



CLEAN SPACES INITIATIVE ACCELERATES RECYCLING AND **POLLUTION PREVENTION** ACTIVITIES

End-of-life electronics recycling at Argonne recently got a boost with the addition of the Clean Space Initiative (CSI). CSI is a multi-year project chartered in 2016 to support the high-level strategic goal of providing modern and appropriate workspaces for Argonne's science and engineering research mission.

Aging facilities, evolving research equipment, and relocation of work teams lead to the ongoing housekeeping goals of cleaning out and consolidating workspaces.

The CSI effort involves the removal of legacy contaminated and excess material, resulting in the reclamation of space as a first step toward achieving improved space utilization. Spaces improved by the CSI program receive a comprehensive evaluation of existing conditions and materials and receive custom cleanup activities to match their needs.



Vandegraaf Linac dismantlement at Building 203, Physics and Environmental Research.

Argonne's Sustainability Program and other pollution prevention and waste reduction efforts benefit from the CSI. Examples include:

- Pollution prevented by removing legacy radiological and hazardous materials, and by decontaminating building surfaces and equipment.
- Excess equipment and materials removed for recycling.
- Unoccupied spaces cleaned out to assist in a broader strategy of consolidating and optimizing programmatic space use.





Excess machine tool clean-out, Building 363 Central Shops.

**FOR MORE INFORMATION
PLEASE EMAIL**

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A team of dedicated and skilled Argonne staff oversees CSI and completes the assessment, removal, and remediation efforts. Where possible, CSI uses existing programs Argonne has in place for waste management, including hazardous, universal, and municipal solid waste. CSI has made significant progress in realizing these goals over the past two fiscal years. To date, the project has accomplished the following:

- Removed 1,686 chemical/hazardous waste items;
- Removed 18,708 cubic feet of radiological waste;
- Removed 714 legacy compressed gas cylinders;
- Decontaminated 7,722 square feet of heavy metals surface contamination; and
- Decontaminated 4,653 square feet of radiological surface contamination.

CSI has directly impacted Argonne's annual sustainability goals through recycling of electronics and scrap metal. Since the program began, a total of 4,108 cubic feet of electronics waste and 97,500 pounds of scrap metal have been recycled. Electronics are recycled as part of Argonne's ongoing collaboration with Fermi National Accelerator Laboratory, which has allowed the laboratories to partner in their electronic stewardship activities for more than 14 years. Scrap metal from the CSI program is incorporated into Argonne's site-wide scrap metal program. Each year, Argonne separates and recycles approximately 40 tons of electronics and over 200 tons of scrap metal.

Since the program started, clean-out efforts have returned 8,108 square feet of laboratory, high-bay, and storage space to usable assets that are now available for active use at Argonne. The CSI program complements Argonne's existing multi-aspect approach to addressing waste management at the laboratory.