1. Given the testimony about the unique nature of PFAS chemicals, do you think manufacturers or direct users of these chemicals can be held liable under the Superfund law? Why or why not?

Manufacturers or direct users of these chemical can and should be held liable under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq. (CERCLA). However, as noted by Ms. Bowers in her written testimony, “in general, CERCLA does not provide a standalone mechanism for holding the manufacturer of a hazardous substance liable solely based on its manufacture of a chemical that another party released into the environment subsequent to purchase. A manufacturer could be liable if a release occurred as part of the manufacturing process at a site the manufacturer owned or operated.” (p. 6).

As it stands today, CERCLA itself is an inadequate remedy for manufacturer liability for PFAS as no one is liable under CERCLA for PFAS because CERCLA only imposes liability for the disposal (i.e., spill) of “hazardous substances.” As discussed below, no PFAS is currently designated a “hazardous substance” under CERCLA, but that could change with respect to PFOA and PFOS if the U.S. Environmental Protection Agency (EPA) finalizes its proposed rule listing those two chemicals as hazardous substances (see 87 Fed. Reg. 54415). Congress should act quickly, under the Congressional Review Act, 5 U.S.C. §§801-808, to approve U.S. EPA’s proposed rule, which will create liability under CERCLA and thus provide additional resources for the cleanup of those chemicals, affording greater protection to the public health.

As noted by Ms. Bowers, the U.S. EPA does have some enforcement discretion under CERCLA. That discretion comes into play after the fact. A much more robust framework for discretion lies with state agencies, under the Resource Conservation and Recovery Act, 42 U.S.C. ch. 82 § 6901 et seq. (RCRA), where states have shown enforcement discretion in requiring corrective actions. This illustrates why CERCLA is not enough and that a RCRA framework is needed to provide the comprehensive cradle-to-grave regulatory framework and the discretionary ability to target the clean-up actions towards the creators of the pollution, and not the receivers of it.

In addition, the U.S. EPA recently sought public comment on a proposal to list nine PFAS as “hazardous constituents” under RCRA. If this proposal is finalized, these nine PFAS would automatically be considered “hazardous substances” under CERCLA as well (see 42 U.S.C. § 9601(14)(C)). So, it is possible that manufacturer liability could be added to CERCLA to make the manufacturers or direct users of these nine PFAS liable.

Once PFAS are listed or considered as “hazardous substances” under CERCLA, manufacturers can and must be held liable for the cost of remediation. Specifically, CERCLA imposes liability for response costs, natural resource damages, and health assessments against: (1) owners and operators of facilities contaminated by hazardous substances; (2) any person who owned or operated such a facility at the time the hazardous substances were disposed of; (3) generators of
hazardous substances; (4) parties who arranged for the disposal of hazardous substances; and (5) transporters of hazardous substances that selected the site of disposal. 42 U.S.C. § 9607(a). Manufacturers of PFAs would likely be liable under either (1), (2), (3), or (4), and possibly also (5). This is as it should be and is in accord with the principle of “polluter pays”, which ensures that those that cause and profit off environmental contamination are made responsible for remedying it. Scientists, economists, and environmentalists call this “internalizing the external costs of pollution”, and it is widely accepted to be both efficient and equitable.

Congressional action under CERCLA and RCRA should proceed together to address PFAS and ensure that manufacturers and direct users, including federal agencies, such as the U.S. Department of Defense (DOD), are not exempted from U.S. EPA and state authorities.

2. Given that there may be circumstances in which the EPA cannot find manufacturers and users of PFAS chemicals liable under CERCLA, what other existing laws and regulations could federal authorities use or expand to ensure PFAS clean-up?

In 1976, Congress enacted RCRA in response to “a rising tide of scrap, discarded, and waste materials” that had become a matter of national concern. In enacting RCRA, Congress declared it a national policy “that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of to minimize the present and future threat to human health and the environment.” Congress recognized, however, that “the collection of and disposal of solid wastes should continue to be primarily the function of State, regional, and local agencies …. ” Almost 50 years later, RCRA continues to effectively protect Americans from exposure to hazardous wastes. By expanding RCRA to include PFAS, Congress will strengthen federal and state protections across the United States.

Specifically, Congress could expand RCRA (42 U.S.C. ch. 82 § 6901 et seq.) as follows:

SECTION 1. (a) Section 3001(e) of the Solid Waste Disposal Act (42 U.S.C. § 6921(e) (“Specified wastes”)) is amended by substituting the following new paragraph as paragraph (2), and redesignating existing paragraph (2) as paragraph (3):

“(2) Not later than 6 months after [date of enactment], the Administrator shall [where appropriate] list under subsection (b)(1) wastes containing the following per- and polyfluoroalkyl substances (PFAS), as well as their salts and structural isomers:

(1) Perfluorooctanoic acid (PFOA);
(2) Perfluorooctanesulfonic acid (PFOS);
(3) Perfluorobutanesulfonic acid (PFBS);
(4) Hexafluoropropylene oxide-dimer acid (HFPO–DA or GenX);
(5) Perfluorononanoic acid (PFNA);
(6) Perfluorohexanesulfonic acid (PFHxS);
(7) Perfluorodecanoic acid (PFDA);
(8) Perfluorohexanoic acid (PFHxA); and
(9) Perfluorobutanoic acid (PFBA).”
SECTION 1. (b) Section 3001(b)(1) of the Solid Waste Disposal Act (42 U.S.C. § 6921(b)(1) ("Identification and listing")) is amended by striking out the last sentence thereof, and substituting the following sentence:

“The Administrator, in cooperation with the Agency for Toxic Substances and Disease Registry and the National Toxicology Program, shall also identify or list those hazardous wastes which shall be subject to the provisions of this subchapter solely because of the presence in such wastes of certain constituents (such as identified carcinogens, mutagens, teratogens [misspelled in statute as written], or per- and polyfluoroalkyl substances) at levels in excess of levels which endanger human health.”

SECTION 2. (a) Section 3004(u) of the Solid Waste Disposal Act (42 U.S.C. § 6924(u) (“Continuing releases at permitted facilities”) is amended by striking out the first sentence thereof, and substituting the following sentence:

“Standards promulgated under this section shall require, and a permit issued after [date of enactment] by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents, as defined in section 6903(5) of this chapter, from any facility [deleted reference specifying TSD facilities] seeking a permit under this subchapter, regardless of the time at which waste was placed in such unit.”

SECTION 2. (b) Section 3004(v) of the Solid Waste Disposal Act (42 U.S.C. § 6924(v) (“Corrective action beyond facility boundary”) is amended by striking out the first sentence thereof, and substituting the following sentence:

“As promptly as practicable after [date of enactment], the Administrator shall amend the standards under this section regarding corrective action required at facilities under section 6924(u) of this chapter [deleted reference specifying TSD facilities and reference to “listed or identified” hazardous waste], to require that corrective action be taken beyond the facility boundary where necessary to protect human health and the environment unless the owner or operator of the facility concerned demonstrates to the satisfaction of the Administrator that, despite the owner or operator’s best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action.”

3. Based on your experiences in New Mexico, what do you believe are the implications of the EPA’s proposed designation of PFAS as hazardous substances under CERCLA on equity – particularly in disadvantaged communities served by public water systems or public solid waste utilities?

Based on our experience in New Mexico, the EPA’s proposed designation of PFAS as a hazardous substance under CERCLA will not benefit disadvantaged communities unless Congress takes steps to modify CERCLA and explicitly state the U.S. EPA is solely responsible for the implementation of CERCLA and its implementing regulations.

As it stands today, the U.S. DOD implements CERCLA at active military installations, Base Realignment and Closure (BRAC) locations, and National Guard facilities where there are known or suspected PFAS releases. However, in our experience, the U.S. DOD does not equitably implement CERCLA. For example, at Cannon Air Force Base in Clovis, New Mexico,
the U.S. DOD poisoned a fifth-generation dairy farmer’s herd, forcing him to euthanize 3,665 cows. New Mexico, not the U.S. DOD, paid $850,000 to the dairy farmer for expenses associated with the proper disposal of these PFAS-contaminated hazardous carcasses. Like the dairy cows, the community of Clovis relies on local groundwater as the primary source of drinking water. Despite the U.S. DOD “PFAS Factsheet” on Cannon Air Force Base showing PFAS levels at 27,000 parts per trillion (ppt) or 6,750 times the U.S. EPA’s drinking water standard – U.S. DOD has not performed any offsite soil or groundwater remediation.

Unlike the mission of the U.S. EPA and state environmental agencies – the U.S. DOD’s implementation of CERCLA is strictly focused on minimizing its scope and costs of PFAS clean-up – not cleaning up PFAS to protect public health and the environment. As a result, the U.S. DOD continues to shift the economic burden for PFAS clean-up to disadvantaged communities served by public water systems and public solid waste utilities.

This is true in Clovis, New Mexico where the public water system representatives have stated: “we have been…developing a plan to ensure that our water sources will meet newer, more stringent requirements as they become the new standard. This includes infrastructure improvements to add treatment processes that remove PFAS from water, examining the impact this will have on the cost of delivering your service, and identifying grants and other potential funding sources to help offset those necessary costs.”¹ In New Mexico and around the U.S., the U.S. DOD is creating PFAS passive receivers at public water systems and public solid waste utilities.

Today, Congress – not the U.S. EPA or state environmental agencies – is the only watchdog responsible for ensuring the U.S. DOD correctly assesses and remediates the 715 active military installations, BRAC locations, National Guard facilities, and Formerly Used Defense Sites (FUDS) properties under CERCLA. However, with Congressional action under CERCLA and RCRA, the U.S. EPA and state environmental agencies can hold PFAS polluters accountable to protect disadvantaged communities.

4. From a practical perspective, if Congress addresses passive receivers of PFAS under CERCLA, are there any unintended consequences that might complicate implementation by states?

It is important to note that if Congress acts to add PFAS as a hazardous substance under CERCLA and adds PFAS as a hazardous waste under RCRA, this will establish a “federally permitted release.” As Ms. Bowers indicated in her oral and written testimony, a CERCLA federally permitted release is a release that is in accordance with a permit issued under an enumerated list of federal statues such as the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. § 1251 et seq.), and RCRA. Practically speaking, adding PFAS to CERCLA and RCRA will allow the U.S. EPA and state environmental agencies to establish PFAS limits for passive receivers. As long as the passive receiver complies with RCRA – CERCLA liability would not be triggered given the “federally permitted release” provision. Effectively, this would help shield passive receivers from CERCLA liability while still providing very meaningful protections under RCRA.

In contrast, if Congress acts to add PFAS as a hazardous substance under CERCLA and does not add PFAS as a hazardous waste under RCRA, this construct will not establish a federally permitted release. As a result, CERCLA liability will immediately apply for passive receivers.

Finally, it is worth noting that CERCLA addresses “innocent landowners” to mitigate enforcement concerns by the U.S. EPA (42 U.S.C. §§ 9607(a)(1), 9622(g)(1)(B)). CERCLA also exempts from liability for response costs “de micromis” handlers of hazardous substances (i.e. less than 110 gallons) and certain handlers of municipal waste. (42 U.S.C. 9607(o) and (p)). However, establishing a federally permitted release for PFAS through RCRA for CERCLA liability is consistent with the longstanding manner in which air, water, and waste statutes interface with CERCLA for thousands of chemicals regulated by the U.S. EPA and state environmental agencies.

5. In New Mexico, PFAS have been found at and around Cannon Air Force Base and Holloman Air Force Base. In 2019, the U.S. Department of Justice filed a complaint against the New Mexico Environment Department’s Resource Conservation and Recovery Act (RCRA) permit for Cannon Air Force Base. The permit’s definition of hazardous waste would require cleanup action at Cannon Air Force Base related to PFAS. In addition, in your testimony, you said that Congress could take immediate action to expand RCRA hazardous waste definitions to achieve better PFAS cleanup outcomes for communities sooner. Please explain how RCRA can be used to address cleanup with Department of Defense sites, as well as sites nationally, and provide suggested RCRA statutory language to accomplish this outcome.

First, while New Mexico is the only place I am aware of where the United States is attacking the state’s authority to regulate and remediate PFAS, it should be noted that the U.S. DOJ is trying to “protect the polluter” in states across the country. In the multidistrict litigation for aqueous film-forming foam (AFFF) which contains PFAS (MDL 2873), the United States has argued that the military’s PFAS cleanup activities across the country (which are being performed without oversight from the U.S. EPA), entitle it to dismiss both injunctive and monetary causes of action asserted against it in the MDL, which includes claims from municipalities, water providers, and states across the country. Further, because the military’s cleanup activities are performed under the Defense Environmental Restoration Program (DERP), 10 U.S.C. 2701 et seq., they are not being overseen by the U.S. EPA, resulting in inadequate and inconsistent cleanups as highlighted below:

**Inadequate screening levels:**

In its cleanup investigations, the military is currently using a screening value (used to determine whether cleanup is warranted) of 70 ppt, which is based on a Health Advisory issued by the U.S. EPA in 2016 (81 Fed. Reg. 33250). However, the U.S. EPA updated its PFAS Health Advisory in 2022 with far lower levels of 0.004 ppt for PFOA and 0.02 ppt for PFOS (87 Fed. Reg. 36848). Additionally, the U.S. EPA established enforceable “maximum contaminant levels” (MCLs) for PFAS under the Safe Drinking Water Act of 4 ppt for PFOA and 4 ppt for PFOS. These MCLs are far more stringent than the 2016 Health Advisory level. Despite the promulgation of these new levels by the U.S. EPA, the U.S. DOD is nevertheless still using 70 ppt as a screening level. This means the U.S. DOD is ignoring the most current science as well as U.S. EPA’s expertise in these matters. At Cannon Air Force Base in Clovis, New Mexico, the U.S. EPA has noted the Air Force’s failure to utilize the new MDLs, and advised against it. However, because DERP is
conducted without U.S. EPA oversight, the Air Force has been able to ignore U.S. EPA’s and New Mexico’s concerns. Historically, the Air Force has stated that it will abide by the MCLs only when they are finalized. This presents serious problems for the cleanup, given that many of the 715 sites around the U.S. were prematurely closed out because they did not exceed the 70 ppt screening value. The Air Force has not committed to revisiting those sites now that the enforceable MCLs are finalized.

**Inadequate Scope of Response:**

In its cleanup activities, the military is currently limiting its effort to two specific PFAS, namely PFOA and PFOS. However, the EPA has issued Health Advisories for an additional two PFAS, namely PFBS and GenX chemicals. 87 Fed. Reg. 36848 (June 21, 2022). Additionally, EPA’s proposed MCLs under the Safe Drinking Water Act encompass both of those chemicals, as well as PFNA and PFHxS. 88 Fed. Reg. 18638 (March 29, 2023). Finally, the EPA has proposed to list a total of nine PFAS as “hazardous constituents” under RCRA, 89 Red. Reg. 8606 (Feb. 8, 2024), which is a preliminary step in establishing a chemical as a “listed hazardous waste” under RCRA. In addition to PFBS, PFNA, PFHxS, and GenX chemicals, this proposal encompasses another three PFAS (PFDA, PFHxA, and PFBA). Id. Notably, when these chemicals are listed as “hazardous waste”, they will also automatically constitute “hazardous substances” under CERCLA. 42 U.S.C. § 9601(14). Because the EPA is not overseeing the military’s cleanup actions, it has no power to alter the military’s inadequate, outdated, and inefficient approach of limiting its response to just PFOA and PFOS. Again, this deficiency has been noted by the EPA regarding the Air Force’s cleanup activities at Cannon Air Force Base in New Mexico.

As noted in my testimony, Congress should reaffirm EPA’s authority in all CERCLA matters. Congress can intervene on behalf of New Mexico and other states similarly situated by amending the DERP, to make it clear that:

1. actions under DERP, such as those for PFAS, are not entitled to the provision in CERCLA Section 113(h) preventing courts from reviewing challenges to such cleanups;

2. actions under DERP, such as those for PFAS, must be performed under the oversight of the U.S. EPA; and mandating greater involvement and regulatory authority to states in DERP cleanups, such as a requirement for state approval of DERP actions at sites within their jurisdiction.

In addition to suggested RCRA language provided above, I suggest Congress modify the DERP as follows:

**SECTION 1.** Title 10, Chapter 160, of the United States Code, is amended—

(a) Section 2701(a) is amended by —

(1) striking out paragraph (3), and substituting the following new paragraph:

**Oversight by EPA.** —The program shall be carried out under the oversight of the Administrator of the Environmental Protection Agency.”

(2) adding the following new paragraph (5): “**Application of section 113(h) of CERCLA.** —Activities of the program described in subsection (b)(1) shall not be subject
to section 113(h) (relating to timing of review) of CERCLA (42 U.S.C. § 9613(h). To the extent this provision is inconsistent with any Executive Orders, this provision shall prevail.”

(3) adding the following new paragraph (6): “Application of section 121(f) of CERCLA.--Activities of the program described in subsection (b)(1) shall be subject to section 121(f) (relating to state involvement) of CERCLA (42 U.S.C. § 9621(f). The Secretary shall promulgate regulations equivalent to those referred to in section 121(f).”

(b) Section 2705(b) is amended by adding the following new paragraphs:

“(3): Concurrence in response actions.--Before undertaking an activity or action referred to in subsection (a)(4), the Secretary shall obtain the concurrence of—

(A) the appropriate State officials, if the response action is to take place at a facility subject to a permit issued under state hazardous waste laws, or if the response action is subject to state laws concerning removal and remedial action; or

(B) the Administrator [of EPA], if the facility is not subject to a permit issued under state hazardous waste laws nor subject to state laws concerning removal or remedial action.

(4) The preceding paragraph does not apply if the action is an emergency removal taken because of imminent and substantial endangerment to human health or the environment and obtaining said concurrence would be impractical. Provided, however, that the Secretary shall provide prompt notice to the Administrator and appropriate State officials regarding such emergency removals, and undertake any additional activities or actions required by federal or State law as advised by the Administrator (for requirements under federal law) or appropriate State official (for requirements under State law).”

(c) Section 2705(c) is amended by striking out the first sentence and substituting the following new sentences: “[Eliminated limitation to “whenever possible and practical”] The Secretary shall establish a technical review committee to review and comment on Department of Defense actions and proposed actions with respect to releases or threatened releases of hazardous substances at installations.”

(d) Section 2705(c) is amended by adding the following sentence to the end of the paragraph: “The Secretary shall proscribe regulations regarding the establishment, characteristics, composition, and funding of restoration advisory boards pursuant to this subsection.”

(e) Section 2705(d) is repealed. Subsequent sections are re-lettered accordingly, and any references to restoration advisory boards in Section 2705 are struck.