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April 17, 2012

TO: Each Supervisor

FROM: Jonathan E. Fielding, M.D., M.P.H. J E Fielding MD
Director and Health Officer

SUBJECT: **REPORT ON THE FEASIBILITY OF MOVING THE TOXICOLOGY LAB FROM THE DEPARTMENT OF AGRICULTURAL COMMISSIONER/ WEIGHTS AND MEASURES TO THE DEPARTMENT OF PUBLIC HEALTH**

On December 6, 2011, your Board directed the Chief Executive Officer (CEO) to report back within a month on the feasibility of moving the Environmental Toxicology Lab (ETL) from the Department of Agricultural Commissioner/Weights and Measures (ACWM) to the Department of Public Health (DPH).

On December 28, 2011, the CEO provided a status report to your Board wherein the CEO advised that there were critical matters yet to be discussed and/or assessed that could have a significant impact on the final recommendation. Additionally, the memo indicated that DPH would provide the final report.

On December 20, 2011, January 18, 2012, and March 20, 2012, a workgroup comprised of staff from ACWM, DPH, and CEO met to review and discuss the following topics related to the feasibility of transferring ACWM's ETL to DPH:

- The history and origin of the ETL;
- The mission, duties, services provided, and clients served by the ETL and DPH's Public Health Laboratory (PHL);
- The certification requirements and mandates of the ETL and PHL;
- The licensing and certification requirements of the staff in the ETL and PHL;
- An understanding of how the County's placement of the ETL in ACWM compares to the placement of other toxicology labs in the State of California;
- The organizational structure and budgetary composition of the ETL and PHL; and
- The operational issues and financial constraints affecting both the ETL and PHL.

On December 22, 2011, representatives from the DPH PHL met with staff from ACWM's ETL and completed an initial site visit of the ETL to observe and obtain a better understanding of its operation, laboratory equipment, and space needs.

Background

Environmental Toxicology Laboratory

Originally created in 1973 within the public health branch of the Los Angeles County Department of Health Services, the ETL was moved to ACWM in 1982. The purpose of this transfer was to better ensure the detection and enforcement of the proper use of pesticides as directed under a contract with the California Department of Food and Agriculture. When the State program ended, the ETL remained in ACWM.

Today, the ETL is a specialized laboratory offering a range of analytical and consulting services to both the private and public sectors. The ETL is currently the only environmental testing laboratory in the State of California at the county government level.

While there are no federal or State mandates that require Los Angeles County to have an environmental toxicology laboratory, certain County operations, such as water and sewerage services provided by the Department of Public Works (DPW), require periodic testing at a State-approved laboratory. Tests performed by the ETL are also performed by private labs, although laboratories may not perform the full spectrum of analyses offered by the ETL.

Current clients (and respective work by volume) of the ETL are as follows:

DPW (68%)
- Watershed Management
- Waterworks
- Water Resources
- Sewer Maintenance
- Flood Maintenance

DPH Environmental Health (10%)
- Drinking and Well Water Programs
- Lead Poisoning Prevention

County Fire Department (12%)
- Camp and Fire Station drinking and waste water

ACWM (5%)
- Pesticide wipe samples, Board of Supervisors requested studies

County Parks and Recreation Department (1%)

County Internal Services Department (1%)

Individual Municipalities (1%)
- Santa Fe Springs and Signal Hill

Private Companies (2%)
- ADM Mailing Company, LA Biomed WIC Program, Malibu Country Club, Honda/Acura of Downey, U & I Water

The ETL is a fee-based operation. The ETL's budgeted net County cost (NCC) as of the fiscal year (FY) 2011-12 Final Adopted Budget is $993,000 and is projected to be $981,000 in FY 2012-13. Presently, rates being charged for a variety of tests performed in the ETL are lower than the industry standards and may not be reflective of actual costs for the testing processes. In a 2010 survey, the ETL compared its rates for ten common drinking water tests to rates charged by three local private environmental testing labs, which indicated that the ETL rates are lower in nine of ten instances. In additional rate comparisons performed in 2011 and early 2012, comparing rates of all ETL analyses also offered by local private laboratories, ETL rates were determined to be lower than the average of private lab rates in 52 of 61 cases. Regrettably, efforts over the past few years to conduct comprehensive reviews of charge rates were not completed due to unresolved errors discovered in time studies, retirement of the laboratory Deputy Director, recent implementation of the Laboratory Information Management System (LIMS) software (which has required a significant investment in laboratory staff time for training and system incorporation into lab processes), and the need for consideration of LIMS-initiated efficiencies and/or costs in determining final rates. The fact that comparisons to private lab rates for water testing show feasibility for possible rate increases with a relatively low risk of loss of analytical business to such laboratories, together with the fact that water analyses comprise the bulk of the ETL work, suggest that some increases are achievable that may serve to diminish the NCC associated with operation of the ETL.

Currently, the ETL has four vacant budgeted positions, one of which is that of the Deputy Director, budgeted to provide managerial oversight of the ETL. The ETL occupies 9,240 square feet on two floors at the ACWM South Gate facility. The space is no longer adequate for the ETL operations and there may be needs for repair/upgrade of the physical facilities. If the ETL were moved from this facility, the vacated space could be used for other ACWM operations. This would relieve existing space management concerns for ACWM and eliminate the need to acquire additional office space to accommodate current staff workspace and equipment storage needs resulting from ACWM's more than 30 percent expansion over the past five years, for which no additional office space has been acquired.

Public Health Laboratory

The PHL's mission and mandate is to provide laboratory testing services geared towards the detection, control, and prevention of communicable diseases of public health importance within the County of Los Angeles. To carry this out, the PHL performs high-complexity testing for the diagnosis and treatment of human infections, which primarily falls into five arenas: (1) primary testing in support of County agencies tasked to detect high-incidence or emerging diseases such as sexually-transmitted infections or pandemic influenza; (2) reference testing to provide definitive identification of problematic infections in patients from hospitals, medical centers, or clinics; (3) phenotypic and molecular fingerprinting of bacterial strains linked to outbreaks of foodborne disease; (4) microbiological environmental testing in support of surveillance and remediation activities concerning potable and industrial waters, and consumable products such as dairy for possible contamination or adulteration; and (5) threat analysis and biomonitoring for the presence of Select Agents, including anthrax, plague, and tularemia.

In addition to DPH programs, the PHL provides these laboratory services to internal and external clients within the County. The majority of these clients are interfaced with the PHL through the Sunquest Laboratory Information System, which enables electronic test ordering and reporting. Over 400,000 tests are performed annually by the PHL. The PHL is governed by a number of federal licensures and State mandates.

The total operating expenditures for the PHL has varied considerably over the past several years. Prior annual expenditures for the PHL are as follows:

- FY 2008-09 = $12.0 million;
- FY 2009-10 = $12.1 million; and
- FY 2010-11 = $9.7 million.

The estimated PHL expenditures for FY 2011-12 are $10.0 million. Based upon FY 2010-11 actual expenditures and FY 2011-12 estimated expenditures, the PHL may potentially experience a 20 percent decrease in funding. During the past two years, federal grant funds awarded to the PHL, including the Tuberculosis Control and Prevention and the Enhanced Laboratory Capacity Grants, have similarly decreased in the range of 9.4% to 14.9%.

Currently the PHL has 12 unfilled budgeted positions. The main facility at 12750 Erickson Avenue in Downey occupies approximately 33,000 square feet and is currently operating at an estimated 90 percent capacity. Build-out capacity involving additional large-scale automated instrumentation is extremely limited and would require reconfiguration of existing infrastructure. Much of the small amount of vacant remaining space (approximately 10 percent) is currently used for Centers for Disease Control and Prevention-dictated training activities or office space. An additional problematic issue is that the laboratory in Downey sits at the end of a power grid and therefore is subject to extreme fluctuations in electrical energy during the summer months. If there were additional expansion of the PHL, options for improving the electrical supply would have to be explored.

Organizational Alignment of the ETL in the County

The feasibility of moving the Toxicology Lab to DPH was extensively explored by the ACWM, DPH, and CEO workgroup. Below is a summary of key issues with respect to the organizational alignment of the ETL in the County:

ETL and PHL Workloads and Operations

- The ETL and the PHL have disparate workloads, function different operationally, require different types of State certifications, and necessitate different types of certified staffs. Due to these factors, the ability to integrate staffs to improve quality and gain efficiencies is limited.

Health Officer Responsibilities

- Laboratory analysis is an important capability needed for the County Health Officer to perform investigative and regulatory activities. The PHL provides this capability for the most common types of disease threats and cases for DPH, namely bacteriology and virology services. In other more limited areas, such as regulation of small water systems, DPH relies on laboratory results submitted by the operator from a State approved laboratory. In some instances, the ETL provides this service, but most water agencies use an in-house or private lab. The DPH regulatory responsibility would continue regardless of the ETL organizational placement.

Space

- Both the ETL and the PHL have space constraints. The PHL does not currently have the space needed to house the ETL and so new space would need to be created. The projected minimum costs to construct a new ETL at the Downey site range from $3.9 to $5.2 million. It should be noted that even if the ETL remained at its current site, which would not be ideal for oversight/supervision, there would still need to be significant costs to upgrade the facility.

Next Steps

As is evident in the descriptions of the labs, the workloads of the ETL and the PHL as well as the staffing and laboratory certifications are very different. Moving the ETL to DPH would not result in significant efficiencies.

Based on our review, there are the following two possibilities:

1) *Remain status quo and keep both labs as they are currently functioning.* With this option, there are two significant considerations: 1) most of the analytic work of the ETL is not related to the core mission of ACWM and 2) the ETL consumes space that the ACWM would otherwise use as needed office space.

2) *Transfer the ETL to DPH.* Under this option, there are the following issues to consider: different missions/workloads; different required certifications and specialized staff; the current administrative/supervisory capacity at the PHL is limited; additional oversight responsibilities would be required if the ETL was transferred to DPH; and the PHL has no currently available space to absorb the ETL.

Given the complexities of the ETL and PHL, there is no apparent optimal organizational alignment of the ETL in the County. In order to complete a more comprehensive analysis, DPH, ACWM and CEO will proceed with an independent third party County-approved consulting firm with experience in public management and/or health services to review the issue and provide recommendations. The consultant should also be asked to examine the workload, budget, and space needs of the ETL. In order to facilitate this, we are requesting a three-month extension to July 10, 2012.

If you have any questions or would like additional information, please let me know.

JEF:rkf

c: Chief Executive Officer
Acting County Counsel
Executive Officer, Board of Supervisors
Department of Agricultural Commissioner/Weights and Measures