

## **CU I&E Submission: Time-Motion Analysis for Efficient Waste Pick-up** <sup>[1]</sup>

### **Who**

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### **What**

The Anschutz Medical campus generates roughly 200,000 pounds annually of Regulated Medical Waste (RMW), which requires significant safety and regulatory oversight and management by the Biosafety division of Environmental Health and Safety (EHS). Prior to FY 2014, there was no formal program to manage the RMW that was being generated at a rate of more than 13,600 tubs (28 gallons each) annually. Two (2) FTEs from the Biosafety division picked up this waste daily from laboratory, clinical, and research spaces. A time-motion study was performed to evaluate how we could find efficiency in picking up these tubs while increasing the level of service to meet the growing RMW demands of our Campus. Using a well-designed and coordinated building pick-up schedule, we were able to go from 80 hours/week of Biosafety staff time down to 32 hours/week, thus eliminating 1 FTE position that could now be utilized to provide additional services to our researchers and clinicians. Providing greater services to our off-campus University affiliates also better community enhancement.

### **Why**

The amount of RMW that is generated both on and off campus has been increasing steadily since the inception of the Anschutz campus. By FY 2014, there was a need to increase staffing beyond the existing 2 FTEs to accommodate the waste demands of the campus. We believed that we could design a program that could meet these demands, provide additional required services, and service all off-campus entities that had not been fully included in the existing program. The results of the time-motion study allowed us to eliminate staffing redundancy and an inefficient daily building pick-up schedule, while increasing our staff productivity and well-being by reducing the number of buildings that they were walking through each day. These cost and time saving measures resulted in the reduction of 1 FTE that could now respond to all RMW related service requests from the Anschutz Medical campus and all of the 40 off-campus University associated sites. An additional FTE would have cost the University more than \$60,000 in salary and benefits had we not designed a more robust and agile program through seeking out these efficiencies.

## Where

The Regulated Medical Waste program has been implemented at the Anschutz Medical campus which services all laboratory, clinical, and research spaces, as well as, all off-campus entities that have a University of Colorado Denver-Anschutz association. On the Anschutz campus, there are more than 400 laboratory, clinical, and research spaces, which occupy approx. 600 Principal Investigators and 4,000 researchers, staff, and students who utilize and depend on this program. There are 40 off-campus entities with more than 200 University employees that also depend on this program.

## When

This process was implemented in August 2015 and continues to be successful in providing excellent customer service to the Anschutz campus.

## Submitted by

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