

CASE STUDY / LAW A ENVIRONMENTAL SUPPORT

ON-CALL ENVIRONMENTAL SERVICES KEEP PROGRESS FLYING

To support Southern California's regional aviation demands, Los Angeles World Airports needed environmental and technical consulting services on demand to deliver high-quality support, no matter the environmental challenge.



A FLEXIBLE CONTRACT FOR COMPLEX OPERATIONS

Large, complex aviation facilities require a wide scope of environmental services on standby to meet environmental regulations and achieve ambitious sustainability goals.

PROJECT STATS

CLIENT

Los Angeles
World Airports

LOCATION

Los Angeles, California

12

ENVIRONMENTAL
SUPPORT CATEGORIES

6

TASK ORDERS
COMPLETED

16.5%

SMALL AND
DIVERSE BUSINESS
UTILIZATION SPEND

As the aviation authority for the second-largest city in the U.S. and hub of one of the world's most populous metropolitan areas, Los Angeles World Airports (LAWA) is faced with various challenges of providing an airport system to serve a major portion of the Southern California market. LAWA owns and operates Los Angeles International Airport (LAX) and Van Nuys Airport (VNY), as well as land holdings in Palmdale.

As part of its commitment to high-quality environmental services, LAWA selected Burns & McDonnell for on-call environmental and technical consulting services to support its operations. LAWA's large and complex aviation facilities require a broad scope of environmental services on standby; therefore, the three-year contract covers services for air and water quality, hazardous materials, petroleum storage tanks, site investigations and environmental management, sustainability and more.

DRINKING WATER

Through weekly site visits under the direction of our certified operator, our water resources team monitors the Palmdale facility treatment system chemical dosage and a suite of water quality constituents. These visits allow

our team to maintain water quality and compliance with state board permit conditions, and review and certify that the facility manager maintains daily operations and maintenance logs. Our team also prepares and submits monthly, quarterly and annual monitoring reports to the state board to keep the facility in compliance with drinking water regulations. We also conduct emergency response procedures as needed. In 2020, we completed the renewal for the facility's drinking water permit, which serves as the guiding compliance document for the next five years.

Our water resources team also conducts routine monthly potable water sampling at various designated sampling locations throughout LAX. Each monthly service consists of sampling 10 separate accessible airside and landside locations. Each sample is analyzed in the field for pH, temperature, total chlorine and free chlorine, and total coliform and E. coli in a drinking water certified laboratory. We also conduct emergency water quality monitoring, including responses to exceedances of water quality standards, upset events related to a boil advisory, cross-connection or unplanned water main break repair.



PETROLEUM STORAGE TANKS

In support of LAWA's compliance with federal, state and local regulations and cooperative relationships with the California Unified Program Agencies, we worked with our subcontractors, including a woman-owned small business, to perform routine inspections and maintenance of the nine underground and 62 aboveground storage tanks at LAX, VNY and Palmdale.

We also conduct contingency services for as-needed tasks that require additional engineering, permitting and utility shutdown requests. Our team keeps LAWA's Spill Prevention, Control, and Countermeasure (SPCC) plans current and conducts annual training for facility employees.

ZERO WASTE PLAN

LAWA and the City of Los Angeles are continuously looking for new ways to improve their operations including reducing waste generation, increasing diversion and setting and achieving zero waste goals. In 2016, a previous waste characterization study found that LAWA disposed of an estimated 18,610 tons of waste in landfills. Our team is working closely with LAWA to develop a Zero Waste Plan (ZWP), a comprehensive road map to achieve

zero waste at LAX and VNY per its Sustainability Action Plan, Sustainable City pLAN, and Mayor's Executive Directive 25. The ZWP evaluates existing operations of LAWA-owned facilities and recommends strategies, performance targets and a monitoring framework for achieving zero waste.

To develop this ZWP, we reviewed existing LAWA waste handling practices and systems, describe the current materials management programs (e.g., pilot organics collection, food donation), identify recommended strategies, and establish future materials recovery goals and a monitoring framework utilizing key performance indicators (KPIs). KPIs include waste diversion rates, organics disposal reduction, and waste generation per capita, and others to measure progress toward zero waste. Some of these goals include improving reduction and recycling programs to achieve 25% and 50% nonconstruction waste diversion rates by 2025 and 2035, respectively.

SOUND INSULATION GRANT PROGRAM

We also partnered with LAWA engineering to provide technical support, construction, regulatory and technical tasks for Inglewood

Unified and Lennox school districts as part of the LAWA Sound Insulation Grant Program, which is being completed by a subcontractor. Services include school sound insulation oversight and on-site technical support and Federal Aviation Administration regulations, policy and industry standards support. In addition to project management and administrative support, we deliver a written monthly summary and other materials as needed.

ELECTRIFICATION

As part of an overall evaluation of how the electrification of terminals can impact economics and greenhouse gas emissions, we evaluated and performed the LAX electrification technical and economic feasibility study. This study assessed the capabilities of existing electric heating systems to meet terminal heating and domestic hot and chilled water generation needs. We determined the cost and environmental impacts of going electric by focusing on four terminal types — large and small terminals that either connect or operate independently to the LAX central utility plant. Our concluding report will inform decisions about the future of LAX terminal development and redevelopment projects.

