



ITEM 7.
Natural Resources - Consent

AGENDA ITEM REPORT

DATE: December 4, 2018
DEPARTMENT: Natural Resources
REQUESTER: Roland Ottolini
TITLE: Approve Purchase of Equipment for Environmental Lab that Tests for Dissolved Metals in Water

I. MOTION REQUESTED

A) Approve Piggyback No.190044KLC, to utilize pricing from the University of Florida Contract No. ITN15NH-115, Specialty Laboratory Supplies for the purchase of a PerkinElmer NexION 2000P Inductively Coupled Plasma Mass Spectrometer (ICPMS) from PerkinElmer Health Sciences Inc. in the total amount of \$176,107.40 which includes the trade in of an ElanDRC-e (serial number AH011290608) for \$64,110.00.

B) Authorize the use of the contract through the expiration date of May 4, 2022 or the expiration date of any renewals or extensions approved by the University of Florida, as approved in the department's annual adopted budget.

II. ITEM SUMMARY

Approves the purchase of an Inductively Coupled Plasma Mass Spectrometer (ICPMS) from PerkinElmer Health Sciences Inc., utilizing the University of Florida's Contract No. ITN15NH-115 in the total amount of \$176,107.40 and continued use of their contract for other miscellaneous items until it expires. The current ICPMS is used by the Environmental Lab to test for 18 different dissolved metals in drinking water and is currently at the end of its useful life. The purchase of the new unit was planned and funded in the current budget.

III. BACKGROUND AND IMPLICATIONS OF ACTION

A) Board Action and Other History

On June 27, 2006 the Board approved the purchase of the current ICPMS unit.

In October, Natural Resources requested the use of University of Florida's Contract No. ITN15NH-115, Specialty Laboratory Supplies, to utilize pricing for the purchase of a PerkinElmer NEXION 2000P ICP Mass Spectrometer. This contract completed the competitive procurement process and is available to piggyback. Also requested the purchase of PerkinElmer NexION 2000P ICP Mass Spectrometer from PerkinElmer Health Sciences Inc. in the total amount of \$176,107.40 which includes the trade in of an ElanDRC-e (serial number AH011290608) for \$64,110.00.

B) Policy Issues

C) BoCC Goals

Water Quality: The ICPMS is used to test for dissolved metals in water samples.

D) Analysis

A number of metals, such as manganese, zinc and copper are essential to biochemical processes that sustain life. However, these same metals, and a variety of others, can be severely toxic to aquatic organisms in high concentrations. Metals can be toxic to humans as well, such as lead and arsenic, if they are ingested directly from contaminated water or if they accumulate in organisms that are higher in the food chain and are consumed by humans. The Lee County Environmental Lab has more than a decade of historical data of monitoring of over 100 surface water sites for dissolved metals. In total, the Lab can test for 18 different metals simultaneously. It also allows the Lab to do most of the drinking water and waste water permit testing for trace metals for Lee County Utilities (the Lab's biggest customer), Florida Department of Environmental Protection, Florida Department of Health and Lee County citizens concerned about pollutants in their drinking water. Last fiscal year the Lab performed 2,054 tests for dissolved metals, and over the life of the instrument the Lab has analyzed over 18,569 samples. Having an outside Lab perform these same tests would cost the County approximately \$445,656 over the life of the instrument. The current instrument is over 10 years old, and although it is still performing its required function, it is approaching the end of its useful life and some replacement parts are no longer available from the manufacturer.

The new generation of ICPMS is designed to be more robust and handle a greater range of matrixes including sea water which the Lab currently does not test for metals. Advances in engineering and technology make the new instruments run faster and use less consumables such as gases and solutions. Improvements in selection of specific ions allows the instrument to measure both trace and high level metal containments within the same sample, thus saving on running the sample twice with multiple dilutions. Combining this instrument with a PrepFAST auto diluting auto-sampler will greatly increase the efficiency of metals analysis and save hours of preparation and analysis time, along with a reduced use of high purity gases and electricity use. These expenses will be cut by roughly 50% with the purchase of the new machine.

E) Options

IV. FINANCIAL INFORMATION

A)	Current year dollar amount of item:	\$176,107.40
B)	Is this item approved in the current budget?	Yes
C)	Is this a revenue or expense item?	Expense
D)	Is this Discretionary or Mandatory?	Discretionary
E)	Will this item impact future budgets? If yes, please include reasons in III(D) above.	No
F)	Fund: General Fund Program: Natural Resources - Environmental Lab Project: Account Strings: OC5370800100	
G)	Fund Type?	General Fund
H)	Comments:	

V. RECOMMENDATION

Approve

VI. TIMING/IMPLEMENTATION

VII. FOLLOW UP

ATTACHMENTS:

Description	Upload Date	Type
<u>Quote from Perkin Elmer</u>	11/19/2018	Backup Material
<u>University of Florida Contract No. ITN15NH-115</u>	11/21/2018	Backup Material
<u>UF- PerkinsElmer MOU</u>	11/27/2018	Cover Memo

REVIEWERS:

Department	Reviewer	Action	Date
Natural Resources	Turner, Nicole	Approved	11/21/2018 - 12:15 PM
Natural Resources	Ottolini, Roland	Approved	11/21/2018 - 3:06 PM
Budget Services	Guttery, Angela	Approved	11/26/2018 - 8:25 AM
Budget Services	Winton, Peter	Approved	11/26/2018 - 3:00 PM
County Attorney	Lira, Louis C.	Approved	11/27/2018 - 10:40 AM
County Manager	Harner, David	Approved	11/27/2018 - 10:49 AM