

Lab & production services

Success story

Scientific sample management: bioprocessing freezer farm

FREEZER MANAGEMENT PROGRAM DELIVERS COST AVOIDANCE, RECOVERS LAB SPACE AND SCIENTIFIC TIME

CHALLENGE

A major pharmaceutical R&D facility's freezer management program had become a burden for researchers. Facing exhausted freezer capacity and limited space, the facility had limited options for expanding without making unwanted trade-offs, such as taking over prime real estate in labs to add more freezers or outsourcing to external freezer programs.

Project teams were responsible for maintaining their own freezers and sample collections, but they had reached the limits of their sample storage capacity. The rising concern of routine freezer maintenance only grew as teams no longer had extra freezer space to store samples in the event of equipment failure.

Scientists were also bogged down with the frustrating and time-consuming manual process of sample tracking. Without consistent procedures for maintaining freezer sample inventories, samples were routinely misplaced or lost. And when a needed sample could not be located, the facility knew it would have serious regulatory compliance concerns in the event of an investigation or audit.

SOLUTION

Avantor Services was called on to establish a freezer management program for the facility. With experience in the critical nature of maintaining scientific samples, Avantor Services developed a solution that deployed an experienced staff with logistics and scientific lab experience to optimize the freezer program.

CHALLENGE

A large pharmaceutical R&D facility was challenged with increasing freezer program costs.

SOLUTION

Avantor Services developed controls and processes to reclaim freezer space, refocus scientists' time, and ensure effective preventative maintenance planning.

RESULTS

The customer has reclaimed five freezers worth of space, refocused 432 hours for scientists, and captured \$440,000 in process savings.

After carefully analyzing the current state, Avantor Services initiated comprehensive process controls for freezer inventory. The team developed a user-friendly but controlled drop-off and pick-up process with guaranteed turn-around times for both incoming and outgoing samples. A comprehensive inventory of the samples was also completed. An inventory review, with the assistance of the R&D team, allowed expired materials to be marked for disposal.

With an accurate database of the stored samples, attention turned to developing a preventative maintenance program to mitigate against catastrophic freezer failure.

RESULT

- Five freezers worth of open space regained from inventory clean-up and reorganization
- \$70,000 in cost avoidance from avoiding purchase of additional freezers
- 432 hours per year recovered for scientists after redirecting sample management activities
- \$440,000 in savings realized through process improvements

The company was able to:

- Refocus end-user time from sample inventorying and searching back to science
- Avoid the purchase of additional freezers
- Preserve laboratory space for science vs. freezer storage
- Harmonize a labeling system across departments
- Focus on creating SOPs and controls to ensure process sustainability
- Drive process efficiencies in areas including processing of new sample deliveries



The success of this freezer management program has resulted in adoption of the program by additional groups within the organization.

Output of Avantor Sciences Freezer Management Program	
Samples processed per week (incoming and outgoing)	2,000-2,100
Sample requests per week	25-30
Freezers maintained	52

Current at time of publication.

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