

THE PROBLEMS OF HEAVY METALS

Justifiable public concern about the ASARCO smelter has, in recent weeks, been renewed by medical testimony that community exposure to airborne arsenic near the smelter is presently above limits proposed to protect smelter workers, an occupational group for whom lung cancer death rates are three times higher than non-smelter workers.

Those disclosures coincided with the release of information from the State Department of Social and Health Services that cadmium -- like arsenic, another heavy metal with potentially adverse human health effects -- has been found in higher than normal levels in soil and vegetation in the vicinity of the smelter, and in hair samples taken from persons living nearby.

The precise health effects of chronic low level exposure to these heavy metals have not been determined with absolute scientific or medical certainty. Studies by the U.S. Environmental Protection Agency and other agencies are in progress, and more are needed to establish the exact degree of correlation between heavy metals in the environment and the incidence of disease in humans.

Even with future decreases in the amounts of pollutants coming out its tall stack -- and there already have been significant reductions made by ASARCO, cadmium and arsenic concentrations may remain high due to the persistency of heavy metals. For example, much of the cadmium found within miles of the smelter is believed to be the residue of deposits that occurred before 1911, the year that smelter discontinued the smelting of lead.

ASARCO must also deal with arsenic levels inside the smelter as well. The U. S. Labor Department's Occupational Safety and Health Administration (OSHA) has proposed tightening its current exposure standard from 500 micrograms per cubic meter of air to 4 micrograms, or more than 100 times more restrictive than the present standards.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

May 6, 1975

You are invited to attend a public meeting to discuss environmental concerns and the Tacoma Smelter.

The meeting will be held Wednesday, May 21, in Room 006 of McIntyre Hall at the University of Puget Sound in Tacoma. An afternoon session will be held from 1:00 p.m. to 5:00 p.m., and the evening portion from 6:30 p.m. to 8:30 p.m.

Purpose of the meeting is to discuss the following questions associated with pollution control at the smelter.

What exactly are the problems?
What is being done?
What has to be done?
Who's going to do it?
When will the job be done?
And, perhaps most importantly, what does all this mean to you?

It's because of this last question that EPA has scheduled the May 21 meeting.

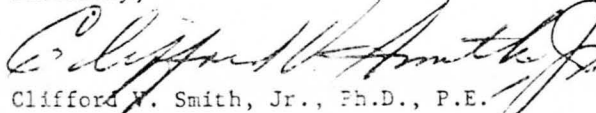
In the last few weeks, public concern has mounted over the problems posed by the emission of potentially dangerous air pollutants from the ASARCO smelter. Inquiries about the smelter are being received with increasing frequency at EPA's regional office in Seattle. From many of the calls we have received, it is apparent that there is little public awareness of the complexity and inter-relationships of all the problems associated with air pollutants at the Tacoma complex.

EPA recognizes that solutions to all the problems will not come at once, nor will they be solved by any single government agency. For that matter, equitable environmental controls to safeguard human health will not be attained by the government sector alone. The task requires the cooperation of ASARCO, smelter workers and local residents, not to mention the understanding and support of the public at large.

The Puget Sound Air Pollution Control Agency, the State Department of Ecology and EPA are actively working with a number of other public agencies and private groups in what EPA regards as a well-conceived and coordinated effort to tackle the ASARCO issues. The outcome of all our efforts will have direct impacts on thousands of Puget Sound residents due to the serious socio-economic and health implications inherent in the decisions to be made. Citizen interests are paramount, and the May 21 meeting is an attempt to involve the public in the decision-making process related to a critical environmental issue.

I hope you will be able to attend.

Sincerely,


Clifford V. Smith, Jr., Ph.D., P.E.
Regional Administrator

THE PROBLEMS OF SULFUR OXIDES.

Sulfur oxides are an unwanted by-product of the Tacoma smelter. If operated at normal capacity and left uncontrolled, the ASARCO smelter is capable of emitting 241,000 tons of sulfur dioxide (SO2) each year. In 1969, according to data compiled by the Puget Sound Air Pollution Control Agency, ASARCO was responsible for 77 percent of the annual SO2 emissions in Pierce, King, Kitsap and Snohomish Counties, and responsible for 92 percent of the total SO2 emitted in Pierce County.

By federally-and-state-approved regulations of the Puget Sound Air Pollution Control Agency, ASARCO is required to reduce 90% of its sulfur oxide emissions by January 31, 1976. This means that, by that date, ASARCO is required to limit SO2 emissions to only 10% of the sulfur contained in the raw material going in to the smelter. To date, ASARCO -- at considerable expense -- has reduced its SO2 emissions by about 50 per cent since 1971.

ASARCO has told the Puget Sound Air Pollution Control Agency it will not be able to meet the 1976 deadline because, according to ASARCO, the only means to achieve 90% control would be through conversion to an electric smelting process which would cost more than \$70 million and would require amounts of electricity not available from Tacoma City Light, its source of electric power. ASARCO has reported that it is not able to afford the \$70 million required to make the conversion.

If the smelter does not meet the 1976 deadline, ASARCO is subject to possible closure under existing air pollution control regulations or be faced with liability for fines up to \$250 per day on any one of more than a dozen counts.

Sulfur oxides, in combination with moisture and oxygen, can yellow the leaves of plants, dissolve marble, and eat away iron and steel. They can limit visibility and cut down light from the sun. They can affect man's breathing: at sufficiently high concentrations, when carried on particulate matter, they appear to do still greater harm by injuring lung tissue.

PUBLIC MEETING
ENVIRONMENTAL CONCERNS AND THE TACOMA SMELTER

Wednesday, May 21, 1975
Room 006
McIntyre Hall
University of Puget Sound
Tacoma

The meeting will be held in two sessions. All citizens are encouraged to attend both the afternoon and evening sessions.

The afternoon session: The primary purpose of this session is to hear presentations from representatives of government agencies, private groups and others who have been identified by EPA as already being extremely involved with or actively engaged in solving pollution problems associated with the ASARCO smelter. These representatives have been invited to deliver presentations according to the schedule below. Each speaker has been asked to discuss -- from his perspective -- the environmental and health effects of emissions at the smelter and to provide suggestions on how various problems need to further be identified and, ultimately, controlled.

- 1:00 pm.....Welcome and Introduction.....Dr. Clifford V. Smith, Jr.
- 1:10 pm.....Overview of Problems
Heavy Metals.....SO2 Control.....Mr. Douglas C. Hansen
- 1:30 pm.....Health Concerns
Washington Thoracic Society.....Dr. John D. Allen
Allenmore Medical Center.....Dr. Joseph G. Katterhagen
- 2:00 pm.....State Involvement
Department of Social & Health Services.....Mr. Terry Strong
Department of Ecology.....Mr. Peter W. Hildebrandt
Department of Labor and Industry.....Mr. Roy Mills
- 2:30 pm.....Regional & Local Involvement
Puget Sound Air Pollution Control Agency.....Mr. Arthur Dammkoehler
City of Tacoma.....Mayor Gordon N. Johnston
Seattle/King County.....Dr. Lawrence Bergner
Pierce County Commissioners.....Mr. Everett Foster
- 3:00 pm.....BREAK
- 3:15 pm.....Federal Involvement
EPA.....Mr. Gary D. Young
OSHA.....Mr. Wesley Noble
- 3:45 pm.....ASARCO.....Mr. Armand Labbe
- 4:15 pm.....Academia:
University of Puget Sound.....Dr. Jeffrey S. Bland
Huxley College.....Dr. Ruth Weiner
University of Washington.....Dr. August T. Rossano
Washington State University.....Dr. Paul Heilman
- 5:00 pm.....ADJOURN

The evening session: This session is to serve as a "town meeting" to hear citizen concerns and suggestions that may, up to now, have been unexpressed. The meeting will begin with a fifteen(15)-minute summary of the presentations made during the afternoon for the benefit of persons who were unable to attend the earlier session.

- 6:30 pm.....Registration for Evening Session
- 6:45 pm.....Summary of Afternoon Session..(Ms. Sherry James)..League of Women Voters
- 7:00 pm.....Citizen Participation and Open Discussion.....Dr. Clifford V. Smith, Jr.
Organized Groups
Private Citizens
- 8:30 pm.....ADJOURN

All persons attending the evening session are encouraged to sign in at the registration table starting at 6:30 p.m. On the sign-up card, each person will be asked to indicate whether he wishes to make a short statement during the general discussion period. Speakers will be recognized by the order in which they signed in, with preference to speakers representing groups or organizations.