Answering Questions About Chernobyl

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Before the reactor blew on April 26, few Americans had heard of the Soviet Union's Chernobyl nuclear power plant; 48 hours later, it was a household word, the anxious focus of the press, the public, and the government. Was dangerous radioactive fallout heading to the United States? Was the health and safety of Americans abroad being threatened? No one knew.

Answering these questions became the job of the Task Force on the Soviet Nuclear Accident. At the peak of its activity, it was measuring domestic radiation levels, monitoring foreign levels, tracking the situation at Chernobyl, and handling hundreds of phone calls every day. For almost a month, the Task Force was the source of information for Americans on the world's worst nuclear disaster.

Chernobyl was a secret disaster at first. The initial evidence that a major nuclear accident had occurred came not from Soviet sources, but from Sweden, where on April 27 workers at a nuclear power plant were found to have radioactive particles on their clothes. It was Sweden's search for the source of radioactivity--there was no lake at the Swedish plant--that led to the first hint of a nuclear problem in the Soviet Union.

EPA first learned about a possible radiological incident from press and citizen inquires coming in on Monday, April 28. The Agency's Press, Radiation, and International Activities offices began fielding calls while working with the State Department, the Nuclear Regulatory Commission (NRC), and the Department of Energy (DOE) to find out what was happening. Although the Soviet news agency, TASS, finally issued a terse statement that evening confirming the accident at the Chernobyl plant, the Soviets offered no details. The resulting information vacuum fueled rumors of all kinds, from fatality estimates to speculation about fires in adjoining reactors.

Tuesday morning, an interagency group met at the White House to review what little information was then available. Although President Reagan was en route to the economic summit meetings in Tokyo, EPA was confirmed as the "lead" agency for coordinating the federal response, and EPA Administrator Lee Thomas was designated head of the Task Force. In addition to EPA, the Task Force was to include DOE and NRC, the White House, the Departments of State, Interior, and Agriculture, the National Oceanic and Atmospheric Administration (NOAA), the U.S. Air Force, the Food and Drug Administration (FDA), the Federal Emergency Management Agency (FEMA), the Federal Aviation Administration (FAA), and the U.S. Public Health Service.

The Task Force immediately established an "up front" approach to the news media, providing access to such top level experts as Harold Denton, Director of Nuclear Reactor Regulation for NRC; Dr. Lester Machta, director of NOAA's Air Resources Laboratory; Dale Bunch, DOE Deputy Assistant Secretary for Reactor Deployment; and Sheldon Meyers, director of EPA's Office of Radiation Programs (ORP) and head of Task Force support efforts (with a quickly mobilized team of ORP staff serving as the focal point for Task Force support). At the first press conference,
Thomas promised every effort to provide as much reliable information as was available. He also ruled out conjecture and second-guessing. Comments would be based on known facts, even if there were gaps in the information coming from Soviet or other official sources.

During the next few weeks, both the facts and the radioactive clouds from Chernobyl spread slowly westward. EPA's Environmental Radiation Ambient Monitoring System (ERAMS)--continuously operated by ORP and augmented by reports from DOE national labs, the military, U.S. diplomatic missions abroad, and commercial nuclear power plants in the country--provided daily radiation measurements based on samples from hundreds of monitoring posts in the United States and abroad. The headquarters press office worked several days a week until May 23, issuing daily task force reports and fielding thousands of in-person visits and phone calls from reporters all over the world. Chris Rice, press specialist for the radiation program, began to feel like the "voice of Chernobyl" as he handled phone calls from print and broadcast reporters.

At the peak, eight press office staff members were dealing with media and other calls, although the pace slackened as it became apparent that the Chernobyl fire was out and that radiation levels in the United States were well below danger levels.

In addition to calls from the press, calls from organizations, congressional offices, and concerned individuals were also pouring into headquarters, the Regional Offices, and various EPA laboratories. At headquarters, responsibility for answering such inquiries was ultimately given to the Office of Public and Private Sector Liaison, which answered hundreds of individual calls and also circulated needed information through a system developed by the Centers for Disease Control to notify health officials of over-the-counter drug tampering incidents.

Most of the calls received by EPA offices concerned possible dangers to U.S. citizens traveling abroad, but others were concerned with reports of radioactivity in specific parts of the United States:

- Region 9 was called by a post office in Seattle which had received a parcel from Sweden. Was it safe to handle?
- Region 3 had a caller who wanted to know when the radioactive cloud would pass over Pittsburgh so she could take in her wash.
- Research Triangle Park had a call from a North Carolina dog breeder who had arranged to purchase an expensive German shepherd from a breeder in West Germany. He wanted to know if there had been heavy fallout in the dog's home so he could cancel the deal if the dog could get sick or harm his other dogs in North Carolina.

EPA's Office of International Activities (OIA) was also heavily involved. Radioactive debris from the reactor was monitored around the world and concern was high in most countries. OIA worked closely with the State Department to get radiation data on fallout within their borders. This information was used to inform the public of world-wide radiation levels and potential health risks for travelers. Richard Hopper of the ORP Las Vegas facility was sent to Poland, Hungary, and Bulgaria to work with U.S. Embassy officials monitoring potential impacts on U.S. employees there.

The Task Force met for the last time on May 14. Its last public report was issued on May 23, just short of four weeks after the accident. Reports from the Soviet Union are still adding new information, EPA's ERAMS system continues its regular monitoring activity, as does the instrumentation Hopper took to the U.S. embassies abroad. The fallout from Chernobyl created no health problems for Americans here or abroad, but the nation now knows that, should another such accident occur or other radiation emergencies arise, there is an effective system in place to provide scientifically credible information about potential dangers and what to do about
them.

**What Does a Task Force Really Do?**

The letter from the White House was short and to the point. From Larry Speakes, Deputy Press Secretary to President Ronald Reagan, it was addressed to EPA Administrator Lee M. Thomas:

*My congratulations on a job well done in the wake of the Chernobyl accident. The interagency group you headed so effectively ought to be used as a model for future situations like this.*

Interagency task forces are not unusual in emergencies and even in relatively mundane situations. The Chernobyl task force was formed quickly, its structure based in large part on an existing Memorandum of Understanding which gave EPA the lead role when there was an atmospheric nuclear detonation abroad, as in the case of two Chinese nuclear tests which lead to extensive monitoring in the United States. Although Chernobyl was not the same, the required response activities were judged to be quite similar.

The Task Force met for the first time at 5:30 PM on Wednesday, April 30. The fire in the graphite core was still burning and the situation at the reactor site was still unclear. The Task Force's first job was to assign tasks:

EPA would be the clearinghouse for offers of assistance to the Soviet Union and would coordinate with the Department of State; DOE would help the FAA take measurements; the Centers for Disease Control/FDA medical network--normally used in drug-tampering incidents--would be used to inform state health officers. The lead for public information would be EPA; and DOE would handle congressional liaison. At the same meeting, the Task Force also decided to step up the monthly ERAMS milk monitoring to twice a week.

On Thursday, the Task Force broadened its assignments:

- The State Department was to report on the Soviet obligation to report data.
- EPA's Office of International Activities was to make recommendations on an international information exchange.
- EPA's Office of Radiation Programs (ORP) was to work with the Department of State to prepare a cable requesting technical information from the USSR and to solicit information based on questions submitted by Task Force Agencies.
- A Health Working Group was formed to examine potential long- and short-term health effects, identify symptoms and effects, and distribute information to health officials.
- ORP/EPA was to be responsible for day-to-day events, reporting, and data collection.
- A DOE-NRC-FEMA-CIA subgroup was to develop and evaluate possible reactor scenarios.
- NOAA was to provide the meteorological and dispersion information for the daily Task Force report.
- DOE was to evaluate the technical aspects of extinguishing a graphite reactor fire.
The Task Force met daily through May 9, then skipped the weekend, although updated task force reports were issued by the EPA press office on Saturday and Sunday. Excerpts from minutes of Task Force meetings show the variety of actions taken by the interagency group.

May 2--The Task Force decided to contact counterpart agencies in affected countries to obtain radiological data. (NRC placed phone calls to 18 countries.)

May 3--NRC sent a notice to its licensees requesting they report any unusual radiation levels. EPA was to get radiological data from DOD bases in Europe and Japan, as well as coordinate data from several other countries.

NOAA reported that the radioactive plume had reached Japan, but no numbers were firmly established. The Department of State was to call our embassy there, and EPA was to determine when data from the military would be available. State and HHS were to work on another cable to offer medical liaison with the USSR. USDA reported that the World Agriculture Outlook Board had requested data from the Task Force to consider in its grain and sugar beet projections. Early radiation readings did not appear alarming.

May 6--The Task Force decided to begin publishing consolidated data with positive U.S. measurements placed in context, their meaning and health implications explained. The Health and Agriculture Working Group (HAWG) reported on projected health effects and identified Protective Action Guides. EPA was asked to provide radiation data on returning U.S. citizens to the Health and Agriculture group. Chairman Thomas directed that any discussions should explain protective action guides and compare them with ERAMS and other U.S. data.

May 12--The Health and Agriculture Working Group reported it had completed development of an advisory outlining levels of concern for imported products.

May 14--The last meeting of the Task Force. The group decided that EPA would continue its operations, including public reports and intensified monitoring until deemed to be not necessary. Other agencies would continue to cooperate as needed. The Task Force would issue a summary health and dose assessment report with EPA serving as the lead agency. EPA and other agencies were to evaluate the lessons learned in the context of their individual responsibilities and push to modify their own procedures accordingly. HAWG would submit to Lee Thomas a list of areas needing improvement. The scope of the Memorandum of Understanding was to be re-examined, as well as the need for real time dose and health information, and the role of the State Department, especially in relation to the need for an international capability for faster, real-time data collection. Thomas announced he intended to send a wrap-up memorandum to the White House.

"I Trained All My Life for This"

Five days after the Chernobyl explosion ORP/Las Vegas specialist Richard Hopper was home preparing for dinner when the telephone rang. By 11 that night he was on a red-eye flight to Washington. His luggage included a variety of hand-held radiation monitors and 60 "Thermal Luminescent Dosimeters," the familiar looking film badges we see in hospitals and laboratories. He was on his way to being EPA's man on the scene in Eastern Europe.

Hopper's mission?: To monitor radiation levels in U.S. diplomatic missions in Poland, Hungary and Bulgaria, the Eastern European countries most directly in the path of meteorological systems carrying radioactive debris from the damaged Soviet reactor.

The next morning, the 43-year old, dark-haired Westerner met with other members of the team
he was joining at EPA headquarters, then went to a briefing at the State Department, where the priority subject of discussion was whether to evacuate U.S. women and children in those countries. Hopper, whose regular job involves monitoring radioactivity and radiation exposure around the EPA Las Vegas Laboratories and the Nevada nuclear test site, suggested they hold the decision until he’d had a chance to check the actual radiation levels.

Arriving in Warsaw on May 3, he found the embassy people "full of apprehension. Anxiety definitely had taken over."

Many Poles were reluctant to accept their government's initial reassurances. In fact, he believes their concern helped the embassy attache speed him through Polish customs without having his instruments and equipment inspected.

En route from the airport, Hopper took readings in a number of places, including office buildings and houses, inside and outside. He found the readings to be very low. Because he had spent many years at the Nevada test site and head organized the monitoring network after the Three Mile Island incident, Hopper anticipated many questions he would be asked, but also assumed there would be problems in Europe that he hadn't heard about back home. The first day in Poland, he met with a team of Polish scientists (whose knowledge of the Las Vegas lab--one had actually been there--gave Hopper added credibility). They told him they were advising the populace to be wary of drinking milk and water, and eating vegetables that might contain radioactive particles.

That evening, he continued his monitoring activities until late at night. The next morning he spent two hours briefing the entire embassy staff, including families. He discussed the exposure levels he had found and the Polish scientists had recorded, putting the levels into a perspective that indicated there would be no long-term health effects for the embassy personnel and their families. After this, he met privately with individuals--mostly pregnant women--who had special concerns but were reluctant to discuss their fears in a public meeting. To Hopper, this was as important as talking to the larger group. He knew, from years of Nevada experience, that such concerns are "very real and frightening to the people involved. A danger you can't see or feel or smell can seem much worse than it really is."

Before leaving Poland, Hopper also went to Krakow and Poznan to monitor radiation levels and brief the U.S. consular staffs and their families; he also talked to the students and staffs at the schools attended by U.S. and British embassy children. He additionally managed a trip close to the border area closest to Chernobyl, where he took even more readings. His working days ran easily to 18 hours. Before leaving Poland, he set up a monitoring system at the embassy and trained the staff to use it over the next six months, a process he repeated in Hungary and Bulgaria.

In Hungary, too, where modern town laboratories were doing the monitoring, he found an openness about sharing information on the part of government authorities. And he found the same need for empathetic briefing of embassy people and their families. In Bulgaria, there was little sharing of information with him on the part of the government officials, but his sessions with U.S. embassy personnel were comparable to those in Warsaw and Budapest.

Hopper has been on the EPA staff since the agency was founded, coming to EPA after serving at the Nevada test site and with the Public Health Service. He has three children, the oldest 24, and his wife, Jacki, is a health physicist. Of this special assignment he says, "It was the opportunity of a lifetime. I've been training for this assignment for the last 20 years."

His feelings of satisfaction are more than echoed by a message from the U.S. Ambassador in Poland to the Secretary of State for relay to EPA:
"The entire staff of Embassy Warsaw joins me in expressing our heartfelt and most sincere thanks to Mr. Hopper for the outstanding manner in which he performed during his recent visit to Poland. His superb technical competence was perhaps expected, but he provide to be equally well qualified and adept at dealing with press inquiries, explaining his findings, reassuring worried mission members, and maintaining an invariably cooperative and cheerful attitude through long and very intensive workdays. He was highly professional in meetings with Polish scientific experts and obtained valuable information. He enthusiastically undertook three long and tiring field trips to various regions of Poland, making readings which enabled policy decisions to be taken in Washington. His serious but friendly manner and long experience made him particularly effective in visiting our diplomatic school and talking with pupils there. He...earned our unanimous admiration and respect."