Alcohol and Tobacco Tax and Trade Bureau

FY 2018 Capital Investment Plan

Investment Name: TTB Scientific Equipment Refresh

Type of Investment: Major Non-IT Investment

Description:

Scientific equipment refresh at TTB's laboratories.

Investment Anticipated Outlay: (\$000,000s):

Туре	2015 and Prior Actual	2016 Actual	2017 Enacted	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
O&M Costs	0.60	0.50	0.78	0.60	N/A	N/A	N/A	N/A	2.48
Total Costs	0.60	0.50	0.78	0.60	N/A	N/A	N/A	N/A	2.48
Number of FTE	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00

Summary of Purpose, Goals, and Benefits:

TTB laboratories provide critical technical support to TTB program offices to assist them in carrying out the TTB mission to collect tax revenue due on alcohol, tobacco, and firearms products; protect consumers through proper alcohol beverage labeling; and prevent unfair or unlawful trade of alcohol and tobacco products. This mission directly aligns to the Treasury objectives of effectively administering the tax code and facilitating U.S. commerce through trusted products and services. TTB program offices depend upon the laboratories to provide the accurate and authoritative data and conclusions that are required to ensure regulatory compliance and support enforcement decisions on regulated products.

TTB Program Office Support: The areas in which TTB chemists analyze alcohol and tobacco products to support TTB programs include:

- * Product classification for tax collection
- * Regulatory compliance
- * Enforcement cases
- * Product integrity investigations
- * Revenue audits and investigations
- * Pre-Certificate of Label Approval product testing
- * Product safety and consumer complaints
- * Trade barrier issues
- * Technical criteria for rulemaking

Through technical support provided by its labs, TTB endeavors to develop science-based policies for industry regulation and provide technically sound scientific data to carry out tax and regulatory enforcement actions.

TTB has four labs housed in two separate facilities. The TTB National Laboratory Center in Beltsville, MD houses the Tobacco Lab, Beverage Alcohol Lab and Nonbeverage Products Lab. The Compliance Lab is located in Walnut Creek, CA. The work performed by the Tobacco Lab and the Beverage Alcohol Lab is instrumental in assisting TTB with its enforcement efforts in the tobacco and alcohol beverage areas. As individuals and businesses develop schemes to create counterfeit products for sale or attempt to sell illegal products in the market place, the labs lend their expertise in support of the investigations, which include, testing products, developing new test methodologies, and authenticating products using analytical technology. Manufacturers may also attempt to avoid tax or incur a lesser tax by improperly classifying various alcohol and tobacco products. The analytical work that the TTB labs perform, when such incidences occur, are instrumental in TTB's ability to pursue individuals and businesses who seek to evade taxes, engage in illegal activity, and defraud the U.S. Government.

Return on Investment:

The technical support provided by TTB Laboratories is critical to TTB's goals of developing science-based policies for industry regulation, and carrying out regulatory enforcement actions based on scientific data. TTB acquires new equipment that will provide laboratory personnel with the tools to ensure that the alcohol and tobacco products tested are compliant with TTB regulations and that the products submitted for analysis are authentic. The acquisition of the proposed new equipment will allow TTB chemists to access information that is currently not available to them.

To deliver effective technical support to TTB program offices and industry, the laboratories require, at a minimum, a set of key instruments that are essential for any modern regulatory analytical laboratory. Strategic investments have been made to build state-of-the art and world-class laboratories that are respected by industry, domestic and international regulatory partners, and the scientific community.

The benefits of the use of this investment in scientific equipment allows for sophisticated analysis carried out by TTB chemists that are needed for:

- * Complex mixture analysis
- * Quantification of the target compound
- * Physical and chemical properties of samples

TTB's Tobacco Laboratory provides comprehensive technical support to all TTB programs related to tobacco products, including investigations of tobacco cases, counterfeiting, diversion, and other illegal trade practices and tax evasion activities, as well as tax classification to protect the revenue. In support of Field Operations efforts, the Tobacco Laboratory provides technical assistance to special agents, the Intelligence Division, and the Trade Investigations Division for counterfeit and diversion cases on tobacco products.

TTB's Beverage Alcohol Laboratory continues to provide technical support to investigations of the illegal sale, production, and distribution of alcohol beverage products. In addition to TTB's investigations, it supports other Federal and State agencies in alcohol products investigations.

Accomplishments and Future Objectives:

TTB chemists routinely utilize the sophisticated instruments for the analysis of regulated products to determine their class and type for proper tax collection, authenticate products, confirm the truthfulness of label declarations, ensure product safety (e.g., pesticide, heavy metals, mycotoxins, prohibited ingredients, limited ingredients), support counterfeiting and tax evasion investigations and cases, help regulated industry export US products, and help industry to remain compliant with TTB laws and regulations.

In addition, with the rapid changes of technology, laboratory equipment becomes obsolete in a short period of time. Vendors develop new generations of instruments, typically stop supporting outdated equipment software, do not supply parts for old equipment, and phase out maintenance services for old equipment. Consequently, most laboratory instruments have finite life cycles. As the instruments reach the end of their life cycles, they must be replaced to maintain the requirements of accuracy and integrity of data listed previously.

The objective is to maintain scientific equipment to provide accurate and reliable data for both industry members and other stakeholders. The consequences of not replacing old and outdated instruments are:

* Loss of capabilities to effectively support program needs

* Increased risk of support disruption from equipment breakdown or malfunction

* Data produced by the old instruments may not be accurate and dependable

* Inaccurate technical conclusions from unreliable data. TTB enforcement actions based on unreliable data may not withstand the scientific or legal scrutiny or challenges from the industry * Loss of ISO 17025 accreditation of TTB laboratories. ISO 17025 accreditation of TTB labs is contingent on maintenance of functional and well-maintained instruments that are capable of generating accurate data

To avoid the situations mentioned above, TTB's laboratories developed a Yearly Equipment Refresh Program. The life-cycles for various instruments were developed based on instrument performance in the TTB laboratories, information received from other federal regulatory laboratories, and information from vendors on their support/service plans and new product development cycles.