



Jean Ospital

EXHIBIT I-1

JEAN J. OSPITAL, Dr.P.H.

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765
909-396-2582
jospital@aqmd.gov

PROFESSIONAL EXPERIENCE

2000 – Present Health Effects Officer

South Coast Air Quality Management District, Diamond Bar, CA

1997 – 2000 Principal

Energy Environment Specialists, Los Angeles, CA

Provide technical assessments relating to energy management and environmental issues to industry and governmental agencies.

1991 - 1996 Consulting Scientist, Environmental Affairs Division

Southern California Edison Company, Rosemead, CA

Directed an interdisciplinary group to develop cost effective methods to clean up air pollution, remediate contaminated sites, manage waste, assess health and environmental impacts of electricity generation and transmission. Interfaced with regulatory agencies and scientists to integrate technical information with policy objectives for environmental standard setting, control rules and exposure guidelines at state and national levels. Conducted health and ecological risk assessments for hazardous substances and contaminated sites. Provided technical expertise to decision makers in areas of environmental impacts and toxicology.

1984 - 1991 Senior Research Scientist, R&D Division

Southern California Edison Company, Rosemead, CA

Supervised Occupational and Environmental Health Research Group. Directed research to determine the public health effects of Company air emissions and wastes, to determine fate and transport of chemicals in soils and groundwater, to remediate contaminated sites, to minimize hazardous waste production, to determine health effects of electric and magnetic fields, and to reduce occupational injuries and illness.

1980 - 1984 Research Scientist, R&D Division

Southern California Edison Company, Rosemead, CA

Managed a research program to determine the effects of air pollutants on human health in southern California and provided technical support for the Company in the area of environmental health and toxicology.

1976 - 1980 Assistant Research Biochemist

University of California, Los Angeles

Research and teaching on toxicological effects of oxidants, ozone, nitrogen dioxide and oxygen; and intermediary metabolism of the lung.

EDUCATION

1976 - 77 NIH Postdoctoral Research Fellow, University of California, Los Angeles
 1976 Dr.P.H., Environmental Health Sciences, University of California, Los Angeles
 1970 M.P.H., Health Education and Behavioral Sciences, University of California, Los Angeles
 1969 B.S., Chemistry, University of California, Santa Barbara

AFFILIATIONS/PROFESSIONAL

Air and Waste Management Association
 American Association for the Advancement of Science
 American Chemical Society

UTILITY AIR REGULATORY GROUP A group of electric utilities, representing a majority of U.S. generating capacity, concerned with environmental regulations.

1988 - 1993 Chairman, Ambient Standards Committee
 1984 - 1993 Chairman, Hazardous Air Pollutants Committee
 1984 - 1986 Chairman, Health Effects Committee

ELECTRIC POWER RESEARCH INSTITUTE The research arm of the U.S. electric utility industry. Served as advisor to research programs related to environmental issues.

1992 - 1994 Air Quality and Health Risk Task Force
 1988 - 1989 Chairman, EMF and Radiation Studies Program Advisory Committee
 1988 - 1989 Health and Risk Science Task Force
 1992 - 1993 Air Pollution Health Research Advisory Committee
 1986 - 1987 Chairman, Risk Assessment and Management Program Advisory Committee
 1985 - 1987 Environment Task Force

UCLA ENGINEERING RESEARCH CENTER FOR HAZARDOUS SUBSTANCES CONTROL

1992 - 1994 Policy Advisory Committee
 1988 - 1990 Systems and Risk Technical Advisory Committee

TEACHING EXPERIENCE

Winter 1983 Lecturer, "Health effects of oxidant and particulate pollutants"
 UCLA School of Public Health,
 Fall 1983 Seminar Presentation, "Environmental health regulations and the utility industry"
 U.C. Irvine, Occupational Health Residency Program
 1984 Advisor, Problems Course
 UCLA Environmental Science and Engineering Program,
 Winter 1989 Instructor, Risk Assessment Course
 UCLA Extension Hazardous Substances Certificate Program
 Winter 1990 Guest Lecture, Health effects of air pollutants
 UCLA Extension
 Winter 1990 Guest Lecturer, Risk Assessment
 UCLA School of Public Health
 October 1993 Seminar, "The role of Science and Policy in setting Environmental Standards,"
 Environmental Science and Engineering Program, UCLA

PUBLICATIONS

- Mustafa, M.G.; Ospital, J.J.; Hacker, A.D.; and Lee, S.D. Effect of ozone and nitrogen dioxide exposure on lung metabolism. Environmental Health Perspectives, 16:184, 1976.
- Mustafa, M.G.; Hacker, A.D.; Ospital, J.J.; Hussain, M.Z. Biochemical effects of environmental oxidant pollutants in animal lungs. In Biological Effects of Environmental Pollutants; Lee, S.D., Ed.; Ann Arbor Science: Michigan, 1977; pp 59-66.
- Lee, S.D.; Hacker, A.D.; Ospital, J.J.; Mustafa, M.G. Influence of dietary antioxidant on low level oxidant exposure. In Proceedings of the Fourth International Clean Air Congress; Asuga, S.K; et al., Eds.; Japanese Union of Air Pollution Prevention Association: Tokyo, 1977.
- Ospital, J.J.; Hacker, A.D.; Mustafa, M.G. Biochemical changes in rat lungs after exposure to nitrogen dioxide. Journal of Toxicology and Environmental Health, 18:40-58, 1981.
- Ospital, J.J.; Kasuyama, R.S.; Tierney, D.F. Oxygen toxicity and lung antioxidant defense. Experimental Lung Research, 5:193-199, 1983.
- Mustafa, M.G.; Elsayed, N.M.; Ospital, J.J.; Hacker, A.D. Influence of age on the biochemical response of rat lung to ozone exposure. Toxicology and Environmental Health, 1:29-41, 1985.
- Grove, R.S.; Faeder, E.J.; Ospital, J.J.; Bean, R.M. Halogenated compounds discharged from a coastal power plant. In Water Chlorination. Chemistry, Environmental Impact and Health Effects; Jolley, R.L.; et al., Eds.; Lewis Publishers, 1985; pp 1371-1380.
- Ospital, J.J. Adaptation to subchronic exposure to ozone. In Evaluation of the Scientific Basis for Ozone/Oxidant Standards; Lee, S.D. Ed.; Air Pollution Control Association: Pittsburgh, 1985.
- Chang, L.Y.; Graham, J.A.; Miller, F.J.; Ospital, J.J.; Crapo, J.D. Effects of subchronic inhalation of low levels of nitrogen dioxide. I. The proximal alveolar region of juvenile and adult rats. Toxicology and Applied Pharmacology, 83:46-61, 1986.
- Eschenroeder, A.; Jeager, R. J.; Ospital, J. J.; and Doyle, C. P. Health risk analysis of human exposures to soil amended with sewage sludge contaminated with polychlorinated dibenzodioxins and dibenzofurans. Veterinary and Human Toxicology, 28:435-442, 1986.
- Chang, L.; Mercer, R. R.; Stockstill, B. L.; Miller, F. J.; Graham, J. A.; Ospital, J. J.; and Crapo, J. D. Effects of low levels of NO₂ on terminal bronchiolar cells and its relative toxicity compared to O₃. Toxicology and Applied Pharmacology, 96:451-464, 1988.
- Elsayed, N. E.; Kass, R. E.; Mustafa, M. G.; Hacker, A. D.; Ospital, J. J.; Chow, C. K.; and Cross, C. E. Effect of dietary Vitamin E on biochemical response of rat lung to ozone inhalation. Drug Nutrient Interactions, 5:373-386, 1988.
- Ospital, J. J. New methods for determining dosimetry of inhaled particles and gases. In Extrapolation of Dosimetric Relationships for Inhaled Particles and Gases; Academic Press, 1989.
- Chang, L.; Miller, F.J.; Ultman, J.; Huang, Y.; Stockstill, B. L.; Grose, E.; Graham, J. A.; Ospital, J. J.; and Crapo, J. D. Alveolar epithelial cell injuries by subchronic exposure to low concentrations of ozone correlate with cumulative exposure. Toxicology and Applied Pharmacology, 109:219-234, 1991.
- Agrawal, H.; Eden, R.; Zhang, X.; Fine, P. M.; Katzenstein, A; Miller, W.J; Ospital, J.; Teffera, S; Cocker, D.R. III Primary Particulate Matter from Ocean-Going Engines in the Southern California Air Basin. Environ. Sci. Technol., 43(14):5398-5402, 2009