



CMAQ/Article 3 Project Application

Project Applicant Information

Lead Agency or Organization: Port of Hueneme		
Mailing Address: P.O. Box 608 333 Ponomo Street		
City: Port Hueneme	State: CA	Zip: 93044-0608
Contact Person Name: Christina Birdsey		Phone: (805) 488-3677
Title: Chief Operations Officer	E-mail: cbirdsey@portofh.org	

Project Information

<p>1. <u>Project Name:</u> ATVER (Alternative Technology for Vessel Emissions Reduction) Project</p>
<p>2. <u>Project Type:</u> (Check all that apply)</p> <p><input type="checkbox"/> Transit</p> <p><input type="checkbox"/> Bicycle Facility</p> <p><input type="checkbox"/> Pedestrian Facility</p> <p><input checked="" type="checkbox"/> Other: Air quality management project</p>
<p>3. <u>Project Description:</u> <i>(e.g. number of replacement or expansion vehicles including type, size, and purpose, for capital improvements include location, length, limits of work, size, etc.. If bike lane, include length and class.)</i></p> <p>The Port of Hueneme seeks funding to initiate and complete the ATVER Air Quality Improvement Project by procuring a proven alternative technology for ocean-going vessels to reduce main engine emissions for use while at berth. There is a very strong urgency to acquire funding for this project as the State implements the elements of Governor Brown's Executive Order B-32-15 which calls for a plan that embodies zero emissions, efficiency, and competitiveness. The Port seeks to achieve the rigorous International Maritime Organization (IMO) Tier 3 engine standard for oxides of nitrogen (NOx), and the California Air Resources Board (CARB) proposal for regulations to reduce PM, NOx and GHG emissions. An alternative technology is required for the Port to significantly reduce air pollutants in line with the targets and goals set forth by the Port and CARB from ocean-going vessels. This technology shall provide a more flexible and cost saving solution as it will not require ship modifications or extensive land-side infrastructure. This alternative technology is referred to as a "Sock" as it is slipped over the stack of the ocean-going vessel to filter the emissions while in the harbor. This Sock is connected to the vessels via barge or a land-based dock. The full funding of the ATVER Project includes procurement of the land-based sock technology and the barge-based sock technology.</p>
<p>4. <u>Project Location:</u></p> <p><input checked="" type="checkbox"/> Vicinity Map Attached</p> <p><input checked="" type="checkbox"/> Project Site Map or Site Plan Attached</p> <p><input checked="" type="checkbox"/> Photos Attached</p> <p><input type="checkbox"/> N/A</p>



5.

- ☐ Check Box if project is a stand-alone project
X Check Box if project is part of a larger project.

If project is part of a larger project, please describe:

The ATVER Project is a part of the Air Quality Strategic Action Plan in the Port's Board of Commissioners adopted Environmental Framework. ATVER is a mechanism to meet the reductions in emissions identified in the 2020 Port of Hueneme Strategic Plan. ATVER is also intended to enable ocean-going vessels to meet or exceed the International Maritime Organization (IMO) Tier 3 engine standard for oxides of nitrogen (NOx), and the California Air Resources Board (CARB) proposal for regulations to reduce PM, NOx and GHG emissions. ATVER is another strategy to achieve zero emissions at berth for a new class of ocean-going vessels. Current electric shore-side power services the refrigerated cargo ships to bring them to zero emissions. However, ATVER is critical to allow roll-on-roll-off (auto) ships and tanker (fertilizer) ships to achieve zero emissions at dock as well.

6. Financial Information:

	CMAQ	Article 3	Required 11.47% Matching Funds (check box below)	Additional Local Funds	Total Project Cost
PE	\$1,600,000	\$	\$183,520	\$	\$1,783,520
R/W	\$	\$	\$	\$	\$
CON	\$10,400,000	\$	\$1,192,880	\$	\$11,592,880
Total	\$12,000,000	\$	\$1,376,400	\$	\$13,376,400

Additional Financial Information

X Check Box if Requesting Toll Credits for CMAQ Local Match Requirements

7. Project Schedule:

SCHEDULE (month/year)			
	Funds Obligated	Start Date	Completion Date
Preliminary Engineering	Yes	Dec. 2017	April 2018
Environmental	Yes	March 2018	May 2018
Right-of-Way	n/a	n/a	n/a
Construction	No	June 2018	June 2019

Project Screening Information

8. Project Readiness: Briefly describe (no more than 100 words) the project work plan and timeline:



Total Timeline: 18 months

November 2017: Request formal bids for alternative at-berth emissions reduction Sock technology

January 2018: Award bid

May 2018: Complete Engineering and Environmental

June 2018: Construction begins per specific design

April 2019: Assembly on site

June 2019: Completion of construction and training

June 2019: Ribbon cutting

Check boxes for all items that have already been completed:

Preliminary Design

- ☒ Project Feasibility Study Completed
- ☒ Right-of-way needs and utility conflicts identified
- ☒ Vehicle specifications identified
- ☒ Planning Level Cost Estimates

30% Design

- ☒ Dimensioned drawings showing existing and proposed improvements, topography, utilities and row etc..
- ☒ Revised Cost Estimates and Schedule

Environmental Clearance

- ☒ CE or Checklist Complete
- ☐ Draft Environmental Document Completed
- ☐ Final Environmental Document Completed

Final Construction Plans, Specifications, and Estimates or Vehicle Specifications

- ☐ Construction Plans, Specifications Completed
- ☐ Final Vehicle Specifications and Bid Packet Completed
- ☒ Ready to Advertise
- ☒ No Right of way needed or Right-of-Way Acquired
- ☐ No need to relocate utilities or Utilities Relocated

 3 Number of Community Meetings Held (not including meetings to adopt community-wide master plans)

9. Safety and Security: Will the project improve safety and security at existing facilities or improve safety by building new facilities? Please list the specific improvements proposed and how they will improve safety.

Yes, this Sock technology used for ocean-going vessels at berth can also be used as a back-up system if issues arise with our shore-side power infrastructure. This allows for the safe shut-down of power connection systems and switchgear without increasing emissions reductions. This safety back-up is also reason for funding both a land-based and a barge-based sock.

10. Air Quality Improvement: Briefly describe how the project will improve air quality.

- For bicycle and/or pedestrian projects please provide estimated new average daily trips.
- For bicycle and/or pedestrian projects please provide average daily traffic volumes on adjacent or nearest parallel roadway.
- For transit, bicycle and/or pedestrian projects provide estimated annual VMT reduced.
- Average projected ridership.



- Will the project improve the level of service of a transit system? Yes, Supply chain, goods movement.
- For transit vehicle purchases, please provide vehicle type, fuel type.

This project has a profound and immediate impact on Ventura County as the Port of Hueneme is one of the most productive and efficient commercial trade gateways for niche cargo on the West Coast. The Port moves \$9 billion in goods each year and consistently ranks among the top ten U.S. ports for automobiles and fresh produce. Port operations support the community by bringing \$1.5 billion in economic activity and creating 13,633 trade-related jobs. Trade through the Port of Hueneme generates more than \$93 million in direct and related state and local taxes, which fund vital community services. Without funding of ATVER, much of this is in jeopardy.

ATVER is the only way for the Port to enable additional vessel classes to achieve zero emissions at berth. By virtue of how global fleets operate, a roll-on-roll-off operator owns a fleet of hundreds of vessels. Out of those hundreds, only one may call the Port two to five times a year, making the \$1 million to retrofit a vessel unviable. However, ATVER is the cost effective answer to this issue. The Sock technology can be used for all the various types of vessels in the shipping industry, and will be housed at the Port itself.

ARB is advancing a process to promulgate regulations to achieve zero emissions at berth for all ocean-going vessels. Implementing the equipment, technology, and infrastructure to meet these regulations is an extremely daunting and heavy lift for the Port of Hueneme. As a public agency, the port is not a profit creator, but a job creator and facilitator of trade. As such, the Port faces insurmountable challenges to keep pace with the California only laws and regulations. The Port needs to keep its customers competitive or the business will move outside of the state. Already, the Port of Hueneme has one of the greenest strategic plans in the state, and strives to be a proactive steward of the environment. The Port needs this funding to continue its commitment to the environment and to meet the new ARB regulations.

The air quality improvements resulting from ATVER will serve not only the local community and air basin, but also the South Coast basin as a whole. The approximate reductions for an expected system based on targeted utilization is 135 tons/year of NOx, 9 tons/year of Sox, 3 tons/year of PM, equating to over 147 tons/year of pollutant reductions.

This project will also reduce the overall emissions of the goods movement supply chain by allowing vessels that have not been able to retrofit for shore-side power to continue to call the Port of Hueneme and still meet or exceed the Port's and CARB's targets for emission reductions. It also allows for a back-up system and added flexibility to the Port's shore-side power infrastructure by enabling a vessel to call another berth instead of sitting idle at sea or changing course while waiting for a berth with shore-side power plug-in capability to open up. Furthermore, the land-based Sock will service those ships whose plug-in capability is located on the dock-side of the vessel. By funding the barge-based Sock as well, will allow those vessels with opposite plug-ins or those which are sitting idle outside the harbor, to utilize the Sock technology as quickly as possible, reducing emissions even more.

11. Project's Potential to Increase Transit System Capacity and/or Ridership, Attract Active Transportation Users, Reduce Motor Vehicle Trips and Serve Destinations: Describe the project's direct relationship to streets, bicycle facilities, pedestrian facilities, transit systems, employment centers, and activity centers.

N/A



12. Network Connectivity and Local or Regional Significance: Does the project serve more than one mode of transportation? ☒ Yes ☐ No

If yes, please explain how:

The ATVER project is of high local and regional significance as it directly impacts the goods movement supply chain. By adding the Sock technology, the imported goods will come to Ventura County in a much more environmentally sustainable way. Currently, ships with retrofitted shore-side power technology can dock on the South Terminal of the Port and plug into shore-side power. However, this leaves non-retrofitted ships on the North Terminal running their diesel engines while the unloading and loading of goods takes place. By procuring the Sock technology, the Port can ensure greatly reduced emissions for vessels calling on the North Terminal of the Port and of those non-retrofitted vessels calling the South Terminal as well.

This not only affects the ocean-going vessels, but is also affects the entire goods movement supply chain by keeping trucks off the highways and less rail cars on the railroads. To examine this impact, the Port commissioned Martin and Associates to conduct an economic impact study evaluating the potential loss of business as a result of the new CARB regulations. The study (attached) concluded that without implementing this Sock technology to bring vessels into compliance with the new regulations, the Port would lose 25% of its current customers, not to mention the future loss of new customers. This 25% of customers have identified that the cost to retrofit their ships with shore-side power capable technology is higher than the cost of shipping the same goods to the Gulf of Mexico or Pacific Northwest Ports and then trucking them to Ventura County instead. This not only eliminates many good paying jobs along the supply chain throughout Ventura County, but it is also much worse for the air quality of the entire region.

13. Local or Regional Significance: Is the project consistent with the local, regional or statewide plans, the District Air Quality Management Plan, or the Short Range Transit Plan? ☒ Yes ☐ No

14. Local or Regional Significance: Is the Project identified in an adopted Local or Regional Transportation Plan (Short Range Transit Plan, Bicycle, Pedestrian, Active Transportation, Strategic Plan, CMP, ITS plan, Signal Plan, SRTS Plan, Corridor Plan) or Capital Improvement Plan? ☐ Yes ☐ No

If yes, please provide the name(s) of the document(s):

ATVER is identified as ship-to-shore emissions reduction alternative technologies in the 2020 Port of Hueneme Strategic Plan, Oxnard Harbor District's Environmental Framework, and will be included in the upcoming Clean Air Action Plan. It is also a direct mechanism to achieve the identified improvements in the SCAG 2017 Federal Transportation Implementation Plan as RTP ID: 1O0705 (Project ID: VEN160401).

15. Bicycle Wayfinding Study: Is the Project Identified as a missing gap in the Bicycle Wayfinding Study? ☐ Yes ☒ No

If yes, please provide the route number from the Study <https://www.goventura.org/vctc-bicycle-wayfinding-plan>:



16. Local or Regional Significance: Briefly describe the public participation process (e.g. public meetings, public notices, project website, mailings, newspaper articles, etc...). How did the agency consider comments and responses from meetings when designing the project?

The Port hosted several stakeholder and community workshops to gain input for the development of the 2020 Port of Hueneme Strategic Plan (adopted on October 12, 2015). The Port held a comment period starting June 17, 2015 with a Public Hearing on July 13, 2015 at its Board of Harbor Commissioners Meeting, to ensure community approval of the plan. These meetings drew representation from various community groups including:

- Ventura County Transportation Commission
- Ventura County Air Pollution Control District
- City of Port Hueneme
- City of Oxnard
- Naval Base Ventura County
- County of Ventura
- Nature Conservancy
- Coastal Conservancy
- Economic Development Corporation of Oxnard
- BMW
- Channel Islands Logistics
- Cool Carriers
- WWL
- Sun Coast Calamari
- Mission Produce
- Ports America
- SSA Marine
- TracTide
- Freeport
- Brusco Tug
- And various private citizens

The Port also conducted a community-wide survey asking residents to share their perspective of the Port and their priorities for the area. The results showed that Ventura County residents identified job creation and environmental responsibility as their two biggest priorities. These findings, along with several others included in the survey, were the foundation for the 2020 Port of Hueneme Strategic Plan.

17. Transit Project Necessity: For Transit Projects, describe the Project's necessity in relation to the Continued Operation of the Existing Transit System with Reliable Equipment.

As more aggressive regulations are voted into law by Sacramento, it is the local agencies who end up being responsible for their implementation. California already has the strictest air quality and environmental regulations in the Country. However, many of these regulations are unfunded. Ports are left to shoulder the cost of implementation. Being a niche port, the Port of Hueneme handles over \$9 billion in cargo annually, yet only makes \$1.5 million in reserves each year. When it comes to implementing the equipment and practices necessary to meet the existing and new environmental regulations, the Port does not have the revenues to do so alone. This is why the Port needs CMAQ funding to initiate and complete the ATVER project.



Many of the vessels that load and unload cargo at the Port call several other ports around the world. This means that under current and new air quality regulations, every one of these companies would need to retrofit their vessels to plug into shore-side power while at Hueneme. From many of these companies, it ends up being cheaper to send their vessels to the Gulf Coast or Pacific Northwest and have the cargo trucked or railed into Ventura County instead of retrofitting their entire fleets for shore-side power. The ATVER Project would eliminate this barrier by providing the Sock technology to place on existing vessels when they were in the harbor. ATVER allows the Port to continue growing economically while meeting the current and new air quality regulations. It is a win for all of Ventura County as they will enjoy cleaner air and all the associated health benefits as a result. Yet, it is even more so a success for the over 13,633 local residents whose incomes are a result of the Port; they will breathe easier and be able to keep their family sustaining jobs. By funding the ATVER Project, VCTC would be enabling the Port to continue operating while remaining competitive for customers importing through the Port of Hueneme.



CEO CERTIFICATION

I hereby certify that the applications included in this submittal package represent this agency's complete proposal for projects recommended for funding at this time. Should the projects be approved for funding by the Ventura County Transportation Commission, this agency will commit the local match as specified in the applications, and will make a priority of meeting the stated project delivery deadlines.

This agency is willing and able to maintain and operate the projects contained in the applications, and hereby assures that it will do so, with the proviso that the agency is permitted to transfer this responsibility to another qualified agency that is willing to do so.

Kristin Decas
Signature

Kristin Decas
Printed Name

8/21/17
Date

CEO/Port Director
Title*

Port of Hueneme
Agency

*Must be signed by City Manager, County Executive Officer, County Transportation Agency Director, or other organizational CEO.



Attachment 1
Project Site Map

Shore Based Sock Technology

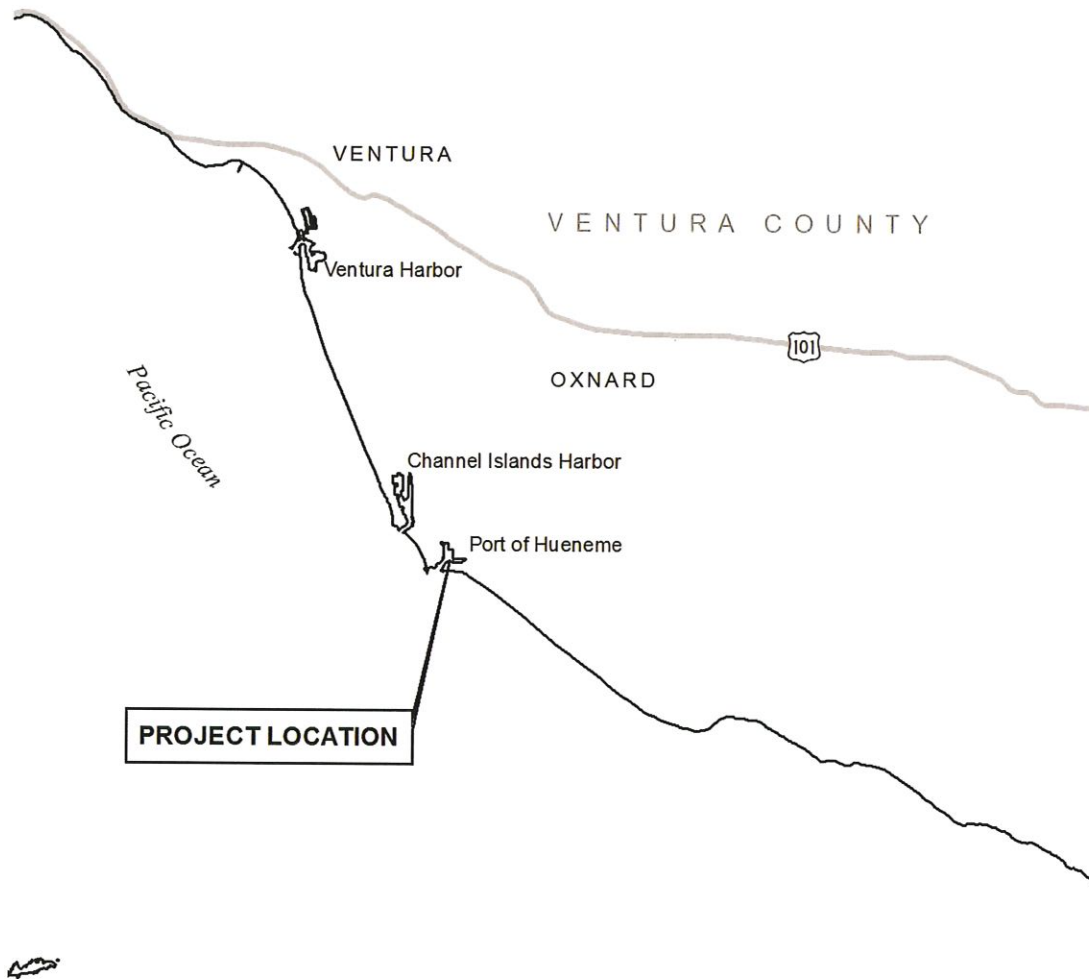
Barge Based Sock Technology





Attachment 2

Vicinity Map





Attachment 3

Photos of Sock Technology



Sock being used via barge platform



Sock being used via on-dock platform