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Environmental Laboratory Privatization Expands; Process Enhancements Made

at a glance

The Department of Environmental Protection has taken some of the steps we recommended in a 2001 report on the potential for increasing the use of private laboratories. The department developed a process for determining its full internal costs, including both direct and indirect costs for performing laboratory services, established measures and standards for evaluating contractor performance, and established a process that can be used to help ensure the accuracy of private laboratory analytical results.

However, the department did not base its recent decisions to expand the use of private laboratory services based on a comparative assessment of in-house and private laboratory costs. The department should conduct analyses to compare its in-house costs with private laboratory costs before it increases the use of private laboratory services in the future.

Scope

In accordance with state law, this progress report informs the Legislature of actions taken by the Department of Environmental Protection (DEP) in response to a 2001 OPPAGA report.^{1,2} This report presents our

¹ Section 11.51(6), F.S.

assessment of the extent to which the department has addressed the findings and recommendations included in our prior report.

Background

The Department of Environmental Protection operates a laboratory that provides a range of environmental testing services, including analyses of water, air, soil, and hazardous material samples. These services support the department's efforts to protect, conserve, and restore the state's air, water, and natural resources. Laboratory personnel also perform other services, such as providing court testimony to explain laboratory analyses and collecting field samples for various department initiatives.

In Fiscal Year 2003-04, department laboratory personnel analyzed 143,344 biological and chemical samples and contracted with private laboratories for an additional 548 analyses. Most laboratory services during Fiscal Year 2003-04 were performed to support of department programs (80%) while 20% were for external customers, such as water management districts and other federal, state, regional, and local entities.

² *Justification Review: Environmental Laboratory Privatization Feasible; Cost Savings are Uncertain*, [OPPAGA Report No. 01-65](#), December 2001.

The Legislature appropriated \$9.6 million for the department’s laboratory in Fiscal Year 2004-05. The laboratory has 75 full-time equivalent positions and 39.75 additional other personal services (OPS) positions, many of which are filled by biologists and chemists.

Prior Findings

More environmental laboratory privatization feasible; cost savings uncertain

Our 2001 report found that the department had partially privatized its laboratory services, and used private laboratories for routine biological and chemical analytical support when its environmental laboratory was unable to conduct such tests due to emergencies and temporary capacity limitations. We concluded that contracting for analytical services under these conditions worked well because the department was able to provide additional testing services without expanding its laboratory’s existing capacity. In Fiscal Year 2000-01, the department contracted for 686 analyses (less than 1% of its analytical workload) to private laboratories.

Our 2001 report noted that the department would likely need to expand its testing capacity to meet the workload generated by the Total Maximum Daily Load (TMDL) Program.³ A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. The Federal Clean Water Act and the U.S. Environmental Protection Agency require states to establish TMDLs for each impaired water body.

At the time of our 2001 review, the department expected to test more than 700 impaired water body segments for various pollutants as part of the process of developing TMDLs. The department was planning to expand its use of

private laboratories to perform these tests because it did not have the resources to accommodate the level of testing required. We concluded that it was feasible for the department to privatize additional laboratory services. Our conclusion was based on three factors: private sector providers that could provide additional laboratory services were available; private providers were nationally certified and well-established; and private providers could meet the department’s service quality standards, including its turnaround time standards and detection limit requirements.⁴

However, we could not determine whether additional privatization would be cost-effective because the department’s pricing information did not include overhead costs and private laboratories excluded the cost of performing quality control activities and expert testimony costs from their price quotes.

We recommended that the department follow a business case approach in expanding the outsourcing of its laboratory work, including

- identifying the services to be outsourced;
- identifying its full costs for these services, including direct and indirect costs;
- comparing its costs, including monitoring costs, to private laboratory costs, and
- establishing a strong contract oversight mechanism.

Current Status

The department has taken many of the steps we recommended in outsourcing laboratory services. Specifically, the department developed a process for determining its full internal costs, including both direct and

³ OPPAGA reviewed the department’s progress in developing TMDLs in *Justification Review: Water Resource Management Program, Department of Environmental Protection, Report No. 03-12*, February 2003, pages 20-31.

⁴ Turnaround time is the length of time it takes a laboratory to perform routine tests and return the results to the requestor. In order for the results of analytical tests to be useful, the turnaround time must be as short as possible. Detection limits are the lowest concentration of a contaminant that can be reliably detected, and are important because the presence or absence of a contaminant may be the critical information desired from an analysis.

indirect costs, for performing laboratory services, established measures and standards for evaluating contractor performance, and established a process that can be used to ensure the accuracy of private laboratory tests.

Department improved its method for estimating full in-house laboratory costs

Since the release of our prior report, the department has developed and implemented a activity-based costing system. With this system, the department can identify the full costs for laboratory tests performed by its own employees, including direct costs, such as employee salaries and benefits and equipment, and indirect costs, such as providing executive direction, and administrative support services such as personnel, finance, and budgeting. As a result, the department should be better able to compare its costs to private laboratory costs when considering whether to expand the use of private laboratories.

However, the department did not base its recent decisions to increase the use of private laboratories on a comparative assessment of in-house and private laboratory costs. The department contracted with a private laboratory in October 2004 to obtain additional data in support of TMDL Program implementation efforts. The private laboratory will collect data and conduct tests that the DEP laboratory does not have the capacity to perform. The department also expects to contract with a private laboratory for routine biological and chemical analytical services before the end of Fiscal Year 2004-05. Under this contract, a private laboratory would perform tests when the department laboratory's workload demands exceeds its capacity. Department managers reported that by contracting for these tests, the department would not need to permanently increase the number of its in-house department laboratory employees or expend resources to expand the capacity of its laboratory. They indicated that the department did not consider whether private laboratories could perform the needed

services at a lower cost to the state. We recommend that the department conduct analyses to compare its in-house costs with private laboratory costs before it increases the use of privatize laboratory services in the future. The department's activity-based cost system should help it to validly compare in-house costs to private laboratory costs.

Department plans to use computerized application to ensure the accuracy of private laboratory test results

In January 2003, the department hired a consultant to develop a computerized application that could be used to evaluate the quality of data provided by private laboratories in Florida. This application, the Florida Automated Data Processing Tool (ADaPT) performs data quality and accuracy checks that department employees previously performed on a manual basis. The department is currently using ADaPT to evaluate data produced by its own laboratory; however, it is not yet using it to evaluate data from private laboratories. The department expects to begin using the application to evaluate certain chemistry data from private laboratories next month and plans to expand its use to other private laboratory tests in the future. The department also will require new contracts to include provisions requiring private laboratories to submit analytical results to the department in the ADaPT format. These steps, once implemented, should help the department ensure that private laboratories are providing accurate data.

The Florida Legislature

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Project supervised by Tom Roth (850/488-1024)

Project conducted by Larry Novey (850/487-3768) and Michelle Harrison (850/487/9220)

Gary R. VanLandingham, OPPAGA Director