



# Securing a Vital Seaport with Video AI

Vaidio.ai with Datastew

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There was no other system that could do what Vaidio did. We were able to deploy advanced AI analytics without changing a single camera.

Chris Millar, CEO, Datastew

## Challenge

A strategically important seaport—central to the movement of autos, refrigerated produce, fertilizer, and project cargo—plays a significant role in the U.S. logistics chain. Despite a compact physical footprint, it handles millions of tons of freight annually and shares a perimeter with a military installation, requiring elevated levels of security, coordination, and operational precision.

As the port's responsibilities have grown in scope and complexity, so too has the need for more advanced video intelligence. While the port had invested in a large, diverse network of IP cameras, increasing demand for real-time situational awareness, regulatory compliance, and operational agility made it clear that a more scalable, intelligent layer of analysis was needed—one that could work with its current infrastructure.

As with many ports balancing safety, throughput, and compliance, existing motion-based video systems were generating excessive alerts without enough actionable insights. Teams faced growing demands for real-time incident detection, environmental monitoring, and perimeter awareness—but with the ability to prioritize threats and efficiently review actionable alerts. At the same time, new mandates from agencies such as the California Air Resources Board (CARB) introduced additional compliance and documentation requirements.

The port sought a forward-looking solution that could:

- Work seamlessly with its diverse IP camera network.
- Reduce alert fatigue by filtering out false positives.
- Improve detection and response across security and environmental use cases.
- Scale efficiently to support future AI-powered operations and compliance needs.

## Impact

As external demands grew—from federal safety guidelines to CARB's 2025 rules—the limitations of the port's video capabilities became increasingly clear. To maintain high standards of safety and responsiveness, a better approach to video monitoring was needed.

- Security teams were spending too much time reviewing routine motion alerts.
- Verification of real incidents was slowed by manual camera review.
- Real-time documentation of emissions events—needed for compliance—was not possible.
- Operational stakeholders wanted more visibility into crane, yard, and perimeter activity.

By enhancing their existing infrastructure rather than replacing it, port leaders saw an opportunity to increase visibility, boost compliance readiness, and streamline security workflows without incurring significant capital costs or disrupting daily operations.



They had a large number of existing cameras—but their motion detection system was flooding guards with meaningless alerts. There was no way to separate the signal from the noise.

Chris Millar, CEO, Datastew

## Solution

Systems integrator DataStew partnered with Vaidio to deliver an AI-powered video analytics platform tailored to the port's operational and compliance priorities. The deployment used Vaidio's open, containerized architecture to run AI engines directly with cameras from the port's existing camera network—minimizing equipment replacement and reducing overall project cost.

By using Vaidio, Datastew enabled improved capabilities at the port:

- Object, person, vehicle, and boat detection
- Cross-camera tracking for real-time situational awareness
- Intrusion and tailgating alerts to protect secure areas
- PPE compliance monitoring for workforce safety
- Smoke, flame, and exhaust detection for environmental compliance
- Alert delivery to port police and Coast Guard partners
- Emissions event logging for CARB compliance

The system was designed for on-premise deployment, with low-latency processing and an intuitive dashboard to help operators triage alerts efficiently. DataStew also integrated Vaidio's outputs with the port's internal systems and external partner platforms.

## Results

By layering AI on top of the port's existing camera infrastructure, the team achieved significant improvements in operational intelligence and regulatory readiness:

- Substantial reduction in false positives, helping guards focus on real threats
- Faster incident response times, thanks to prioritized alerts and cross-camera tracking
- Enhanced environmental monitoring, with automated video evidence supporting CARB documentation
- Improved operational insight, with visibility into crane movements, yard congestion, and berth activity
- A future-ready AI foundation to support smart port initiatives—from drone patrols to predictive modeling

The result is a more proactive, efficient, and scalable security and compliance posture—delivered without disruption, and built for the future.

## About Datastew

DataStew designs and delivers advanced AI-enhanced security, sensor-fusion, and cyber-physical systems for critical infrastructure including seaports, airports, and higher-education campuses.