The Port of Los Angeles is known as one of the world’s most environmentally progressive seaports, and its success in dramatically reducing pollution from ships, trains, trucks and cargo handling equipment has influenced global strategies for greening the maritime industry and goods movement. Pioneering initiatives, such as the San Pedro Bay Ports Clean Air Action Plan (CAAP), have helped to accelerate sustainable practices among all links in the supply chain doing business in southern California and around the globe.

About the same time the Port of Los Angeles was developing the CAAP, it was also taking a hard look at itself and how to improve its internal track record on the environment. The result was the port’s Environmental Management System (EMS) – a lesser known, but equally significant component of its commitment to environmental stewardship.

“We never viewed sustainable practices as the sole responsibility of our business partners,” said port executive director Geraldine Knatz, Ph.D. “We always knew that environmental leadership started in our house.”

In 2003, the Port of Los Angeles teamed with the US Environmental Protection Agency and the American Association of Port Authorities to be among the first US seaports to establish an EMS programme – a comprehensive strategy for ensuring internal operations are conducted in accordance with the highest international environmental standards. Today, the Port of Los Angeles’ EMS is still going strong.

“The goal is continual improvement based on cultivating awareness and developing protocols that make sustainable practices part of an organisation’s permanent culture,” said Christopher Foley, environmental affairs officer for the Port of Los Angeles.

### An international standard

Established by the International Organization for Standardization, ISO 14001 is an international standard available to any company, organisation or institution seeking a strategy for minimising its environmental impacts while maximising resources and operational efficiency. The ISO 14001 EMS standard follows a ‘plan, do, check, act’ framework for organisations to identify significant environmental impacts, set goals for reducing their footprint, institute best practices and operational controls for meeting targets, and check progress through internal and external audits.

Adopting the processes and practices of ISO 14001 is purely voluntary, and some of the port’s business partners – most notably NYK at its Yussen Terminal in Los Angeles – are among those whose operations that also meet the EMS standard. The ‘system’ allows organisations to customise their programmes and set their own goals based on environmental priorities and requirements specific to their operations.

The standard sets the bar high, and compliance represents a serious commitment of financial resources and personnel. This is especially true for organisations like the Port of Los Angeles that voluntarily submit to an independent audit every three years to certify they meet the rigorous requirements.

The Port of Los Angeles was the first port on the US west coast to develop an ISO 14001 certified EMS. As America’s
busiest container port and given its location in California –
widely viewed as one of the most environmentally proactive
regions in the US—the port’s decision to take on the challenge
of developing an EMS speaks volumes about its values, said
Meredith Martino, AAPA’s director of publications, digital
media and technology and environmental policy expert.
“It demonstrates the port’s commitment to comprehensively
looking at its environmental footprint and always looking for
ways to improve its environmental performance,” Martino said.
“It also speaks to the value of an EMS,” she added. “That the
largest container port in the US sees it as an important tool,
even with all the other sophisticated things this port does
with its emissions inventories and clean air and clean water
programmes, underscores the value of this model and how it can
be used by others.”

Targeted improvement
Under ISO 14001, an organisation can either implement
the standard across-the-board or target a specific part of the
operation with a defined ‘fence line’. Like other seaports
that have established EMS programmes, the Port of Los
Angeles adopted the latter approach and identified its fence
line as its construction and maintenance (C&M) division.
The division employs nearly 300 craftspeople and supervisors
who, in performing their duties, are most likely to impact the
environment, said captain Jim Morgan, C&M director.
“C&M performs building, maintenance and repair work on
every square foot of the port’s property, which spans 7,500 acres
of land and water along 43 miles of waterfront,” said Morgan.
“Our yard is an 8-acre facility where we store hazardous
materials from all kinds of work we do in the field.”
The division employs electricians, equipment and vessel
operators, gardeners, tree surgeons, painters, labourers,
mechanics, machinists, electricians, plumbers, roofers, pile
drivers, welders, building engineers, sheet metal technicians,
carpenters, and heating, ventilation and air conditioning
(HVAC) technicians. In addition to maintaining and repairing
boats, wharves, roads, plumbing, equipment, and heavy
machinery, C&M is responsible for fuelling and fleet operations,
recycling and waste management programmes, and storm water
management systems.
The port’s first step was to look at its operations and facilities
with fresh eyes, said Foley. “ISO 14001 really forced us to look
at a lot of our practices. When you work on something day to
day, you can become blind to stuff that piles up that should be
disposed of or recycled.”
The port’s hazardous waste programme was a prime example.
Closer scrutiny revealed that non-hazardous waste was being
congregated with hazardous materials, the port was paying higher
hazardous waste rates to dispose of the mix, more oversight was
needed to ensure contractors were handling the waste properly,
and a significant portion of waste the port was accumulating
came not from the port’s own operations, but from illegal
dumping on its property.
New protocols make positive impact
By creating new protocols for identifying and handling waste, the port shrunk its hazardous waste stream from 79,344 pounds in 2006 to 11,060 pounds in 2011 – an 86 percent reduction in waste from bilge water, oil-based paint, other substances and materials considered toxic and subject to highly regulated treatment and disposal.

In doing so, the port reduced its compliance burden. Under California law, an organisation that generates 26,400 pounds or more of hazardous waste must meet more extensive documentation and reporting requirements.

ISO 14001 includes communication as a key EMS component to ensure operational controls work and best practices endure. Improving internal communication helped the Port of Los Angeles make huge strides in its environmental practices, and involving construction and maintenance workers in developing its EMS was crucial to the port’s success, Foley said.

“These are people normally called in to fix a problem somebody else caused,” said Foley. “Giving them a voice in designing and improving our EMS reinforces how important they are to the port and acknowledges their front-line expertise in maintaining a safe and healthy workplace.” Equally important was a buy-in from top management, which ensures an institutional commitment for the long run, he added.

The Port of Los Angeles went above and beyond the ISO 14001 communications requirement by creating a bimonthly EMS newsletter distributed throughout C&M that highlights its successes, flags work-in-progress and reinforces best practices and features a calendar that helps the entire organisation stay on top of compliance activities and deadlines. The port also installed kiosks at five locations within C&M where staff can access and review records and guidelines.

Forums where EMS team members from different divisions discuss issues and projects and a Continual Improvement Form (CIF) available to staff throughout the organisation are among the port’s model communications strategies developed cited in a 2007 report prepared for the USEPA to promote responsible growth of US seaports.

A springboard for success
While it isn’t easy to quantify all the benefits directly attributable to the Port of Los Angeles’ EMS, the case for green practices is supported by its location in an urban centre whose air basin is home to nearly 17 million people. Hundreds of thousands of people live and work in the immediate harbour area, and beaches, recreational boating and a cruise industry are part of day-to-day activity at the Port of Los Angeles.

Vacuuming dust-filled water from cutting concrete instead of allowing it seep into storm drains and collecting debris from scraping hulls rather than letting it float out to sea are among the practices that have helped the port reduce boost productivity and improve inventory control. The port’s EMS has also eased the burden of complying with a complex web of city, regional, state and federal environmental regulations, said environmental specialist Manny Ramirez, a member of the port’s core EMS team since its inception.

Rather than limiting the reach of the port’s EMS, the fence line serves as a springboard for expanding the programme, Ramirez added. When C&M workers go into other divisions, they take their environmental practices with them. Similarly, best practices have a ripple effect on tenants, contractors and vendors who see the benefits of sustainable practices first hand, he said.

Presently, the port’s EMS is undergoing an outside audit to renew its ISO 14001 certification. Setting new goals for continual improvement is as important to maintaining its certification as meeting existing objectives, said Christina Chang of ERM, a global environmental consulting firm hired by the port to help manage its EMS.

“One of the greatest benefits that the port has seen with its EMS is the fact that good institutional knowledge is captured and what you do gets passed on,” said Chang. “Certification shows that an organisation like the Port of Los Angeles is leaving behind a legacy that embraces this concept.”

“The mind-set of protecting the environment on a day-to-day basis is completely woven into the fabric of all C&M employees,” Morgan said. “They make the Port of Los Angeles a greener, cleaner place. Our employees are the ‘system’ in our EMS.”

ABOUT THE AUTHOR
Natalie Shore Peterson is an LA-based freelance writer specialising in the maritime industry and the San Pedro Bay ports. Her work includes coverage of major port development projects, landmark environmental initiatives, and business and economic trends affecting ports, international trade and goods movement. A journalist with more than 20 years’ experience, she formerly wrote for The Cunningham Report, an independent business weekly that covered US west coast ports and related trade and transportation issues.

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