

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE ENVIRONMENTAL PROTECTION AGENCY  
OF THE UNITED STATES OF AMERICA  
AND  
PUBLIC UTILITIES BOARD  
OF THE REPUBLIC OF SINGAPORE  
ON SUSTAINABLE URBAN WATER MANAGEMENT**

The Environmental Protection Agency (“EPA”) of the United States of America and the Public Utilities Board (“PUB”), the national water agency of the Republic of Singapore (hereinafter referred to individually as “the Participant” and jointly as “the Participants”):

**RECOGNIZING** the common challenges both countries face in sound and sustainable management of water resources, including increasing demands on limited sources of water, emerging contaminants in water, and impacts of climate change and extreme weather events;

**RECOGNIZING** these challenges in the water sector have a disproportionate impact on vulnerable populations;

**ACKNOWLEDGING** the opportunity for our organizations and communities to gain from enhanced cooperation;

**RECOGNIZING** the 2003 Memorandum of Intent Between the United States of America and the Republic of Singapore on Cooperation in Environmental Matters (“the MOI”) and the U.S.-Singapore Environmental Plan of Action (2013-2014);

**FURTHER RECOGNIZING** that the Participants would like to enhance their cooperation on integrated water management strategies and sustainable water infrastructure and explore new ways of ensuring long-term sustainability of water use;

**RESOLVING** to cooperate to build on and benefit from the already strong relationship between the two governments, based on a foundation of similar environmental values and goals, including;

- The commitment to address global, regional, and local environmental threats to protect the safety and environmental health of our citizens and to assist governments in other countries to do the same with the respect to their citizens;

- The protection of human health and the environment to effectively contribute to the shaping of prosperous, secure, and sustainable economies now and for future generations;

Have reached the following understandings:

### **Section 1 OBJECTIVE**

1. The Participants intend to engage in a program of cooperation for mutual benefit and promote open exchange and cooperation on water issues.
2. The objective of this Memorandum of Understanding (“MOU”) is to promote bilateral cooperation, as well as joint work, as appropriate, in other countries, regionally or multilaterally on efforts of mutual interest in the area of water and long-term adaptation to climate change.

### **Section 2 FRAMEWORK**

1. The collaborative activities contemplated by this MOU are intended to be conducted in a manner consistent with the MOI.
2. Cooperative activities by each participant under the MOU are to be conducted in accordance with that Participant’s applicable law and regulations. This MOU is not an international agreement and does not give rise to rights or obligations under Public International Law.
3. The Participants intend to conduct cooperative activities under this MOU on the basis of equality, reciprocity, and mutual benefit.

### **Section 3 AREAS OF COOPERATION**

Specific areas of cooperation should be mutually determined by the Participants at appropriate intervals and may include, but are not limited to, such areas of mutual interest as:

1. Safe drinking water research, with particular reference to emerging contaminants in drinking water;
2. Watershed management to improve and protect water quality;
3. Technological research and development for innovative water and wastewater treatment and water quality management;
4. Wastewater effluent reuse; and
5. Sustainable water infrastructure.

#### **Section 4**

### **FORMS OF COOPERATION**

The Participants intend to cooperate at the technical level in the areas of cooperation as set out in Section 3 of this MOU through the exchange of information and experiences and, where appropriate, joint research and collaboration. The Participants intend to cooperate bilaterally, and where appropriate, the Participants also intend to cooperate on water issues in third countries, regionally or multilaterally, with strategic partners whose interests are aligned with those of the Participants. Cooperation under this MOU may include, but is not necessarily limited to:

1. Bilateral policy exchange;
2. Transfer or exchange of technical and governance information in the field of environmental protection;
3. Joint organization of and/or participation in symposia, conferences, seminars, workshops, and training courses;
4. Study tours, visitor exchanges, and temporary assignments of personnel from one Participant to the other;
5. Joint publications and cooperative research; and
6. Joint projects to demonstrate improved water management approaches.

#### **Section 5**

### **IMPLEMENTATION**

1. The Participants should develop a workplan to implement the MOU. Specific cooperative activities and the provisions under which they are intended to be conducted should be described in the workplan.

2. The Participants intend to involve and collaborate with strategic partners as appropriate from government and non-government agencies on elements of workplan implementation and research cooperation.
3. In the event of a substantial difference between the workplan and this MOU, the provisions of the MOU should prevail.
4. The Participants recognize that collaboration under this MOU does not represent a commitment of funds, personnel, or other resources. Additionally, collaboration under this MOU is subject to the availability of funds, personnel, and resources. No claims for the compensation for services rendered in connection with activities carried out in furtherance of this MOU are to be submitted by one Participant to the other. Any transaction involving reimbursement or contribution of funds between the Participants to this MOU is to be handled in accordance with the applicable laws, regulations, and procedures under separate written arrangements.

#### **Section 6**

### **PLANNING AND REVIEW OF ACTIVITIES**

Each Participant should designate a principal representative who, at such times as the Participants mutually determine, should meet to review the activities under this MOU and develop proposals for future activities as appropriate.

#### **Section 7**

### **STAKEHOLDER ENGAGEMENT**

The Participants should encourage and facilitate the engagement and participation of relevant stakeholders (such as research organizations, universities, and other government agencies) in cooperative activities under this MOU, as mutually determined by the Participants.

#### **Section 8**

### **INTELLECTUAL PROPERTY RIGHTS, INFORMATION SHARING AND SECURITY OBLIGATIONS**

1. Except as provided below, all technical information obtained through cooperative activities under this MOU should be available to the Participants.

2. Prior to engaging in cooperative activities under this MOU that may result in the creation of intellectual property rights, the Participants intend to consult regarding the allocation of any such intellectual property rights. The Participants intend to ensure adequate and effective protection of intellectual property created or furnished under this MOU.
3. In the event that either Participant deems information to be confidential under its laws and regulations, or identifies in a timely fashion information furnished or created under this MOU as “confidential,” each Participant endeavours to protect such information in accordance with its applicable laws, regulations and administrative practices. The Participants recognize that information may be identified as “confidential” if the information is not generally known or publically available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.
4. No information or equipment requiring protection in the interest of national defense or foreign relations and classified in accordance with its applicable national laws and regulations is intended to be provided under this MOU. In the event it is subsequently discovered that information or equipment which is known or believed to require such protection is identified as having been furnished inadvertently in the course of cooperative activities pursuant to this MOU, the matter should be brought immediately to the attention of appropriate officials and the Participants should consult to identify appropriate security measures to be mutually determined by the Participants, in writing, and applied to this information and/or equipment.
5. Sharing of confidential information in the course of activities under this MOU is not intended to serve as a warranty or representation regarding the information’s accuracy, completeness, fairness or otherwise, or to constitute advice by the other Participant.

**Section 9**  
**MODIFICATION**

This MOU may be modified at any time by mutual written determination of the Participants, and any modification should form an integral part of this MOU. Any modification should apply on such a date to be determined jointly by the Participants.

**Section 10**  
**INTERPRETATION**

Any difference between the Participants related to this MOU should be settled by consultation.

**Section 11**  
**EFFECTIVE DATES**

1. This MOU is intended to become effective on the date of its signing.
2. This MOU is intended to remain operative for five (5) years after it has been signed. Participants may review and decide to continue their cooperation for further periods of five years, or otherwise as mutually determined. Either Participant may discontinue its cooperation under this MOU by giving three (3) months' written notice to the other Participant.
3. In the event that a notice of discontinuation of cooperation is submitted, the Participants should promptly consult regarding the effect of discontinuation on the implementation of ongoing programs and activities under this MOU.

**Section 12**  
**MISCELLANEOUS**

1. This MOU is not intended to confer any rights on the Participants, or any third person or entity.
2. This MOU does not create any partnership, agency relationship, or legal responsibilities among the Participants.
3. All communications made pursuant to this MOU should be in writing and delivered personally or sent by prepaid registered post or by facsimile addressed to the intended recipient thereof or by electronic mail at their address or facsimile number or electronic mail address set out below (or to such other address or facsimile number or electronic mail address as any Participant may from time to time notify the others). The contact points for this purpose are:

For PUB:

Mr Harry Seah  
Chief Technology Officer, PUB

Address: 40 Scotts Road, Environment Building #15-01 Singapore 228231, Republic of Singapore  
Tel. No.: (65) 6326 2950 or (65) 6731 3355  
Fax No.: (65) 6326 2929

E-mail: [harry\\_seah@pub.gov.sg](mailto:harry_seah@pub.gov.sg)

a. For US EPA:

Mr. Mark Kasman  
Senior Advisor, Asia-Pacific Program

Address: USEPA, 1200 Pennsylvania Ave NW, MC 2650 R, Washington DC 20460;  
USA

Tel. No.: (1) 202-564-2024

Fax No.: (1) 202-565-8074

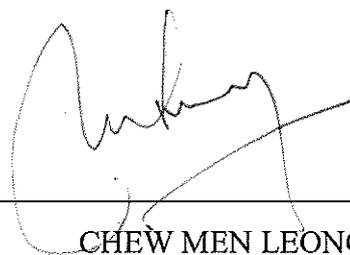
E-mail: [kasman.mark@epa.gov](mailto:kasman.mark@epa.gov)

**SIGNED** at Singapore this 27<sup>th</sup> day of June 2013



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DAVID ADELMAN  
UNITED STATES AMBASSADOR TO  
SINGAPORE  
For the U.S. Environmental Protection  
Agency



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CHEW MEN LEONG  
CHIEF EXECUTIVE  
For the Public Utilities Board of Singapore