HPNS Radiological Remediation Goals (RGs) for Current, Onsite Buildings
Recent history of EPA/Navy discussions

- **March 2018 -** The RPM sent [HYPERLINK "https://semspub.epa.gov/work/09/100009179.pdf"]. EPA noted the Navy is performing updated risk evaluations of the existing radiological remediation goals, as part of the Five-Year Review. Additionally, EPA had previously recommended this evaluation use EPA's Preliminary Remediation Goals (PRG) calculators to "reflect findings of the updated risk evaluations to ensure the protectiveness of the cleanup."

- **August 2018** – The RPM sent [HYPERLINK "https://semspub.epa.gov/work/09/100009276.pdf"]. EPA repeated the assertion that as part of the ongoing FYR, the Navy needs to evaluate whether or not the existing RGs are still protective. Furthermore, EPA expects the Navy to use the PRG calculators to assess ROD radiological RGs. In addition, EPA noted cancer risk should be evaluated additively, by risk posed by multiple radionuclides of concern.

- **September 2018** - The RPM sent [HYPERLINK "https://semspub.epa.gov/work/09/100010568.pdf"]. EPA identified the need for an updated risk evaluation on the long-term protectiveness of the radiological RGs for soils and onsite buildings using EPA's current guidance and PRG Calculators.

- **March 2019** - Laura Duchnak (Navy) sent Enrique a letter announcing the **Navy's plans to use RESRAD** in its FYR evaluation of the radiological RGs. Enrique responded in a [HYPERLINK "https://semspub.epa.gov/work/09/100017131.pdf"] to highlight this decision is a pivot from the Navy's last two years of efforts to use EPA's PRG calculators; inform the Navy of a necessary HQ consultation to use tools other than EPA's PRG calculators; and suggest a meeting date to further discuss in a meeting with DTSC and CDPH.

- **April 2019** – The Superfund Division Director sent [HYPERLINK "https://semspub.epa.gov/work/09/100017132.pdf"] to complete the long-term protectiveness evaluations in the FYR and finalize the Parcel G retesting work plan. EPA outlined a path forward on background levels for radionuclides in soils; retesting for radionuclides in soils; and retesting for radionuclides in buildings. EPA reiterated the need for the Navy to provide complete information on its use of RESRAD "to facilitate efficient, thorough analysis to ensure the use complies with Superfund regulations and guidance." At the Superfund Division Director's level, EPA, the Navy, DTSC, and CDPH met on April 15, 2019 to discuss the path forward.

- **May 2019** – The RPM sent [HYPERLINK "https://semspub.epa.gov/work/09/100017814.pdf"].

- **June 2019 to Present - EPA partially approves the Parcel G radiological retesting work plan to allow soil background and soil radiological retesting fieldwork.**
  - **June 2019** - EPA's Assistant Director sent a letter to the Navy to [HYPERLINK "https://semspub.epa.gov/work/09/100017847.pdf"] portions of the Parcel G retesting work plan. EPA communicated we would approve of other sections of the work plan once the Navy provided additional information.
  - **August 2020** - EPA's Section Manager sent a letter to the Navy to [HYPERLINK "https://semspub.epa.gov/work/09/100021230.pdf"] portions of the Parcel G retesting work plan. We agreed the background threshold value for Cesium-137 could be used as a new cleanup level and a radiological retesting sample results above the RG could be determined to

be "background" through a secondary evaluation. We communicated the Navy would work with EPA to prepare a memorandum-to-the-file to document this post-ROD change to account for background of radionuclides.

- **September 2019** - EPA's Assistant Director [HYPERLINK "https://semspub.epa.gov/work/09/100018448.pdf"] and agreed with the need to produce two technical addenda to assess the long-term protectiveness of radiological RGs for soils and buildings.

- **October 2019 to Present** - Navy and EPA correspond on the Navy's ***draft* FYR long-term protectiveness evaluation addendum of the building radiological RGs**.
  - **October 2019 -** The Navy provides EPA and the public with a *draft* FYR evaluation. The Navy used RESRAD Build (RRB) in the public report and subsequently provided EPA staff with some BPRG calculator runs via email. EPA began the HQ consultation and enlisted the expertise of the US Army Corps of Engineers to help fill gaps in the Navy's evaluation.
  - **August 2020** – The RPM provided [HYPERLINK "https://semspub.epa.gov/work/09/100021232.pdf"] We were unable to fully understand the methodology used by RRB, concluding "we cannot concur with the Navy's conclusion that the radiological building RGs remain protective of human health or support the use of RRB as part of the evaluation of HPNS building RGs." Additionally, EPA provided proposed BPRG values that could be adopted as RGs.
  - **August to November 2020** - EPA and Navy technical staff meet to discuss the Navy's protectiveness evaluation of building radiological RGs using RRB.
  - **December 2020 to March 2021 – Navy's BRAC Director and EPA's Superfund Director correspond on the Navy's evaluation of the protectiveness of the building radiological RGs.**
    - **December 11, 2020** - Laura sent Enrique a letter requesting EPA to reconsider the Navy's RRB evaluation on the building RGs. The Navy made unsubstantiated claims that EPA's proposed BPRG values were much lower than background levels and not technically implementable. The Navy noted it "may need to consider pausing all ongoing remediation work…"
    - **December 22, 2020** - [HYPERLINK "https://semspub.epa.gov/work/09/100022436.pdf"], asking the Navy to substantiate these claims; reiterating our request for the Navy's response to concerns EPA identified in our August letter regarding how RRB may underestimate cancer risks for a future residential use; and suggesting a meeting with the HPNS FFA-signatories.
    - **January 11, 2021** - Laura responded in a letter to restate the Navy's claims on background levels and technical feasibility. The Navy also provided two numbers to address our request to substantiate background levels for HPNS buildings.
    - **January 15, 2021** - Enrique replied to Laura via email. Again, we requested the underlying data to substantiate background levels and technical feasibility.
    - **On January 22 and 27, 2021** - Laura responded briefly over email. One email shared data and another email noted other data provided to EPA at the project manager level.
    - **On February 3, 2021** - Enrique replied via email to note the deficiencies in the data provided by the Navy and recommending pushing the meeting of FFA-signatories until we can coordinate with HQ, experts at CDPH, and our regulatory agency partners.

- **On February 11, 2021** – Laura replied via email with an attachment responding to some of EPA's assertions in our previous email. The Navy suggests that the "CDPH scan of Parcel A includes a risk assessment that supports those conclusions."
- **On February 18, 2021** – Enrique replied via email to note we are working on scheduling a meeting with the state the first week in March, and a DRC-level meeting should occur after.

- **March 2021 to Present – Prepare for and participate on DRC-level meeting on the Navy's evaluation of the protectiveness of the building radiological RGs.**
  - **March 8, 2021 –** EPA, DTSC, and CDPH met to prepare for meeting with the Navy.
  - **March 10, 2021 –** EPA reached out to the Navy via email to recommend a meeting on March 29, based off EPA, CDPH, and DTSCs scheduling constraints. Laura responded by suggesting the meeting be between the principals plus one. We quickly responded that Enrique and Wayne would participate.
  - **March 29, 2021 –** EPA, Navy, DTSC, and CDPH met at the DRC-level, plus one. Navy was not willing to discuss ingestion rates for RESRAD Build. From that meeting, EPA had been expecting a Navy proposal to conduct a more sensitive radiological scan of one or more onsite buildings.
  - **April 22, 2021** – Navy sends EPA new RESRAD Build runs in a spreadsheet. This was a change in course from our expectation out of the March 29, 2021. We had a number of meetings with the Navy after the submittal to understand its approach.