Bureau: TTB

Investment Name: TTB Scientific Equipment Refresh

Type of Investment: Non-Major Non-IT Investment

Description:
Scientific equipment refresh at TTB's laboratories

Investment Anticipated Outlay: (In Millions of $):

Type	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M Sub Total (Including Gov FTE) Costs	0.00	0.60	0.60	0.60	0.60	0.60	0.60	3.00	6.60
Total Cost (Including Gov FTE)	0.00	0.60	0.60	0.60	0.60	0.60	0.60	3.00	6.60
Total Gov FTE Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of FTE represented by costs	0.00	0.00	0.00				0.00		0.00

Summary of Purpose, Goals, and Benefits:
TTB requires accurate and reproducible data and results from the laboratories to support regulatory compliance, tax classification and enforcement, rulemaking, and investigations. This requires well-functioning and well-maintained equipment. The instruments in the laboratories require periodic replacement, as they have finite lifecycles due to use. Technologies eventually become obsolete and the instruments are not serviceable as vendors stop carrying parts and software. Periodic replacement of the existing technologies is essential for TTB laboratories to remain state-of-the-art and effective. The TTB laboratory maintains a refresh model that tracks the lifecycle of each piece of scientific equipment.

Return on Investment:
Scientific instruments undergo wear and tear from prolonged use. 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 Vendors develop new generations of instruments, typically stop supporting outdated equipment software, do not supply parts for old equipment, and phase out maintenance services for old equipment.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The consequences of not replacing old and outdated instruments are:

ï¿½ Loss of capabilities to effectively support program needs
ï¿½ Increased risk of support disruption from equipment breakdown or malfunction
ï¿½ Data produced by the old instruments may not be accurate and dependable
ï¿½ Inaccurate technical conclusions from unreliable data. TTB enforcement actions based on unrealizable data may not withstand the scientific or legal scrutiny or challenges from the industry
ï¿½ Loss of ISO 17025 accreditation of TTB laboratories.

Requirements/ Benefits/ Mandates:
Legislative Mandate: TTB is responsible for the administration and enforcement of those

sections of the Internal Revenue Code of 1986 (IRC) associated with the collection of excise taxes on alcohol, tobacco, firearms, and ammunition, and the Federal Alcohol Administration (FAA) Act, which provides for the regulation of the alcohol beverage industry and the protection of U.S. consumers. The laboratories link directly to those strategic goals and legislative mandates. The TTB mission is carried out according to two principal strategic goals that, briefly stated, are: collect the revenue and protect the public.

The areas in which SSD chemists analyze alcohol and tobacco products in support of those legislative mandates include:
ï¿½ Regulatory compliance
ï¿½ Enforcement
ï¿½ Trade and regulatory investigations
ï¿½ Audits
ï¿½ Product safety
ï¿½ Trade barrier issue
ï¿½ Technical criteria for rulemaking
ï¿½ Tax Classification.
Audit Finding or Material Weakness: N/A
Agency Strategic Plan / Annual Performance Plan: N/A
Presidential Priority: N/A
Other Requirement: In order to provide the accurate data required for our customers and for SSD's ISO 17025 accreditation, the instruments must:
ï¿½Be fully operational, and be able to be calibrated
ï¿½Perform to generate accurate and dependable data
ï¿½Pass Quality Assurance/ Quality Control (QA/QC) before data can be collected and reported
ï¿½Be stable and yield consistent results for a long period of time
ï¿½Instruments under ISO scope must be able to be calibrated and certified by ISO accredited vendors
Above all, it is extremely important that the data generated are accurate and withstand the scientific and legal scrutiny so that policy decisions and regulatory enforcement actions can be adequately defended. 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. TTB chemists routinely utilize the sophisticated instruments for the analysis of regul.

Accomplishments:
The financial statements, which include a ï¿½Balance Sheetï¿½ for the bureau disclosed assets for the period ending 2013. Included in those reported assets were Laboratory equipment with an acquisition value of $6.4 million. SSD has 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 & new product development cycles.

Planned Objectives and Accomplishments:
The investment's objective for the CY, BY and budget out years is to ensure that the instruments in the laboratories are replaced periodically, as they have finite lifecycles due to use, and as new technologies are introduced in order to ensure that the equipment used at the laboratories provide accurate and reliable information for use with industry members and other stakeholders regarding regulatory, tax and safety matters. Without funds in TTB's base budget to refresh laboratory instruments and acquiring new technologies, it will be difficult both to

replace old instruments that have reached or are approaching the end of life-cycles or acquire new technologies. This situation will negatively impact SSD's ability to effectively support TTB program office needs and their missions.

Development, modernization, and enhancement timeframe:
BY+1: Laboratory scientific equipment refresh.
BY+2: Laboratory scientific equipment refresh.
BY+3: Laboratory scientific equipment refresh.
BY+4: Laboratory scientific equipment refresh.

Useful Life:
Year the investment began: 2015
End Year of the current planning cycle: 2019
Description of why the investment is not consistent with life cycle model defined in OMB Circular A-131.: The life-cycles for various instruments do vary (i.e. chromatographs, mass spectrometers, densitometers, smoke machine, etc.), and those lifecycles 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 & new product development cycles.

Performance Evaluation and Metrics:

Metric Description	FEA Category	Measurement Condition	Reporting Frequency	Unit Of Measure	CY Target	Latest Actual Result	Date of Latest Actual Result