

Congress of the United States
House of Representatives
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Director
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U.S. Department of Health and Human Services
4770 Buford Hwy NE
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Dear Dr. Portier:

This letter serves as my formal comment on the report entitled “An Evaluation of Environmental, Biological, and Health Data From the Island of Vieques, Puerto Rico,” which was released by the Agency for Toxic Substances and Disease Registry (ATSDR) in draft form on December 8, 2011.¹

As you know, I represent the 3.7 million residents of Puerto Rico, including the nearly 10,000 residents of Vieques, in the U.S. Congress. Since taking office in January 2009, I have met with the Director or Acting Director of ATSDR on five occasions to discuss the health and environmental issues addressed by the draft report. Specifically, I met with Dr. Howard Frumkin on September 22, 2009 and October 22, 2009; with Dr. Henry Falk on February 4, 2010; and with you on December 14, 2010 and December 7, 2011. During our most recent meeting, you briefed me on the conclusions and recommendations in the draft report. Upon receiving that briefing, I expressed concerns related to both process and substance. Now that I have had a chance to study the draft report more closely, I would like to elaborate on those concerns and to make six specific recommendations.

At the outset, it is important to make two points clear. First, my objective in providing comments on the draft report is to propose a path forward that will enable the federal government to fulfill its obligations to the people of Vieques—American citizens who were asked by federal authorities to sacrifice a great deal to advance our nation’s military readiness and security. Thus, my comments, even where critical, are intended to be constructive. The people of Vieques do not benefit one iota from attacks on ATSDR, the Navy or any other federal agency. What residents want—and what they deserve—is a realistic, evidence-based and fair-minded

¹ http://www.atsdr.cdc.gov/sites/vieques/2011_report.html.

evaluation of the draft report that is designed to produce concrete action on the part of the federal government.

Second, since ATSDR issued its draft report, a three-judge panel of the U.S. Court of Appeals for the First Circuit, in a 2-1 vote, dismissed the tort claims that had been filed by over 7,000 residents of Vieques against the U.S. government.² The plaintiffs' claims are rooted in the argument that they have suffered harm to their health as a result of the Navy's negligence in emitting certain contaminants during training exercises conducted over the course of six decades.

The appellate panel dismissed the case on procedural, not substantive, grounds, concluding that the plaintiffs did not have standing under the Federal Tort Claims Act to pursue damage claims against the United States. The majority opinion explicitly stated that it took "no position on whether the Navy's operations on Vieques have had adverse health effects on the island's residents." In fact, the court said that the plaintiffs' pleadings, if true, "raise serious health concerns." By virtue of its ruling, however, the First Circuit has made it impossible for the merits of plaintiffs' claims and the Navy's defenses to be adjudicated by a judge or jury. A trial would presumably have required the Navy to provide a comprehensive account of its training activities—what weapons it used, where it used them, and for how long it used them. It would also have enabled both the plaintiffs and the defense to call scientific experts to testify about the prevalence of certain diseases on Vieques and the causal relationship between those diseases and past military training activities on the island.

Unless the panel's decision is reversed by the First Circuit sitting *en banc* or by the U.S. Supreme Court, the opportunity for residents of Vieques to establish facts and seek relief through the judicial system will be foreclosed. This means that the people of Vieques, and their elected leaders, have no alternative but to turn to the other two branches of their national government: the legislature and the executive. That explains why the First Circuit panel, at the close of its opinion, took the unusual but appropriate step of stating that the health issues raised by residents of Vieques in their pleadings "should be brought to the attention of Congress." Indeed, the judges instructed the clerk of the court to "send a copy of this opinion to the leadership of both the House and Senate."

On November 18, 2011, in anticipation of the release of the ATSDR report, I formally requested that the House Committee on Natural Resources hold a hearing "to assess the ongoing federal response to the significant land use, environmental and public health challenges facing the U.S. citizens of Vieques, Puerto Rico."³ I intend to recommend to the Committee that it invite you or

² <http://www.ca1.uscourts.gov/pdf/opinions/10-1648P-01A.pdf>.

³ <http://pierluisi.house.gov/PDF/letters/2010/11.18.11%20Letter%20to%20Natural%20Resources%20Committee%20Regarding%20Hearing%20on%20Vieques%20PR.pdf>.

your designee to appear as a witness at this hearing, in order to provide testimony about the conclusions in the ATSDR report and to explain what action the agency intends to take—or recommend that other federal agencies take—going forward.

In summary, ATSDR's draft report expressly acknowledges that multiple human health studies performed since 1999 indicate that residents of Vieques have higher rates of cancer and other chronic illnesses than residents of mainland Puerto Rico. The principal question that ATSDR seeks to answer in its report is whether there is evidence to show or suggest a causal relationship between these identified health problems and the military training exercises that were conducted on Vieques.

The draft report is a re-evaluation of the conclusions reached by ATSDR in a series of public health assessments that the agency conducted on Vieques between 2001 and 2003. In those assessments, ATSDR examined four "pathways" through which residents of Vieques could potentially have been exposed to training-related contaminants harmful to their health—air, soil, fish and shellfish, and groundwater. ATSDR concluded that, although there were contaminants attributable to the training exercises in certain of those pathways, they were not at levels expected to cause adverse health effects. The methodology used by ATSDR and the conclusions reached by the agency in those public health assessments were subject to significant criticism in Puerto Rico, in sectors of the scientific community, and in Congress.

In the draft report, ATSDR again examined these four pathways. It also examined a fifth pathway—the consumption of produce and livestock grown on Vieques. Although there are some modest differences, the overarching conclusion reached by ATSDR in the draft report is essentially the same as the conclusion reached by the agency in its earlier public health assessments—specifically, that the available scientific data does not establish or indicate that the contaminants in these pathways, certain of which can be linked to the military training activities, were at levels expected to cause the adverse health effects that residents of Vieques have been experiencing.

However, as ATSDR repeatedly acknowledged throughout the draft report, this conclusion is by no means definitive—or even close to it—because the available scientific data upon which the agency relies is incomplete and insufficient in many respects.

To its credit, ATSDR recommends in the draft report that further studies be conducted to fill in some of the identified data gaps so that more credible and reliable conclusions can be drawn, particularly in connection with the fish, local produce and livestock, and soil pathways. My fundamental criticism of the draft report is that the agency does not go nearly far enough. In a November 2009 release to the public, ATSDR stated it had "identified gaps in environmental data that could be important in determining health effects." ATSDR further stated that it "expects" to "recommend biomonitoring to determine whether persons living on Vieques have

been exposed to harmful chemicals, and, if so, at what levels those chemicals may be in their bodies.” Yet, in a startling move that appears both inconsistent with its November 2009 release and contrary to common sense, ATSDR states in the draft report that “it is not recommending a comprehensive, systematic biomonitoring effort at this time,” although “public health officials could consider a limited and focused human biomonitoring investigation.”⁴ This recommendation is made despite the fact that ATSDR expressly acknowledges that the existing “biomonitoring data available for Viequenses cannot be used to determine whether residents of Vieques were exposed to past, military exercise-related constituents [i.e., contaminants].”⁵

I respectfully, but strongly, submit that this recommendation is inadequate. Given the reported health problems on Vieques, and the possible link between those problems and military training activities, such half-measures are misplaced. And it is certainly neither acceptable nor appropriate for ATSDR to suggest that such half-steps, if they are undertaken, ought to be conducted by local public health officials using primarily local funds.

In light of the foregoing, my six recommendations are as follows:

1. I recommend that ATSDR adhere to the letter and spirit of its November 2009 release and propose a comprehensive biomonitoring effort to determine whether, and to what degree, residents of Vieques have been exposed to harmful chemicals linked to training activities. Unless that data is obtained, this entire exercise seems like a hollow one, designed to reach a pre-determined conclusion of “no harm.” If ATSDR does not amend its recommendation to propose comprehensive biomonitoring, I ask the agency to explain clearly why it does not believe this step to be justified and appropriate, and to explain why it has evidently reversed course from its November 2009 release.
2. I support ATSDR’s recommendations that additional studies should be performed to fill data gaps identified with respect to the fish, local produce and livestock, and soil pathways. I urge that additional studies, to the extent they could be useful, be performed to fill any data gaps that have been identified in connection with the air and groundwater pathways. I fully understand that not all data gaps can be filled, but clearly some of them can—and the federal government should take all reasonable steps to ensure that they are.
3. In general, I recommend that ATSDR and other federal agencies take a far more active and assertive role in designing, implementing and especially funding the additional

⁴ Draft Report, page xi.

⁵ Draft Report, page 59. See also Draft Report, page 65 (stating that the five biomonitoring investigations conducted on Vieques to date by local officials “do not permit any conclusions about exposure to the bombing-related contaminants.”)

health and environmental studies that are needed to determine, to a reasonable degree of confidence, the precise nature and potential causes of the health problems being experienced by residents of Vieques. It is dismaying that, more than a decade after ATSDR completed its first public health assessments on Vieques, so many fundamental questions about the safety of the island's environment and the health of its residents remain unanswered.

4. Below, I quote at length from testimony provided by Dr. John Wargo, a Yale University professor, during a May 20, 2010 hearing held by the Subcommittee on Investigations and Oversight of the House Committee on Science and Technology. That testimony serves as an extensive, pathway-by-pathway critique of ATSDR's 2001-2003 public health assessments on Vieques. Some of the shortcomings that Dr. Wargo identified in 2010 with respect to the public health assessments have been rectified in the 2011 draft report. For example, unlike the public health assessments, the draft report has been peer-reviewed⁶ and contains a section on the "local produce and livestock" pathway. However, based on my review, it also appears that many of Dr. Wargo's most incisive criticisms and recommendations have not been addressed by the draft report. Therefore, I believe it would be helpful for ATSDR to include in its final report a section that explains whether, and to what extent, the report incorporates Dr. Wargo's recommendations and addresses his criticisms.
5. I urge ATSDR, as part of any broader response it furnishes to the criticisms and recommendations made by Dr. Wargo, to respond specifically to what I regard as one of Dr. Wargo's most perceptive critiques of ATSDR's public health assessments—namely, that the agency "routinely relied on studies previously prepared or data collected by others rather than designing new studies that are appropriate for local conditions and problems" and that the agency "rarely conducted its own research on environmental contamination, human exposure, and disease prevalence, and flaws in any available studies leads them to conclude there is no credible evidence of a causal relation between hazardous materials and disease. . . ."

It would appear that this critique applies with equal force in the case of the draft report. Because it relies exclusively on the scientific work of others, ATSDR's conclusions are only as good (or as poor) as the underlying work itself. By my count, 32 studies were analyzed by ATSDR in the draft report and used as the basis for the agency's conclusions. Only three of those studies were conducted by federal agencies: one by the Navy in 1978, one by the Environmental Protection Agency (EPA) in 2001, and one by

⁶ I am aware that federal law does not require peer review for public health assessments, but does require it for other types of ATSDR studies. See 42 U.S.C. 9604(i)(13). Of course, the statute does not prohibit ATSDR from seeking peer review of its public health assessments either.

the National Oceanic and Atmospheric Administration (NOAA) in 2010. The Navy study and the EPA study are not, in fact, studies at all, but rather simply collections of sampling data of contaminant levels—and thus were not peer-reviewed. And the NOAA study was not intended to be a human health study or, as ATSDR phrased it, to “characterize[] the impact from bombing activities.”⁷

The 29 non-federal studies appear to be of uneven quality and rigor. While some tremendous work has been done by local researchers—including Arturo Massol-Deyá, Elba Díaz, Carmen Ortiz Roque, and researchers from the Puerto Rico Department of Health—only four of the 29 studies were peer-reviewed and only three were published in scientific journals.

In my view, this summary underscores the need for the federal government, working in partnership with experienced independent researchers, to assume a more prominent role in designing, implementing and funding additional studies on Vieques.

6. Finally, during a recent meeting in my office, Dr. James Porter, an Associate Dean at the Odum School of Ecology at the University of Georgia, provided me with a copy of an article that he co-authored, entitled “Ecological, Radiological, and Toxicological Effects of Naval Bombardment on the Coral Reefs of Isla de Vieques, Puerto Rico.” The nearly 60-page piece was published in 2011—evidently not in time to be cited by ATSDR in its draft report—as a chapter in G.E. Machlis et al. (eds.), *Warfare Ecology: A New Synthesis for Peace and Security* (The NATO Science for Peace and Security Programme).⁸ According to the article, “Our data show unequivocally that toxic substances leaching from UXO [unexploded ordnance] have entered the coral reef food web. Since the concentration of explosive compounds is highest near unexploded ordnance, we recommend that surface UXO on the Vieques coral reef be picked up and removed.” I respectfully ask ATSDR to analyze this article and to incorporate it into the agency’s final report, because the article appears to provide information highly relevant to the fish and shellfish pathway.

To ensure optimal inter-agency attention and coordination, I am providing a copy of this letter to key members of the President’s Task Force on Puerto Rico’s Status, including its (former and current) co-chairs and its representatives from the Department of Health and Human Services, the Environmental Protection Agency, and the Department of Defense. The Task Force’s March 2011 report included a section on Vieques, which stated: “There is much that the Federal Government can do to improve the quality of life for the people of Vieques.” I concur—and my

⁷ Draft Report, page A-73.

⁸ <http://www.springerlink.com/content/978-94-007-1214-0#section=902961&page=2&locus=19>.

recommendations are rooted in that premise. It seems evident that ATSDR cannot resolve the outstanding questions on its own, given the agency's limited funding and mandate.⁹ Instead, a broader federal government-wide approach is necessary. If the Administration believes it requires additional funding or authority from Congress in order to timely implement the recommendations I have made, I urge the Administration to seek such funding and authority via an amendment to its budget request for Fiscal Year 2013. I, in turn, pledge that I will do everything within my power, working with my allies in the House and Senate, to provide the Administration with what it needs.

To place my recommendations in context, some background information is useful.

The Navy's Operations on Vieques¹⁰

In the 1940s, the federal government expropriated lands on the eastern and western portions of Vieques for use by the Navy, and residents of those areas who remained on Vieques were required to relocate to the central portion of the island. The Navy established the Vieques Naval Training Range in eastern Vieques, which consisted of two facilities: (1) the Atlantic Fleet Weapons Training Facility, which was used for ship-to-shore and aerial bombing exercises, and comprised a Live Impact Area and a Secondary Impact Area, and (2) the Eastern Maneuver Area, which was used primarily for ground-based training involving smaller munitions. The Navy also established the Naval Ammunition Support Detachment in western Vieques to store munitions used in its training in eastern Vieques and to dispose of obsolete or damaged munitions. The Navy reported that it had dropped between three million and four million pounds of ordnance on Vieques each year between 1983 and 1998.

The Closure and Transfer of the Navy's Facilities on Vieques

In the National Defense Authorization Act for Fiscal Year 2001 (P.L. 106-398), Congress directed the Navy to close its facilities in western Vieques and to transfer approximately 4,000 acres of that property to the Municipality of Vieques, approximately 3,100 acres to the Department of the Interior, and approximately 800 acres to the Puerto Rico Conservation Trust. In the National Defense Authorization Act for Fiscal Year 2002 (P.L. 107-107), Congress authorized the Navy to close its training facilities in eastern Vieques if equivalent training facilities were available elsewhere and directed the Navy, upon closure, to transfer administration of the roughly 15,000 acres of that property to the Department of the Interior. In

⁹ I note that the Navy is responsible for the costs of ATSDR studies on Vieques. Thus, it is the adequacy of the Navy's funding that will be key to the implementation of my recommendations.

¹⁰ This section, and the two sections that follow it, are drawn in large part from the Findings section of H.R. 1645, the *Vieques Recovery and Development Act of 2011*, introduced on April 15, 2011 and cosponsored by 21 members of Congress.

January 2003, the Navy certified to Congress that alternative training sites had been identified and confirmed that training operations would cease on Vieques by May 2003.

The Ongoing Cleanup Effort on Vieques

The Navy continues to be responsible for administering and funding the cleanup of munitions and contamination that resulted from its past activities on Vieques, subject to oversight by the Environmental Protection Agency and the Puerto Rico Environmental Quality Board, an agency of the Puerto Rico government. As of April 2011, over 35,000 munitions had been recovered and destroyed on Vieques, including at least 19,000 live munitions. Through the end of Fiscal Year 2010, the Navy had spent a total of \$142.4 million to support the cleanup of its former facilities on Vieques, and estimated that an additional \$380.6 million would be needed from Fiscal Year 2011 onward to complete all planned cleanup actions.

ATSDR Public Health Assessments on Vieques (2001-2003)¹¹

Between 2001 and 2003, ATSDR conducted a series of public health assessments on Vieques. ATSDR examined four pathways through which residents of Vieques could have been exposed to contaminants harmful to their health: (1) air, (2) soil, (3) consumption of fish and shellfish, and (4) groundwater.

In its public health assessments, ATSDR concluded that there was “No Apparent Public Health Hazard” to island residents through any of these four pathways. This finding indicates that, while there may be the potential for exposure to a contaminant, such exposure is not likely to occur at a level that would cause adverse health effects, based on acceptable levels of exposure established by public health standards for individual contaminants. This finding does not confirm or deny the existence of certain health effects within a population, but rather indicates that the potential for human exposure to the contaminants examined does not appear to be the cause of any reported health effects.

The air pathway has been a chief concern among the public because the residential population in the central portion of Vieques is located downwind of the former Live Impact Area on the eastern end of the island. However, ATSDR’s assessment of the air pathway is inherently limited by the lack of historical data on the emissions that were released during training exercises over several decades. Given the absence of data on actual historical exposures through the air, ATSDR evaluated this pathway through the use of air quality modeling data—that is, by attempting to estimate past emissions based on more limited, recent sampling. Utilizing this methodology, ATSDR concluded:

¹¹ This section is drawn largely from a 34-page report prepared by the Congressional Research Service for my office at my request, entitled “Cleanup of Former U.S. Navy Facilities on Vieques Island, Puerto Rico” and dated August 19, 2009.

- Residents of Vieques have been exposed to contaminants released into the air during the Navy's military training exercises. However, the estimated exposures are lower than levels known to be associated with harmful health effects. Airborne dust and contaminants released during training activities at the former Live Impact Area disperse to extremely low levels before reaching the residents of Vieques.

The soil pathway has also been a source of concern to residents of Vieques. This pathway is related to the air pathway, because contaminants from the Navy's training activities could have settled out of the air and been deposited into the soil. However, ATSDR concluded:

- Touching or incidentally ingesting the soil on Vieques would not cause harmful health effects.
- Training activities have elevated the levels of some metals in the soil on the former Live Impact Area. However, the levels are too low to be of health concern.

The safety of fish and shellfish regularly consumed by residents of Vieques has been an additional concern. The marine environment could have been contaminated by the leaching of chemicals from munitions that landed in underwater areas or from contaminated storm water runoff from the training range into the sea. This, in turn, could have contaminated edible fish and shellfish species and resulted in harmful exposure through human consumption. However, ATSDR concluded:

- It is safe to eat seafood from the coastal waters and near-shore lands on Vieques, including fish and shellfish from areas north and south of the former Live Impact Area.
- Several metals were detected in fish and shellfish collected around Vieques. However, the metal concentrations were too low to be of health concern, even if a person ate fish or shellfish every day for 70 years.
- Explosive compounds were not detected in any of the edible fish and shellfish that were sampled from Vieques.

Finally, residents of Vieques have expressed concerns that the island's drinking water supply could have been contaminated by the Navy's activities. ATSDR concluded that there did not appear to be the potential for the migration of contamination from the Navy's facilities to the middle of the island where the residential population is located. A 1999 study prepared by a contractor at the Navy's request indicated that the groundwater primarily does not flow from the Navy's facilities to the residential portion of the island. In addition, the groundwater beneath the residential portion of the island has not been used as a primary source of drinking water on Vieques since 1978, because of increased saltwater intrusion within the aquifer. Instead, residents receive their drinking water primarily from a public water supply that is piped from

mainland Puerto Rico. ATSDR evaluated the results of a sampling of the public water supply and concluded:

- The water was not affected by contaminants from the Navy's facilities and was safe to drink.
- A few public and private groundwater wells still exist in the residential portion of the island and are occasionally used when the public water supply is interrupted. Water from these wells was safe to drink, with the exception of one private well that contained water contaminated with nitrates and nitrites (most likely originating from agricultural sources or nearby septic systems, not contamination that migrated from the Navy's facilities).

The Response to ATSDR's Public Health Assessments

ATSDR's conclusions were controversial—not only among island residents who believe that the health effects they have experienced are caused by exposure to contamination from the Navy's operations on Vieques, but also among a number of independent (that is, non-federal) researchers who have studied environmental contamination on Vieques. Those researchers have asserted that the contaminant levels are higher in some cases than ATSDR reported, and that the potential health hazards are therefore likely to be greater overall than ATSDR concluded.

March 12, 2009 Hearing, House Committee on Science and Technology, Subcommittee on Investigations and Oversight

On March 12, 2009, the Subcommittee on Investigations and Oversight of the House Committee on Science and Technology held a hearing entitled "ATSDR: Problems in the Past, Potential for the Future."¹²

The Subcommittee's Majority staff, in a background report it prepared in connection with the hearing, noted that "[m]any independent scientists and health experts question" ATSDR's findings on Vieques. The staff report observed that Professor James Porter (referenced above) had "presented findings at a conference last month that found unexploded munitions from the U.S. Navy around the island were, in fact, leaking toxic cancer causing substances into the ocean endangering sea life." The staff report further noted that, "[a]lthough Professor Porter cautioned that it is still unclear what sort of impact these toxins have had on the dinner plate," other studies had shown that residents of Vieques "have a 23 percent higher cancer rate than those on the main island of Puerto Rico" and that "plants on the island have high concentrations of lead, mercury, cadmium, uranium, cobalt, manganese and aluminum."

¹² <http://www.gpo.gov/fdsys/pkg/CHRG-111hhr47718/pdf/CHRG-111hhr47718.pdf>. (hearing transcript).

During the hearing, at which then-Director Frumkin testified, members of the Subcommittee argued that ATSDR's public health assessments on Vieques were flawed and urged the agency to re-evaluate its conclusions in light of the research conducted on the island by independent scientists. In response to questioning, then-Director Frumkin stated: "I am very happy to pledge to you moving out of this hearing to take a fresh look at the Vieques situation and to collect any data necessary to clarify the health situation for the people there."

November 13, 2009 ATSDR Press Release

On November 13, 2009, ATSDR issued a press release that it posted on its website.¹³ In the release, ATSDR stated that it intended to issue a revised report that "modifies some of its earlier conclusions about health risks" and "changes some of its earlier conclusions regarding the safety of environmental exposures" on Vieques. According to the release, the decision "followed a thorough review of ATSDR public health assessments finalized in 2003 and other environmental studies of the island conducted in the intervening years." ATSDR said that its re-examination of the data comes as part of a "fresh look" that ATSDR pledged to island residents and to Congress.

The release quoted then-Director Frumkin as saying: "Much has been learned since we first went to Vieques a decade ago, and we have identified gaps in environmental data that could be important in determining health effects. . . . The gaps we found indicate that we cannot state unequivocally that no health hazards exist in Vieques. We have found reason to pose further questions."

Finally, ATSDR stated in the release that it "expects" to "recommend biomonitoring to determine whether persons living on Vieques have been exposed to harmful chemicals, and, if so, at what levels those chemicals may be in their bodies" and to "work with Puerto Rican health officials to conduct more in-depth evaluation of health outcomes."

The contents of ATSDR's November 13, 2009 public release were consistent with the message that Dr. Frumkin conveyed to me personally during our meetings on September 22, 2009 and October 22, 2009.

May 20, 2010 Hearing, House Committee on Science and Technology, Subcommittee on Investigations and Oversight

On May 20, 2010, the Subcommittee on Investigations and Oversight held a hearing entitled "Preventing Harm - Protecting Health: Reforming CDC's Environmental Public Health

¹³ <http://www.atsdr.cdc.gov/news/displaynews.asp?PRid=2455>.

Practices.”¹⁴ In the “Hearing Charter” prepared by the Subcommittee’s Majority staff, it was observed that ATSDR’s public health assessments on Vieques had been “widely criticized.”¹⁵

Dr. John Wargo’s Testimony at the May 20, 2010 Subcommittee Hearing

One of the witnesses at the May 20, 2010 hearing was Dr. John Wargo, a professor of Risk Analysis and Environmental Policy at Yale University, who had conducted research on Vieques for a number of years. Dr. Wargo’s written testimony constitutes one of the most comprehensive critiques of ATSDR’s public health assessments on Vieques. As such, it merits close consideration here—principally as an aid to analyzing whether ATSDR’s 2011 draft report displays any of the same shortcomings that Dr. Wargo identified in connection with the agency’s earlier work on the island.

Dr. Wargo argued that military training activities on Vieques “have created a toxic soup, a mess that I have never seen anything similar to in my experience.” Dr. Wargo testified that ATSDR’s public health assessments on Vieques “contain serious flaws in scientific methods, analyses and interpretations of evidence, yet the agency consistently concludes that human health risks are insignificant.”¹⁶ Dr. Wargo noted that “[l]ead, mercury, cadmium, chromium, arsenic, and uranium have all been released into the Vieques environment” as a result of military training activities, and that these elements “are well recognized to [be] hazardous substances, and they have the potential to be absorbed by plants, wildlife, fish and shellfish.” Dr. Wargo opined that “[a] careful review of the ATSDR public health assessments reveals an agency determined to find no causal relation between the Defense Department’s 60 year history of dropping nearly 100 million pounds of weapons on a small island, and the exceptional incidence of human illness among those that lived through this history.”

Dr. Wargo’s oral and written testimony also included the following conclusions:

- ATSDR “concluded that the absence of evidence of contamination is sufficient to conclude the absence of significant health threat. However, the poor quality of environmental monitoring and surveillance makes it impossible to justify the sweeping declarations of safety made by ATSDR.”
- ATSDR “routinely relied on studies previously prepared or data collected by others rather than designing new studies that are appropriate for local conditions and problems.”

¹⁴ <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg57173/pdf/CHRG-111hhrg57173.pdf> (hearing transcript).

¹⁵ http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/052010_charter.pdf.

¹⁶ <http://gop.science.house.gov/Media/hearings/oversight10/may20/Wargo.pdf>.

- ATSDR “rarely conducted its own research on environmental contamination, human exposure, and disease prevalence, and flaws in any available studies leads them to conclude there is no credible evidence of a causal relation between hazardous materials and disease. . . .”
- ATSDR “conducted no human testing on Vieques to determine whether hazardous chemicals released by the Navy were present in the tissues of island residents.” Nor did ATSDR “conduct any original epidemiological studies to understand patterns of disease prevalence on the island.” However, “[t]hese types of data are fundamentally necessary to understand the relations between hazardous chemicals and human illness.”
- The Navy “has carefully controlled access to the bombing range in a manner that has precluded the conduct of scientific research by independent scientists When the government controls the science, they control the narrative risk to human health. There is a clear need to create an alternative [institution] to conduct these health assessments by independent and unbiased scientists.”
- With respect to the air pathway, “air pollution data was mismanaged by the Navy and therefore provides unreliable information regarding the magnitude and distribution of air contaminants during high activity training periods on the Live Impact Area.” As a result, ATSDR relied entirely on a modeling study to evaluate this pathway, which limits the persuasive value of its conclusion “that estimated exposures are lower than levels known to be associated with harmful health effects.”
- With respect to the soil pathway, the Navy and ATSDR “failed to collect soil contamination data associated with military operations. The absence of these data prevented them and others from understanding when and where soil might pose a public health threat. This could occur from soil particles exploding into the atmosphere, drifting downwind in the atmosphere, eventually settling on plants, soils, and perhaps open cisterns.” Dr. Wargo questioned why ATSDR had not tested soil—as well as edible plant tissues and animal products—for hazardous compounds released by training activities.
- With respect to the fish and shellfish pathway, “ATSDR’s conclusions that fish intake by Vieques residents poses no health threat is not supported by the data the Agency relied upon to reach the finding.” While ATSDR collected fish and examined them to identify the presence of hazardous chemicals, “their sampling designs were inappropriate and insensitive.”

- In addition, ATSDR wrongly “assumes that fish constitute the only significant food that might carry contaminants of military origin to the dinner table.” The Navy, EPA and ATSDR “neglected research on grazing activities by cattle, goats, sheep, pigs and chickens,” which “could potentially have been a significant additional pathway of exposure.” Because the Navy leased lands to those who grazed their stock, some in close proximity to the Live Impact Area, “it seems prudent to consider the potential for metals, explosives, and other contaminants of military origin to be taken up by plants that are in turn consumed by cattle.” The “restriction of ATSDR attention to fish seems convenient rather than scientifically justified.”
- With respect to the groundwater/drinking water pathway, ATSDR’s conclusion that public drinking water supplies pose no health hazard “is not supported by a statistically valid sampling design.” The 35-year period between 1943 and 1978—when a public water supply from mainland Puerto Rico was completed—is “the most likely time when the island’s population might have been exposed to hazardous compounds released to the environment by the Navy via drinking water.” Yet, “this is also a period when government testing of environmental quality on the island was minimal.” The “poor history and quality of water quality testing make it difficult to reconstruct a history of exposure with precision,” because “[w]ater supplies on Vieques were not tested routinely for chemicals that were intensively released to the environment by the Navy” and “ATSDR did not conduct any tests of its own.” Instead, the Agency relied on previous studies conducted by the Puerto Rico Department of Health, the EPA, the U.S. Geological Survey, and a consulting firm hired by the Navy. Although ATSDR reported the presence of the explosives RDX and Tetryl in the drinking water supplies, the Navy and ATSDR did not provide “a plausible explanation for these findings.” The studies interpreted by ATSDR “do not demonstrate the absence of health threat associated with Naval activities. Instead, they demonstrate the absence of the Navy’s testing of the community’s drinking water supplies.”

More generally, Dr. Wargo testified that ATSDR suffered “from an underlying cultural problem.” Specifically, he argued that the agency had “misperceived its intended mission.” He said that it was clear, based on the public health assessments, that ATSDR “believes its purpose is to search for conclusive evidence that hazardous chemicals have caused health loss.” However, “[s]ince data necessary to demonstrate the cause of health loss . . . rarely exist, the agency normally finds ‘no significant threat to human health,’ and it declares the safety of surrounding communities. Yet these conclusions are illogical, and scientifically flawed.” While “ATSDR may not have sufficient evidence to conclude community danger,” Dr. Wargo testified, neither does it “have sufficient evidence to conclude ‘safety.’”

Dr. Wargo recommended, among other things, that ATSDR conduct human tissue testing; evaluate disease prevalence; explicitly evaluate the quality and uncertainty of each data source; and establish rigorous standards before declaring safety.

Conclusion

On the basis of the foregoing, I respectfully urge ATSDR to implement the six recommendations I have made. I look forward to continuing to work with you on this matter.

Sincerely,



Pedro R. Pierluisi
Member of Congress

cc: Cecilia Muñoz, Director, Domestic Policy Council, The White House
Thomas J. Perrelli, Co-Chair, The President's Task Force on Puerto Rico's Status
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