## **Unfinished Business: The Exxon Valdez Oil Spill Legacy**

Congressional Briefing by Riki Ott, PhD
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#### I. Introduction

Thank you for sharing your time with us, the Survivors of the *Exxon Valdez* Oil Spill (EVOS). We are here because the Supreme Court is hearing the Exxon Valdez Case on Wed Feb 27.

We invite you and your colleagues to be with us:

Feb 26 National Press Club, 10-11 AM

Feb 26 National Mall, 6 PM, candlelight vigil

Feb 27 Supreme Court steps, pre-hearing, 8-9:30 AM

We are here today to talk with you about unfinished business from the EVOS. As I talk we ask you to think about people and communities in your states, because what I am about to share with you is not limited to what happened in Prince William Sound.

I am talking about the Valdez Crud, the 911 Crud, the Katrina Crud. I am talking about every urban community and every big port in America because it doesn't take an oil spill to make people sick from breathing fine oil particles.

This is happening because the federal government has not updated laws based on new science; it is not enforcing laws; and it is not really trying very hard to hold wealthy corporations accountable to the people. This is your job.

We are here today to ask you to do your job. I will address 4 areas of unfinished business:

• Environment • Labor • Public health • Energy

#### II. Environment

A decade ago when I first started research for *Sound Truth and Corporate Myth\$*, an environmental medicine doctor, Dr. William Rea in Dallas, TX, told me: "When you have sick animals and you have sick people, and they are sick because of the same chemical, you have the strongest evidence possible that that chemical is a problem." At the time, I said, "But I'm talking about oil." And he said, "So?"

I am talking about oil. Oil is more toxic than previously thought when we passed the Clean Air Act, the Clean Water Act, CERCLA, OSHA some 30 plus years ago. It's more toxic than we thought when we passed the Oil Pollution Act 18 years ago. The killing goes on for years after a spill—nearly 2 decades in Prince William Sound.

You know oil is more toxic than previously thought because the seminal paper on the paradigm shift in oil ecotoxicology was entered into the congressional record on Dec. 14, 2005, during Senate EPW committee hearing (Exhibit #1).

Let me refresh your memory. Paradigm shift highlights:

- √ new focus: PAHs (polycyclic aromatic hydrocarbons) v. WSF or VOCs
- √ new approach: field v. std. lab bioassays 96 h v. generations single species v. foodweb interactions
- √ new finding: PAHs 1,000 times more "toxic"
- $\sqrt{\text{"toxic"}}$  = kills eggs, embryos stunts growth suppresses immune system
  - disrupts cellular function: synthesis of proteins, hormones, enzymes, DNA

As of late 2006, the EVOS Trustee Council lists only 8 of 24 studied species and beach communities as fully recovered (<u>Exhibit #2</u>). In particular, wildlife that frequent beaches with residual buried oil still have not recovered.

Most recently, there is scientific evidence that links the collapsed herring population in the Sound with the spill (Exhibit #3). Fishing is closed indefinitely until stocks recover. Loss of the primary forage fish creates a ripple effect through the Sound. The Sound cannot recover until the herring recover.

You also know that oil is more toxic than previously thought because on August 31, 2006, the U.S. Justice Dept. and the State of Alaska requested the federal district court to reopen the EVOS civil settlement for natural resource damages based on unanticipated injury—long-term harm—and demanded that ExxonMobil pay up \$92 million to redress this injury (Exhibit #4 and <a href="http://www.youtube.com/watch?v=If6i86x0ATO">http://www.youtube.com/watch?v=If6i86x0ATO</a>).

But what you might not know is that Exxon has not paid this debt. We request your help in holding Exxon accountable.

## III. Labor

## "When you have sick wildlife and you have sick people, and they are sick because of the same chemical..."

The first sick EVOS cleanup workers started calling me in May 1989. Sick former workers have continued to call me ever since for nearly 19 years. These people are from all over the United States. Their commonality is that they worked on the EVOS cleanup in 1989. They also share a lot of illness symptoms. As one told me in 2003, "I thought I had the Valdez Crud in 1989. I didn't think I would have it for 14 years."

What I am about to tell you is not about Exxon. It's about the government's failure to adequately safeguard worker health during hazardous waste cleanups—EVOS, 911, Katrina... We are asking your help to remedy this for past and future disaster responders.

I pieced together what happened during the EVOS cleanup with the help of two Alaska-based NGOs, AFER and ACAT that are sponsoring this talk, and with the help of students from around the country. We looked at investigative news articles—only 3 (Exhibit #5)—toxic tort records, an Alaska Labor Dept. report from 1989. We conducted interviews with workers, literature reviews, and even one independent pilot study (Ms. thesis) at Yale medical school.

This oil spill cleanup is not unique in resulting in sick workers. Thousands of workers are sick now from the South Korea oil spill cleanup. This could have happened in California if oil had washed ashore in San Francisco Bay. The most recent scientific paper on sick oil spill cleanup workers is from the *Prestige* spill in Spain (Exhibit #6). It was published in the *American Journal of Respiratory and Critical Care Medicine* in 2007.

What is making spill responders sick? The simple answer is: oil, specifically, PAHs or fine particulates. In the EVOS cleanup, the US Coast Guard approved the high-pressure hot-water wash as the primary cleanup method. This treatment created a splash-back effect that aerosolized crude oil and people breathed it. Workers were not adequately protected from this exposure route, as documented in *Sound Truth and Corporate Myth\$*, chapters 2 and 3 (Exhibit #7).

Exxon's own clinical data (Exhibit #8), obtained through toxic tort records before the cases were sealed, show that Exxon recorded an average of 385 Upper Respiratory Infections per week, every week the high-pressure hot-water wash was used, for a total of 6,722 cases. This is about 2 of every 3 workers who used this treatment.

This is an epidemic. Worker safety programs are supposed to recognize such epidemics and triage to intervene and stop the illness breakout. OSHA officials are supposed to make sure this happens in hazardous waste cleanups. High numbers of *illnesses* should trigger a NIOSH Health Hazard Evaluation.

This did not happen. Exxon largely monitored its own cleanup—and Exxon did not want a HHE. Exxon's head medical chief, Kenneth Gould, wrote an internal company memo warning, "We do

not need an HHE [Health Hazard Evaluation] and should try and avoid it if possible" (<u>Exhibit #5</u>, *Anchorage Daily News*). So Exxon claimed 6,722 cases of "infections"—colds and flu, the Valdez Crud—not 6,722 work-related *illnesses*. Colds and flu are exempt from reporting in hazardous waste cleanups [29 CFR 1904.5(b)2]: Exxon never reported the illness epidemic.

Exxon also circulated a partial release form for indemnity from adverse health effects of its cleanup *and paid workers \$600.50 to sign it*, while claiming that work conditions on beaches were safe (Exhibit #9).

As it turned out, NIOSH did complete an HHE in 1991, but the agency never subpoenaed Exxon for its records. NIOSH never obtained Exxon's clinical data, showing the epidemic of respiratory claims. NIOSH never obtained Exxon's air quality monitoring data, showing workers were overexposed to high levels of dangerous chemicals (Exhibit #7, Appendix 1, p. 450). These records surfaced in court 3 years after the HHE was completed.

NIOSH concluded, "*Based on available data*, there is no basis for recommending long-term medical surveillance of the health of the workers involved in the cleanup of the oil spill" (<u>Exhibit</u> #7, p. 137).

We disagree. A pilot study conducted on EVOS cleanup workers through Yale medical school in 2003 or 14 years after the spill found that a statistically significantly number of beach workers—one-third of the participants—had higher self-reported respiratory problems, central nervous system problems, and chemical sensitivities than workers who were not out on beaches. There were a host of other maladies.

Respiratory problems and CNS problems are classic indicators of petrochemical inhalation. These symptoms and the others are listed on Material Safety Data Sheets as indicators of overexposure to crude oil—with the exception of chemical sensitivities, a relatively new illness. If the illnesses were infections, as Exxon claimed, there would be no chronic illnesses.

The real tragedy of OSHA is that the coding system does not currently recognize chemical-induced illnesses. The Alaska Labor Department treated some 1,800 EVOS spill-related claims separately to look for trends. Using the OSHA coding system, it found no unusual patterns and simply remarked the high number of respiratory "infections" on the cleanup was "notable."

We disagree. We reanalyzed the data and found: 10 times more illness claims among cleanup workers when compared to the 1987 workforce; 21 times more respiratory claims; 14 times more digestive system claims; and 11 times more "undefined" illnesses.

I spoke with the person in charge of coding cleanup claims. He had no medical training and could not have known that "headaches" and "dizziness" were possible symptoms of central nervous system problems rather than "undefined" illnesses.

The symptoms of chemical-induced exposure through inhalation—respiratory problems and CNS problems such as headaches, dizziness—mimic colds and flu. OSHA exempts colds and flu

reporting. OSHA is likely exempting chemical-induced illnesses: these illnesses are invisible under outdated OSHA regulations.

There is no category for chemical-induced illnesses. Because there is no category, these illnesses are given a zero-rating, and claims are controverted (dismissed). Ignoring these illnesses only makes them disappear on paper—and in courts of law. Because of an outdated system, our government is not holding corporate spillers accountable for protecting workers' health.

We believe there are some 3,000 former cleanup workers, who are suffering from spill-related illnesses, many of whom are disabled or dead, the live ones are paying medical bills and as they age, they are shifting their bills to Medicare.

Our workforce is not disposable. Workers with "invisible illnesses" will continue to be a problem—Valdez Crud, 911 Crud, Katrina Crud—until congress intervenes and takes action. Possible remediation and prevention steps include:

- √ Hold oversight hearings on OSHA and NIOSH disaster oversight of EVOS, 911, and Katrina to strengthen government's ability to protect health of responders and public
  - -- Update OSHA to include chemical-induced illnesses
  - -- Change 2-year statute of limitations on filing toxic torts to when illness is diagnosed rather than when exposure occurred—and do this retro to the *Exxon Valdez* oil spill. Precedent: Alabama changed 2-year statute of limitations; Oil Pollution Act of 1990 bans tankers that have spilled over 1 million gallons of oil retro to March 23, 1989.
- √ Revise the Hazardous Waste Cleanup regulations to:
  - -- Remove exemption for reporting colds and flu
  - -- Require spillers give medical and monitoring records to OSHA (avoid need for subpoena)
  - -- Require long-term monitoring of workers
- √ Require NIOSH "do-over" its Health Hazard Evaluation of the EVOS cleanup based on a subpoena of Exxon's medical and monitoring records.

  Hazardous Waste Cleanup regulations require spillers keep medical records for 30 years.
- √ Fund NIOSH to conduct a community-based participatory research (CBPR) epidemiology study of EVOS cleanup workers through a collaborative of Alaska-based NGOs and the university.
  - Precedent: ACAT is conducting a CBPR from 2000–2008 through NIEHS on effects of military toxins on public health on St. Lawrence Island.
- √ Expand Clinton-Schumer Fund to include health needs of EVOS and Katrina responders as well as 911 workers.

We have been writing different members of Congress since we first learned the extent of sick worker problems in Alaska and the ramifications to other disaster responders (<u>Exhibit 10</u>). We hope to follow up with some of you to advance some of ideas we've presented.

## IV. Public Health

I believe we "have the strongest evidence possible that that chemical [oil] is a problem."

In 1999, the EPA listed 22 PAHs in crude oil—and in our automobile exhaust—on its list of Persistent, Bioaccumulative, Toxic Pollutants. Other compounds on this list include: lead, dioxin, mercury, PCBs, and DDT—none of which do we put in the gas tanks of our automobiles.

In 2003, the National Research Council reported that over 90 percent of the PAHs in coastal seas of North America derives from burning fossil fuels in our power plants and vehicles. PAHs are mobile, moving by atmospheric fallout and runoff into waterways. PAHs in our environment are well within the range that we now know causes health problems for animals and people.

Environmental medicine doctors now recognize the "petrochemical problem" as low-level exposure to PAHs that is linked with asthma, depression, and chemical sensitivities. These health consequences occur at PAH levels found in urban air.

In his recent book, *Lives per Gallon*, author Terry Tamminen, the former Special Assistant to California governor, found that people living within 300 feet of a freeway (one football field) or 30 miles downwind of an oil refinery, or people who drive one hour a day in urban rush-hour traffic, are literally shaving years off their lives and diminishing the quality of their lives simply by breathing PAHs in the air.

Further, Tamminen found that children in urban cities are loosing 1 percent of their lung capacity for each year of their lives: so a 5 year-old child has lost 5 percent of his/her lung capacity; a 10-year old child, 10 percent.

At the meeting of the American Association for the Advancement of Science last week in Boston, scientist John Incardona presented his findings of the emerging link between ambient levels of PAHs in urban air and human heart diseases. Incardona said, "Our analysis indicates that these airborne contaminants are likely to be toxic to the human heart when inhaled and should be considered prime suspects in the cardiovascular impacts of urban air" (Exhibit 11).

I think we know oil is more toxic to animals and people than previously believed 35 years ago. The issue is: what are we going to do about it?

## V. Energy

The good news is that we can solve two problems with one solution: the same chemical is stealing the breath of our children and roasting the planet. We need to reassess the risks and benefits of our primary energy resource—fossil fuels.

The next generation is demanding that Congress STEP IT UP and reduce carbon emissions by 80 percent in 2050. One politically feasible way to do this might be to start educating yourselves and the public that oil is more toxic than previously thought.

- √ Hold formal hearings on oil toxicity and public health: people understand sick children and public health issues. This will add urgency and political leverage to the transition off oil.
- √ Set standards for "environmentally sound development" (ESD) including:
  - -- health effects on people and animals using most current science *and the precautionary principle:* i.e., if the science is controversial, err on the side of public health and the environment.
  - -- effects on fresh water supplies in the region,
  - -- no increased carbon load,
  - -- a *demonstrated* ability to respond to and cleanup spills or other development-related disasters; and
  - -- meaningful citizen oversight, modeled after the Regional Citizen Advisory Councils (RCACs) in the Oil Pollution Act of 1990, to reduce risk of accidents through complacency.
- √ Do not authorize new outer continental shelf lease sales, tar sands and oil shale developments, and coal plants that do not pass the red-face test for ESD
- √ Expand the authority of the Prince William Sound RCAC under the Oil Pollution Act to include the entire Trans-Alaska Pipeline System, not just the marine terminal and tankers. Alaska is among the top carbon-emitting states in the nation. The PWS RCAC has a track-record of reducing record emissions from the marine terminal out of concerns for public health. The same could be done along the pipeline by involving citizens.

We hope that what we've shared with you today results in concrete change. Please think about other people's children as you take action. Thank you for your consideration.

# EXHIBITS for Congressional Briefing February 25, 2008 by Riki Ott, PhD

#### Exhibit #1

CH Peterson, SD Rice, JW Short, D Esler, JL Bodkin, BE Ballachey, and DB Irons, "Long-term Ecosystem Response to the Exxon Valdez Oil Spill," *Science* 302:2082–2086, Dec. 19, 2003.

#### Exhibit #2

EVOS Trustee Council, *EVOS Restoration Plan: Update on Injured Resources and Services*, November 2006, available at: http://www.evostc.state.ak.us/Publications/injuredresources.cfm

#### Exhibit #3

RE Thorne and GL Thomas, "Herring and the "Exxon Valdez" oil spill: an investigation into historical data conflicts," *ICES Journal of Marine Science*,

http://icesjms.oxfordjournals.org/cgi/reprint/fsm176?ijkey=BLWiSZZPACBw2Dz&keytype=ref

#### Exhibit #4

U.S. Justice Dept., Environment and Natural Resources Division, Letter to ExxonMobil Corporation, RE: Demand for cost of restoration under reopener for unknown injury in *United States v. Exxon Corporation, et al.*, Nos. 3:91-0082 & 3:91-0083 (D. Alaska)

#### Exhibit #5

N Phillips, "STILL PAINFUL: 10 years later, front-line spill workers link physical ailments to cleanup work," *Anchorage Daily News*, March 23, 1999; K Murphy, "Exxon spill's cleanup workers share years of crippling illness," *Los Angles Times*, November 5, 2001; S Stranhan, "The Valdez Crud: Are crude oil and chemicals to blame for the health problems of workers who cleaned up Exxon's mess?" *Mother Jones*, March/April 2003 (reprint) with Mike Mosendale, "Oil spills are forever," *Mother Jones*, December 19, 2007; http://www.motherjones.com/news/outfront/2003/03/ma 286 01.html

#### Exhibit #6

10 authors of the SEPAR (Spanish Society of Pulmonology and Thoracic Surgery) Study Group, "Prolonged respiratory symptoms in clean-up workers from the *Prestige* oil spill," *American Journal of Respiratory and Critical Care Medicine*, 176:610–616, June 2007.

#### Exhibit #7

R Ott, Sound Truth and Corporate Myth\$ (Dragonfly Sisters Press, 2005)

#### Exhibit #8

Exxon Company, 1989. Clinical data on upper respiratory infections: URIs-Breakdowns, in *Garry Stubblefield and Melissa Stubblefield v. Exxon Shipping Company et al.*, 3AN-91-6261 CV (HBS), Alaska Superior Court, Third Judicial District at Anchorage (1994). (Also in Ott, *Sound Truth and Corporate Myth*\$, p. 57.)

## Exhibit #9

Exxon, "Partial release for indemnity from adverse health effects from cleanup work," 1989 in Alaska Dept. of Labor, Alaska Worker Compensation Board, Case No. 9009878 (Ed Meggert), 1992. (Also in Ott, *Sound Truth and Corporate Myth\$*, p. 33.)

#### Exhibit #10

Letters to Congress RE: government failings to adequately protect EVOS and other disaster responders; redress for injured workers

#### Exhibit #11

NOAA Research press release, RE: Impacts of fossil fuels on fish and people, Feb. 16, 2008