

Virgil

What is decommissioning? How does it impact the NIH?

Jake

NIH is committed to providing its scientists, doctors, nurses and support staff state-of-the-art laboratories and clinical facilities to meet contemporary challenges in health and medicine and foster an environment conducive for scientific discovery. When upgrading facilities, NIH must ensure that existing buildings and renovated spaces remain free of contaminants such as unhealthy building materials, hazardous chemicals, radioisotopes, and pathogens. Decommissioning is the process by which NIH properly vacates, surveys, and decontaminates facilities targeted for closure or renovation. Basic to the process is an understanding of all hazardous materials used and stored in each location, as well as preexisting building components that can become hazardous should they be disturbed during the process. NIH implements a rigorous and thorough decommissioning process to protect the environment and public health throughout these efforts.

Virgil

What is it like being a decommissioning officer?

Jake

Being a decommissioning officer is great; we get to meet tons of people at NIH and learn a lot about the unique, interesting, and incredibly important research that happens at NIH. It allows us to work with a wide range of people – not just people within DEP, but people within our wider ORF community, our partners in ORS, and a ton of people in other institutes and centers. Plus, it's awesome to see some of the historic and important buildings on campus, like Building 1 and some of the executive suites in Building 31. We recently performed some decommissioning in Dr. Fauci's office and it was a privilege to witness such a historic office. Plus, it's nice to not be tied down to a desk. There is always something you can go out and look at, some new building to explore. Unfortunately, some of the areas to which we are called are not particularly nice areas (e.g. a steam pit in the bowels of some old basement) but you can find something interesting even in the gross places.

Virgil

What are some challenges you often run into?

Jake

Aside from the inherent challenges of dealing with environmentally hazardous materials, often finding those hazards and documenting the extent of contamination can be very challenging. These hazards get buried over time in layers of building materials. For example - several layers of floor coverings from years of renovations of people installing floor tile on top of floor tile, or layers and layers of paint that are hiding lead-based paint, or the numerous nooks and crannies where asbestos is buried. We can generally estimate fairly accurately the extent of hazardous material contamination but until we actually start digging into the remediation/abatement, we won't know the full extent. That can be hard to plan for as some of these hazardous materials aren't conveniently constrained to a project area.

Another challenge is explaining why we spend so much time chasing seemingly minute amounts of hazardous material. I wouldn't quite call it geologic time frames, but over long periods of time, if improperly treated or disposed, these environmentally hazardous materials can have incredibly deleterious effects on the local ecosystem. So, we chase after very, very small amounts of things like mercury and polychlorinated biphenyls. That can be tough to explain sometimes especially since those of us in the environmental world have that at the forefront of our brains. We're thinking long-term solutions.

Additionally, government funding issues can throw a wrench into our plan.

Virgil

What do you find the most fun?

Jake

I find the most satisfying part of the job the walkthrough at the very end of the decommissioning process. Seeing a totally clean space that will soon be turned into a state-of-the-art research lab is incredibly satisfying. That's what keeps us all going – knowing that we are helping to facilitate the research.

Virgil

What could other people do to make your job easier?

Jake

Flexibility, and the ability to be flexible in general. I am keenly aware flexibility is often hard to write into government contracts and government documents, but when we are dealing with hazardous materials that have been accumulating and festering for years or decades, understanding the extent of contamination and how we're going to abate/remediate them requires flexibility. For example, if we discover mercury contamination in the nooks and crannies of an old lab the way to remediate that is to cut out the contaminated materials and dispose of them in the proper waste stream. But when we discover that mercury has migrated underneath walls and into utility chases, now we have to deal with old asbestos that is mercury contaminated. That can be hard to write into a scope of work – it generally requires several change orders, which take time to execute, and more importantly this requires flexibility to understand there are cost and time implications while we address these issues.

Virgil

What do you think NIH decommissioning will look like 10 or 20 years from now?

Jake

Hopefully it gets easier! As we continue to address these hazardous materials, in theory, there should be less and less to deal with over time. There will always be something new and unique that pops up but with our modern documentation system and databases having easily accessible histories of what has been done will make things easier and easier.

Virgil

Is there anything else you'd like to share?

Jake

Contact DEPDecom@mail.nih.gov for questions or guidance about decommissioning or hazardous materials; additionally there are resources on the [DEP NEMS site about decommissioning](#).