REPORT OF

THE ELEVENTH MEETING OF THE BRUNEI-SINGAPORE WORKING GROUP ON THE ENVIRONMENT (BSWG)

# 13 April 2017

**Orchard Hotel, First Floor, Singapore**

1. **INTRODUCTION**

The 11th Meeting of the Brunei-Singapore Working Group on the Environment (BSWG) was held in Singapore on 13 April 2017.

The delegation comprised of :

* + Mr. Haji Shaharuddin Khairul bin Haji Anuar, Acting Director, Department of Environment, Parks and Recreation, Ministry of Development
  + Ms. Lim Sui Kau Alice, Director of Water Services, Public Works Department, Ministry of Development
  + Mr. Haji Mohd Salleh bin Hji Abd Karim, Acting Director, Department of Drainage and Sewerage, Public Works Department, Ministry of Development
  + Ms. Sarimah Haji Abu Bakar, Acting Head, Science, Technology and Environment Partnership Centre, Ministry of Education
  + Ms. Sarimah Haji Awang, Acting Head, Land use, Housing and Environment Division, Ministry of Development
  + Mr. Haji Ashrulsuhardy bin Haji Ibrahim, District Engineer, Water Services Department, Public Works Department, Ministry of Development
  + Mr. Haji Mohd Sidek bin Haji Mohd Yusof, Senior Engineer, Department of Drainage and Sewerage, Public Works Department, Ministry of Development
  + Dayangku Haryanti binti Pengiran Haji Petra, Acting Head, Pollution Control Division, Department of Environment, Parks and Recreation, Ministry of Development
  + Mr. Mohammad Akmal Fikry bin Yusra, Environment Officer, Pollution Control Division, Department of Environment, Parks and Recreation, Ministry of Development
  + Ms. Norharniah binti Haji Jumat, Head, International Affairs Unit, Administration Division, Department of Environment, Parks and Recreation, Ministry of Development

1. **AREAS OF COORDINATION** 
   1. There are a number of areas being shared between Singapore and Brunei Darussalam.
   2. Under the Memorandum of Understanding (MOU) on Bilateral Partnership in Environmental Affairs between Brunei Darussalam and Singapore, both countries shared close environmental co-operation and both countries provided updates on Solid Waste Management, Water Resources Management, Air Quality Management and Environmental Youth Exchange Programme.
   3. Policies, initiatives, monitoring and management systems were shared by the two countries.
2. **BENEFITS THAT BRUNEI HAS LEARNT**

**3.1 Solid waste management**

* The provision of dual chutes for housing developments built before 2014. Singapore explained that one recycling bin per housing block has been provided to all public housing developments since 2014. This would enable residents to practise recycling in developments not equipped with dual chutes. Dual chutes in private housing were not mandatory for developers of private housing developments. In order to improve waste collection infrastructure in Singapore, it would be mandatory for private housing developments (buildings taller than 4 storeys) to be equipped with dual chutes and this would apply to applications submitted from 1 April 2018.
* On Pneumatic waste conveyance system (PWCS), there was a limit to the length of transportation pipes used to transfer refuse from the housing chutes to the central collection centre. Singapore clarified that the distance of the transportation pipes was a constraint. Currently, the transportation pipes in Singapore were approximately a few hundred meters to about 1 km.  The PWCS helped convey waste from several housing blocks within the same estate to a central bin centre. This translated to better manpower productivity and a more efficient waste collection system.
* However older estates to be installed with PWCS and recycling chutes, there were cost considerations and space constraints. Thus, the focus on incorporating these infrastructure improvements are for new developments. There is a pilot project to retrofit an existing estate, Yu Hua, with PWCS under the Housing & Development Board (HDB) Greenprint Programme to study the cost and operational feasibility. Residents in existing developments were able to recycle using the existing recycling bins.
* Brunei Darussalam has benefited on the usage of regulations to mandate the implementation of dual chutes in private housing developments and mandatory waste reporting in commercial premises in Singapore are the basic requirements on waste management which were spelt out under the Environmental Protection Health Act (EPHA) and details would be specified in the Subsidiary Legislations, e.g. the associated Regulations and Code of Practice on Environmental Health (COPEH). In addition, mandatory waste reporting, an amendment was made to the EPHA as it was a completely new requirement, but only amendments to Subsidiary Legislations were needed for mandating dual chutes in private housing developments.

**3.2 Water resource management**

* Brunei Darussalam benefited from Singapore’s Smart Shower Programme. Singapore shared that a PUB-NUS (National University of Singapore) behaviour study, conducted from July 2015 to March 2016, on the use of smart shower devices providing real-time information, indicated that households were able to save 5 litres of water per capita per day, on average. Building on the findings, PUB would install the devices for some 10,000 new homes under a demonstration project over the next few years to study and validate the conservation effect of using such devices during showers. The successful use of such devices could help households save about 3% of their monthly water bill.

* Singapore had water quality standards for its reservoirs for recreational use, followed WHO guidelines on recreational water quality. The guidelines were based on enterococcus and chlorophyll-a measurements. Singapore also had a set of internal water quality guidelines on the treatability of raw water that included other parameters.
* Singapore’s approach toward enforcement of the drainage and sewerage regulations, and technologies such as body worn cameras to aid in the enforcement process.

**3.3 ASEAN Cooperation on Environment**

* The Meeting benefited on the following issues :

(i) Progress of the Study on the Economic, Health and Social Impact of Haze in 2015 on the ASEAN Region;

(ii) Progress of the Establishment Agreement (EA) of the ASEAN Coordinating Centre for Transboundary Haze Pollution Control (ACC THPC);

(iii) Updates on the ASEAN Working Group on Climate Change (AWGCC) and ASEAN Working Group on Environment Education (AWGEE);

(iv) Progress of the development of the ASEAN Strategic Plan on Environment (ASPEN) and the revision of the Terms of Reference (TORs) of the ASEAN Ministerial Meeting on Environment (AMME) and ASEAN Senior Officials on the Environment (ASOEN); and

(v) Preparations for the 19th Meetings of the Sub-Regional Ministerial Steering Committee (MSC) and Technical Working Group (TWG) on Transboundary Haze Pollution.

* On the ASEAN Haze Impact Study, Singapore shared that the hotspot data presented in the Study as part of the review of the extent of fire situation in ASEAN during that period should be hotspot data from the ASEAN Specialised Meteorological Centre (ASMC). This was given that an ASEAN Study should reflect the expertise of an ASEAN specialised centre that had been designated to monitor and assess land and forest fires resulting in smoke haze in ASEAN. Singapore also commented that it would be useful for the consultant of the Study to recommend a set of appropriate indicators for ASEAN member states to track the progress of regional cooperation on transboundary haze pollution, so as to improve ASEAN data sources and methodologies for similar studies in the future. In addition, the Study would contribute to the implementation of the ASEAN Haze-Free Roadmap.
* On the AWGCC, Singapore had hosted the Preparatory Meeting for the 8th AWGCC Meeting on 22 March 2017. Singapore expressed appreciation for Brunei Darussalam’s support for its AWGCC Chairmanship, and looked forward to working closely with Brunei Darussalam and other ASEAN member states to implement the various initiatives under the AWGCC Action Plan, including Singapore’s proposed project to “Improve Estimation of GHG Emissions from Land Use Change in Peatlands” that would be tabled at the 8th AWGCC Meeting.
* On the AWGEE, Brunei Darussalam expressed its appreciation for Singapore’s support for its AWGEE Chairmanship and shared that discussions had started between the two countries on the collaborative activities under the draft ASPEN, in particular, the ASEAN Youth Environment Forum (AYEF) and a recognition scheme for youth eco-champions. Brunei Darussalam shared that a framework for the recognition scheme would be surfaced at the upcoming 9th AWGEE Meeting on 23–24 May 2017, after which a concept note would be developed for the AWGEE’s recommendation for ASOEN’s endorsement at next year’s meeting.
* On the ASPEN, the Task Force met in Jakarta on 20–21 April 2017. Singapore explained that it would be more holistic for the ASPEN to acknowledge the AATHP and the ASEAN Haze-Free Roadmap, and for cross-reporting of environment-related meetings to facilitate the flow of information. On the issue of the review of the ASOEN TOR, Singapore shared that the AMME and ASOEN must retain a comprehensive overview of environmental issues at ASEAN, including haze-related issues which cut across other ASOEN subsidiary bodies’ work, such as nature conservation and biodiversity, as well as climate change.
* On the upcoming 19th TWG/MSC, the Meeting acknowledged that the MSC continued to be an important platform for the southern ASEAN region to discuss the challenges within the sub-region with regard to the prevention and mitigation of transboundary haze pollution. Singapore shared that the latest draft of the 19th TWG agenda had combined the agenda item on “Update on Fire and Haze Situation” with the agenda item on “Operationalisation of Comprehensive Plan of Action (PoA) in Dealing with Transboundary Haze Pollution”.

**3.4 Sustainable Consumption and Production**

* Singapore shared sustainable consumption and production (SCP) was an issue that was gaining traction, and that Singapore and Brunei Darussalam could explore this as an area of cooperation in the future. Brunei Darussalam welcomed the idea and agreed that there was scope for further collaborations, subject to the views of other Brunei Darussalam agencies that were also stakeholders on this issue.
* The meeting agreed to revisit whether SCP should be made a permanent agenda item of the BSWG and BSJCE/BSAEV in the run-up to the 12th BSWG meeting.

1. **PREPARATIONS FOR THE 11th BRUNEI – SINGAPORE JOINT COMMITTEE ON THE ENVIRONMENT (BSJCE) AND THE 11th BRUNEI – SINGAPORE ANNUAL EXCHANGE OF VISITS (BSAEV) MINISTERIAL MEETING**

* Singapore shared the tentative programme for the 11th BSJCE meeting and 11th BSAEV, which would be held on 20–21 April 2017.

**5. PREPARATION OF A DRAFT PRESS STATEMENT FOR 11th BSAEV**

* The Meeting agreed to the draft press statement for the 11th BSAEV, which would be further refined subject to the outcomes of the 11th BSJCE meeting and 11th BSAEV, and activities to be conducted under the BSWG.

**6. DATES AND VENUE OF 12TH BSWG MEETING**

* Brunei Darussalam will host the next BSWG meeting, and will inform Singapore of the date of the 12th BSWG meeting, tentatively in first half of 2018.

**7. NEW AREAS OF INTERESTS**

**SOLID WASTE MANAGEMENT :**

* During the 9th BSWG meeting, Singapore had offered an attachment programme for 1 to 2 weeks for 2 officers from Brunei Darussalam to gain first-hand experience of Singapore’s waste reduction initiatives.Brunei Darussalam would provide a tentative date for the programme.
* Singapore made an exchange visit during the 10th BSWG meeting, a 2-day visit to Brunei Darussalam took place on 17–18 April 2017. They made an in-depth sharing of Singapore’s solid waste management to the *Jawatankuasa Induk Isu-Isu Kebersihan* (National Committee on Cleanliness), and an on-the-ground experience of Brunei Darussalam’s solid waste management.
* Brunei Darussalam’s interest to learn about the following waste management areas and the challenges encountered during implementation:
  + PPP approach and the privatization of waste management facilities such as waste-to-energy plants.
  + Waste collection system in Singapore, including the derivation of uniform fee for waste collection.
  + Cost-benefit analysis of PWCS as compared to conventional waste collection.

Singapore agreed to share the requested information during the 2-day sharing experience in Brunei Darussalam on 17–18 April 2017.

**AIR QUALITY :**

* Singapore offered the 10-day training attachment programme on air quality monitoring for Brunei Darussalam, focusing on technical maintenance, which was first proposed at the 7th BSWG meeting, and vehicular emissions enforcement. Brunei Darussalam expressed interest in revisiting the programme and would work with Singapore on the tentative dates and topics.

**INCORPORATING ENVIRONMENTAL CONSIDERATION AT LAND USE PLANNING :**

* Singapore shared how environment considerations were factored into land use planning by ensuring proper siting of industries and checking that environmental requirements were complied with *via* building plan submissions by industrial developers.
* Singapore further shared that land use planning involved multiple agencies such as the Urban Redevelopment Authority (URA – the national land use planning authority) and the Jurong Town Corporation (JTC, which manages Singapore’s industrial land). The investors would submit their plans for development to a central portal, and the plans would be distributed to the various agencies. For polluting facilities, the developers would need to apply for a Written Permit from the Director-General of Environmental Protection, which would state the conditions under which the facilities were permitted to operate.
* Brunei Darussalam would like to connect with Singapore’s URA and JTC, as Brunei Darussalam’s Ministry of Development, which managed land use, was looking into zoning for industrial activities issues. Brunei Darussalam shared that with the enactment of the EPMO, it was mandatory for projects prescribed under Schedule 1 of the EPMO to conduct an Environmental Impact Assessment (EIA).

1. **CONCLUSIONS**

These meetings and MOU serves as a good platform for the two countries on issues merely being encountered by Brunei’s side. In other avenues, this performs as an opportunity for Brunei to learn practical issues and adopt solutions and implement the necessary actions. The BSWG platform has strengthened the working relationship amongst environmental officials from both countries. There are exchanges and mutual support in environmental programmes over the years for both countries. Singapore has a number of areas of expertise that Brunei could learn and seek for advice and support.

It is iterated that not only solid waste management, air quality monitoring and management, water resources management, environmental education to transboundary haze pollution but land use planning seems to be another avenue to be explored for Brunei to improve.

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