BOARD MEETING DATE: September 6, 2024 AGENDA NO. 3

PROPOSAL: Execute Memorandum of Cooperation on Building Transpacific

Partnerships for a Green Maritime Economy, between South Coast AQMD and the Harbor Department of the City of Long Beach in Southern California and the North American Representative Office of Shenzhen, the Shenzhen Port Group Company Limited, and the Yantian International Container Terminals Limited in Shenzhen,

China

SYNOPSIS: South Coast AQMD, together with the Harbor Department of the

City of Long Beach and several Chinese entities based in Shenzhen, People's Republic of China, including the North American Representative Office of Shenzhen, the Shenzhen Port Group Company Limited, and the Yantian International Container

Terminals Limited, have jointly developed a proposed

memorandum of cooperation (MOC) to establish transpacific partnerships to promote green development of ports and maritime economies that prioritize sustainability and public health around the Pacific Rim. Potential areas of cooperation include clean energy, zero- and low-carbon environmental initiatives, green infrastructure development, and emission reductions from oceangoing vessels. Signing of the proposed MOC will take place in

Shenzhen, China, on September 22, 2024.

COMMITTEE: Mobile Source, August 16, 2024, Reviewed

#### **RECOMMENDED ACTION:**

Authorize the Chair or her designee to execute the attached MOC between South Coast AQMD and the Harbor Department of the City of Long Beach in Southern California and the North American Representative Office of Shenzhen, the Shenzhen Port Group Company Limited, and the Yantian International Container Terminals Limited in Shenzhen, China, including authorization to incorporate subsequent non-substantive modifications to the MOC language and/or minor administrative revisions as warranted by future circumstances.

Wayne Nastri Executive Officer

#### **Background**

Mobile sources account for about 80 percent of all smog- and particulate-forming NOx emissions in the South Coast Air Basin. By 2030, ocean-going vessels (OGVs) are projected to become the largest emission source, generating 32.6 tons per day of NOx or roughly one-fifth of total NOx emissions from all mobile sources in the region. The majority of OGVs that visit the Ports of Long Beach and Los Angeles are registered under foreign flags. NOx emissions from foreign-flagged ships are primarily subject to international regulations enacted by the International Maritime Organization (IMO). Current federal marine engine standards for OGVs are only applicable to U.S.-flagged ships, which transport just 1.5 percent of total U.S. waterborne imports and exports by weight. Given the regulatory framework and the long useful life of the OGV fleet, innovative strategies are needed to help accelerate the development and adoption of cleaner maritime technologies.

In 2018, staff began developing the Pacific Rim Initiative for Maritime Emission Reductions (PRIMER), to explore potential transpacific partnerships to reduce emissions from OGVs deployed on shipping routes that transverse through the San Pedro Bay Ports and other Pacific Rim ports. The PRIMER initiative was included in the 2022 AQMP as Control Measure MOB-12 and as an action in the AB 617 Community Emission Reduction Plan adopted by the Board for the Wilmington/Carson/West Long Beach (WCWLB) community.

In 2019, staff identified the southern Chinese city of Shenzhen as a potential partner and began exploring a potential memorandum of cooperation (MOC) with the Shenzhen Municipal Government through in-person and virtual discussions. Shenzhen is not only home to the world's fourth largest container port, it is also at the forefront of technology innovation and environmental protection. Shenzhen fully electrified its bus and taxi fleets by 2018 and, in the same year, it established ten green logistics zones where only zero-emission delivery vans and trucks are allowed to operate. Meanwhile, Shenzhen is the first Chinese city to introduce its low sulfur marine fuel regulation for vessels visiting the Port of Shenzhen, more than three years ahead of the IMO global sulfur cap. Shenzhen is therefore well positioned for the transition to sustainable port operations and as a partner to promote green transpacific shipping.

Despite a temporary pause in MOC efforts due to the ensuing global pandemic and geopolitical uncertainties, staff continued engaging with the North American Representative Office of Shenzhen (NAROS), a subsidiary of the Shenzhen Municipal Government. The continued engagement led to NAROS and South Coast AQMD

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<sup>&</sup>lt;sup>1</sup> South Coast AQMD. South Coast Air Basin Attainment Plan for the 2012 Annual PM2.5 Standard. https://www.aqmd.gov/home/air-quality/air-quality-management-plans/other-state-implementation-plan-(sip)-revisions/2012-annual-pm2-5-plan. The projection already accounts for emission reductions expected from the implementation of CARB's OGV At-Berth Regulation, which will minimize NOx emissions from auxiliary ship engines when ships are docked at ports.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Transportation and the Maritime Administration. Goals and Objectives for a Stronger Maritime Nation: A Report to Congress. <a href="https://www.maritime.dot.gov/sites/marad.dot.gov/files/2020-07/Final\_2\_25\_Stronger%20Maritime%20Nation%20Report\_.pdf">https://www.maritime.dot.gov/sites/marad.dot.gov/files/2020-07/Final\_2\_25\_Stronger%20Maritime%20Nation%20Report\_.pdf</a>.

co-organizing a virtual forum on green ports and low-carbon cities in 2021, with participation from multiple Shenzhen- and Hong Kong-based entities, global maritime and logistics industry, and the Port of Long Beach.

In 2022, NAROS expressed renewed interest in pursuing a multi-party MOC and followed up in 2023 with a revised proposal where the Shenzhen Port Group Company Limited, a state enterprise of the Shenzhen Municipal Government which manages the Port of Shenzhen, and the Yantian International Container Terminals Limited, which operates the world's largest container terminal in Shenzhen, were added as potential parties. In March 2024, during the visit of the Shenzhen delegation to Long Beach, executive staff from South Coast AQMD, the Port of Long Beach, and the Shenzhen-based entities affirmed this shared interest and intent to explore transpacific partnerships through a potential MOC.

#### **Proposal**

An MOC (see Attachment) is proposed to be executed between South Coast AQMD, the North American Representative Office of Shenzhen, the Shenzhen Port Group Company Limited, the Yantian International Container Terminals Limited, and the Harbor Department of the City of Long Beach (i.e., Port of Long Beach). The proposed MOC aims to establish transpacific partnerships in promoting green development of ports and maritime economies that prioritize sustainability and public health around the Pacific Rim.

The proposed MOC will provide a communication mechanism for the signing partners to seek future collaborations in areas such as clean energy, zero- and low-carbon environmental initiatives, green infrastructure development, and emission reductions from ocean-going vessels. Potential collaborations may include coordinated maritime technology demonstration projects, pilot programs to attract cleaner OGVs, as well as information exchanges and knowledge sharing conducted through virtual meetings, regional workshops, and so on.

The signing of the MOC is proposed to take place in Shenzhen, China, on September 22, 2024, during the China (Shenzhen) International Logistics and Supply Chain Fair. The proposed MOC will be valid for three years from the date of signing and may be extended with written consent by all signing parties.

#### **AQMP and Legal Mandates**

Pursuant to Health and Safety Code Section 40460 (a), South Coast AQMD is required to adopt an AQMP demonstrating compliance with all federal regulations and standards. The South Coast AQMD is also required by the California Clean Air Act, Health and Safety Code Section 40914, to adopt all feasible measures to attain air quality standards. The 2022 AQMP includes Control Measure MOB-12: Pacific Rim Initiative for Maritime Emission Reductions, to assist in meeting state and federal ambient air quality standards for ozone and fine particulate matter. The proposed MOC will implement MOB-12, as well as the AB 617 action for the WCWLB community, by building

transpacific partnerships between Shenzhen, China, and Southern California, and create opportunities for potential future collaborations, including but not limited to reducing NOx emissions from transpacific OGVs.

#### **Implementation and Resource Impacts**

Implementation of the proposed MOC will require the same level of resources currently budgeted to cover staffing, as well as services and supplies, for the development of the PRIMER initiative. Any future collaboration projects facilitated by the proposed MOC may require additional resources which will be specified when any such project is proposed to be implemented.

#### **Attachment**

Proposed Memorandum of Cooperation on Building Transpacific Partnerships for a Green Maritime Economy, between South Coast AQMD and the Harbor Department of the City of Long Beach in Southern California and the North American Representative Office of Shenzhen, the Shenzhen Port Group Company Limited, and the Yantian International Container Terminals Limited in Shenzhen, China

# Memorandum of Cooperation

Building Transpacific Partnerships for a Green Maritime Economy

This Memorandum of Cooperation ("MOC") is made and entered into by and between:

South Coast Air Quality Management District of the State of California of the United States of America

Harbor Department of the City of Long Beach, California, the United States of America

North American Representative Office of Shenzhen, People's Republic of China

Shenzhen Port Group Company Limited

Yantian International Container Terminals Limited

The entities listed above are hereinafter referred to separately as the "Party" or collectively as the "Parties."

IT IS AGREED by the Parties as follows:

### I. Purposes of Cooperation

The Purpose of this MOC is to support and coordinate technical exchanges and programmatic collaboration between Shenzhen and Southern California in areas such as clean energy, zero- and low-carbon

environmental protection, and green infrastructure development. By piloting coordinated efforts towards a green maritime economy around the Pacific Rim focusing on the deployment of emissions reduction, decarbonization, and energy efficiency technologies, the Parties wish to inspire similar efforts by other Pacific Rim regions and cities in promoting regional economic development that prioritizes sustainability and public health.

This MOC provides a communication mechanism for the Parties to exchange ideas, share knowledge and experience, and plan for implementation of coordinated actions. This MOC also provides a collaboration platform for facilitating mutually beneficial endeavors, including but not limited to potentially establishing a multi-regional framework to coordinate efforts and programs among relevant organizations, institutions and businesses.

This MOC aims to promote exchanges and cooperation among ports and other relevant organizations and businesses operating in Shenzhen and Southern California, guided by our common goals of ensuring quality of life and sustainable economic development for all populations and our shared vision of developing a green maritime economy around the Pacific Rim with high standards. This MOC establishes a fundamental mechanism for pragmatic multilateral exchanges and cooperation among

the Parties in the exercise of their respective interests and authorities based on the principles of equality and mutual benefit. However, this MOC does not constitute or create any legally binding or enforceable rights or obligations, expressed or implied.

### **II. Areas of Cooperation**

To fulfill the purpose and vision of this MOC, the Parties may undertake cooperative actions in mutually agreed areas as follows:

- (a) Under this MOC, the Port of Shenzhen and the Port of Long Beach will explore sister port partnership building so as to strengthen communication, cooperation, and knowledge exchanges in areas such as exploration of emission reduction opportunities along shared shipping routes, planning and development of green port infrastructure, and deployment of shipping emission control technologies, with the goal of jointly promoting sustainable development of shipping and logistics industry that provide goods movement services between the U.S. and China;
- (b) Active sharing of experience in regional governance. Building on their piloting efforts for programmatic multi-regional collaboration between Shenzhen and Southern California, the Parties will initiate and further promote cooperation among Pacific Rim regions and cities in deploying emission control and decarbonization technologies. The Parties will convene multi-city meetings to share experiences and lessons learned

from implemented programs and provide suggestions and considerations on each other's policies and programs;

- (c) Promoting collaboration related to green port and green maritime technologies. Working towards a green maritime economy around the Pacific Rim, the Parties will help promote sustainable development of port economy and maritime industry, and encourage businesses and organizations operating in Shenzhen and Southern California to strengthen collaboration and promote research, development, and deployment of green port and green maritime technologies;
- (d) Facilitating exchanges and collaboration related to other relevant green technologies and green infrastructure development. Under the collective will to promote emission reductions, decarbonization, energy efficiency, and sustainable development, the Parties are committed to facilitating technical exchanges between businesses and organizations operating in Shenzhen and Southern California that are engaged in clean energy and environmental protection, and promoting programmatic collaboration related to green technologies and green infrastructure development; and
  - (e) Other areas of common interest to the Parties.

### **III. Forms of Cooperation**

Forms of cooperation may include the following and any other forms as mutually agreed by the Parties:

- (a) Exchange of relevant information, knowledge, and experience, which includes sharing pertinent and publicly disclosable documents, program implementation guidelines, regulatory text, and other resources;
- (b) Exchange and visits between the Parties' relevant personnel, including regular business calls and electronic communications, and periodic in-person meetings, workshops, and/or project and technology exhibitions, as warranted;
- (c) Multi-regional and multi-city exchanges and sharing of experience among Pacific Rim regions and cities;
- (d) Specific project collaborations in developing and demonstrating pollution-cutting marine technologies; and
- (e) Collaborative pilot program(s) to collectively reduce emissions from trans-Pacific ocean-going vessels.

## IV. Implementation Mechanism

This MOC will be implemented by the Parties through the following mechanism:

- (a) The Parties agree to meet regularly during the term of this MOC to discuss the implementation details of various cooperation programs covered herein, and report the progress and status of relevant activities conducted jointly or separately by each Party;
- (b) All activities under this MOC must be conducted in compliance with the laws, regulations, and relevant rules applicable to each of the

Parties and subject to the availability of funds, personnel, and other resources available to each Party. The specific cooperation projects and matters under this memorandum shall be executed in accordance with a separate cooperation agreement signed by respective parties;

- (c) Consultation and exchanges of information and documents shall preserve the security and integrity of the systems, processes, and information (including trade secrets) of each Party and each of the third parties involved in the activities carried out under this MOC, and be without prejudice to the Parties' legal requirements or obligations, which may prevent the exchange of certain confidential information and documents under this MOC; and
- (d) The Parties shall endeavor to resolve any disagreement arising from the implementation of this MOC through amicable consultations and to finalize the resolution thereto in writing.

### V. Term, Amendment and Termination

The Parties agree as follows:

- (a) This MOC is valid for a period of three years from the date of signature by the legal or authorized representative of each Party. The content and the term of this MOC may be amended with the mutual written consent of all Parties;
- (b) This MOC may be terminated by any of the Parties and shall cease to be valid 90 days (including Saturdays and Sundays) after the -6

terminating Party has notified the other Parties in writing of such termination. Following termination of this MOC, the Parties must take necessary measures to ensure that the ongoing activities implemented hereunder are concluded in a swift and appropriate manner; and

(c) Nothing in this MOC precludes any Party from entering into any other MOC with an entity inside or outside of the People's Republic of China or the United States of America.

This MOC is signed on \_\_\_\_\_, 2024, in \_\_\_\_\_\_ in quintuplicate, one copy for each Party. Each copy of this MOC is made in both Chinese and English, both texts being equally authentic.

### [Signature Page of This Memorandum of Cooperation ONLY]

For and on behalf of South Coast Air Quality Management District of the State of California of the United States of America For and on behalf of Harbor Department of the City of Long Beach, California, the United States of America

For and on behalf of
North American Representative Office of Shenzhen,
People's Republic of China

For and on behalf of Shenzhen Port Group Company Limited For and on behalf of Yantian International Container Terminals Limited