

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE ENVIRONMENTAL PROTECTION AGENCY  
OF THE UNITED STATES OF AMERICA  
AND  
THE MINISTRY OF ENVIRONMENTAL PROTECTION  
OF THE PEOPLE'S REPUBLIC OF CHINA  
ON SCIENTIFIC AND TECHNICAL COOPERATION  
IN THE FIELD OF ENVIRONMENT

The Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP), hereafter referred to as the "Parties," in accordance with and subject to the Agreement Between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology, signed at Washington January 31, 1979, as extended and amended (the "S&T Agreement"), and in order to promote scientific and technical cooperation and collaboration in the field of environmental protection, have reached the following understandings:

Article 1

The Parties shall conduct cooperative activities under this MOU on the basis of equality, reciprocity, and mutual benefit.

Article 2

Cooperative activities undertaken pursuant to this MOU may involve the following areas:

1. Prevention and management of:
  - a. air pollution;
  - b. water pollution;
  - c. hazardous waste; and
  - d. pollution from persistent organic pollutants (POPs) and other toxic substances;
2. Environmental threats to human health and to ecosystems;
3. Environmental policy and management;
4. Environmental education and public awareness;
5. Environmental law and enforcement; and
6. Other areas as determined by the Parties.

Article 3

Cooperation under this MOU may include the following forms:

1. Transfer or exchange of scientific and technical information in the field of environmental protection;
2. Joint organization of symposia, seminars, workshops, and training;
3. Study tours, exchanges, and temporary assignments of personnel from one Party to the other;
4. Joint scientific publications;
5. Joint projects to demonstrate environmental management approaches and technologies;
6. Cooperative research on subjects of mutual interest;

7. Provision of samples, reagents, materials, data, instruments and components for testing, evaluation and other purposes; and
8. Other forms of cooperation as may be determined by the Parties.

#### Article 4

The Parties shall encourage and facilitate the development of direct contacts between environmental and scientific groups from each country, including through the coordination of cooperation among government agencies, research institutions, business and industry, universities, and other entities, in conducting activities under this MOU.

#### Article 5

1. Five Annexes to this MOU have been prepared regarding the subject and form of cooperation contemplated under the MOU:
  - a. Annex 1 - Air Pollution;
  - b. Annex 2 - Water Pollution;
  - c. Annex 3 - Pollution from Persistent Organic Pollutants and Other Toxics;
  - d. Annex 4 - Hazardous and Solid Waste; and
  - e. Annex 5 - Development, Implementation and Enforcement of Environmental Law.
2. The Parties shall develop additional annexes to the MOU for each of the areas of cooperation contemplated under the MOU, as appropriate. Each annex shall outline the subject and form of cooperation and shall be an integral part of the MOU. Specific cooperative activities and the terms under which they will be conducted, including financial arrangements, shall be described in separate project agreements, strategies, or work plans.
3. In the event of a conflict between the terms of an annex and this MOU, the provisions of this MOU shall prevail.

#### Article 6

1. The Parties hereby establish a Joint Committee on Environmental Cooperation (JCEC). The JCEC will be co-chaired at the level of EPA Administrator or Assistant Administrator for International and Tribal Affairs and at the level of Minister or Vice Minister of the MEP, or their designees.
2. All working groups established by the Parties under this MOU will be guided by the JCEC.
3. The Co-chairs, by mutual agreement, may determine the remaining composition of the JCEC, the entities that may attend or participate in JCEC meetings, and may establish additional sub-committees or working groups as determined to be necessary to effectively implement this MOU. The specific structures and responsibilities of the sub-committees or working groups, and any modifications thereto, shall be determined by the JCEC.
4. The JCEC will meet at least once every two years. Such meetings shall be held alternately in the United States of America (USA) and The People's Republic of China (PRC). Prior to each meeting of the JCEC, the Parties shall agree to a meeting agenda. The Parties will endeavor to place items on the agenda

that cover a wide range of environment-related issues such as technical exchange, informational exchange, scientific research, and environmental policy.

5. Each Party will designate a Liaison Secretary. The Liaison Secretary shall be the EPA Deputy Assistant Administrator for International and Tribal Affairs, and at the Deputy Director General level for MEP, or their designees. The Liaison Secretaries shall serve as the points of contact for their respective Parties for the JCEC and shall provide strategic coordination, advise the JCEC and supply administrative support for meetings of the JCEC.

#### Article 7

All activities undertaken pursuant to this MOU shall be undertaken in accordance with the applicable laws of the Parties, as well as the availability of appropriated funds, personnel, and other resources of each Party.

#### Article 8

The treatment of intellectual property created or furnished in the course of activities under this MOU, the allocation of rights for such intellectual property, and business-confidential information obtained and/or exchanged pursuant to this MOU, will be governed by the provisions of Annex I (Intellectual Property) of the S&T Agreement.

#### Article 9

Both Parties agree that 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 shall 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 shall be brought immediately to the attention of the appropriate officials and the Parties shall consult to identify appropriate security measures to be agreed upon by the Parties, in writing, and applied to this information and equipment.

#### Article 10

The transfer of unclassified export-controlled information or equipment between the Parties shall be in accordance with the relevant laws and regulations of each Party. If either Party deems it necessary, detailed provisions for the prevention of unauthorized transfer or retransfer of such information or equipment shall be incorporated into the appropriate project agreements or work plans. Such information or equipment shall be marked to identify it as export-controlled, and the Parties shall consult to identify appropriate restrictions or other requirements regarding the transfer of this information or equipment.

Article 11

Upon entry into force, this MOU replaces the Protocol between the Environmental Protection Agency of the United States of America and the Office of the Environmental Protection Leading Group of the State Council of the People's Republic of China for Scientific and Technical Cooperation in the Field of Environmental Protection (the "1980 Protocol"), and established under the S&T Agreement.

Article 12

1. This MOU shall enter into force upon signature and shall remain in force for five (5) years, or for as long as the S&T Agreement remains in force, whichever is shorter. Either Party may terminate this MOU upon six months' written notification, through diplomatic channels, to the other Party. Such termination shall be without prejudice to the rights that may have accrued to either Party under Annex I to the S&T Agreement. The Parties shall consult regarding the effect of termination on the implementation of ongoing programs and activities agreed to under the MOU prior to the date on which notice of termination was given.

2. Either Party may request in writing, through diplomatic channels, to amend this MOU. Any amendment must be mutually agreed upon by the Parties in writing.

DONE at Beijing, this 10th day of October, 2010, in duplicate in the English and Chinese languages, both texts being equally authentic.



FOR THE ENVIRONMENTAL  
PROTECTION AGENCY OF THE  
UNITED STATES OF AMERICA



FOR THE MINISTRY OF  
ENVIRONMENTAL PROTECTION OF  
THE PEOPLES REPUBLIC OF CHINA

## ANNEX 1

### Air Pollution

#### Article 1 Authority

1. This annex to the Memorandum of Understanding (MOU) between the Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP) on Scientific and Technical Cooperation in the Field of Environment sets forth a framework for scientific and technical cooperation on air pollution.
2. Under this annex, agreements related to project activities, including those pertaining to financial and other relevant issues, will be developed by participating institutions. These project agreements shall be negotiated and executed by duly authorized representatives of implementing institutions, to include the EPA and MEP, together, the "Parties".

#### Article 2 Scope

Project activities under this annex may include work in the following areas:

1. Management of air quality, including standard setting, monitoring, emission measurement and inventories, modeling, emissions trading, stationary and mobile source control policies and strategies, funding, inter-governmental relations, and public information programs;
2. Management of clean energy technology (transportation, residential, industrial, and commercial) that helps to reduce or eliminate pollution and greenhouse gases;
3. Management, reduction, and elimination of air toxics;
4. Management of indoor air quality;
5. Compliance with and enforcement of air pollution and clean energy technology policies and standards; and
6. Other areas as determined by the Parties.

#### Article 3 Forms of Cooperation

Cooperation under this annex may include the following forms:

1. Transfer or exchange of scientific and technical information in the field of environmental protection;
2. Joint organization of symposia, seminars, workshops and training;
3. Study tours, exchanges, and temporary assignments of personnel from one Party to the other;
4. Joint scientific publications;
5. Joint projects to demonstrate environmental management approaches and technologies;
6. Cooperative research on subjects of mutual interest;
7. Provision of samples, reagents, materials, data, instruments and components for testing, evaluation and other purposes; and
8. Other forms of cooperation as may be determined by the Parties.

#### Article 4 Project Plans

Specific cooperative activities and the terms under which they will be conducted, including financial arrangements, shall be described in project agreements, strategies, and work plans.

Article 5  
Designation of Management Officials

1. Management Officials administering activities under this annex will work with participating institutions to facilitate implementation of project agreements, strategies, and work plans.
2. The Management Officials for the United States shall be the Deputy Assistant Administrator for the EPA Office of Air and Radiation and the Deputy Assistant Administrator for the EPA Office of International and Tribal Affairs.
3. The Management Official for China is the Deputy Director General for Air and Noise Pollution Control for the MEP Department of Pollution Prevention and Control.
4. Each Party may designate a replacement Management Official at any time upon written notice to the other Party.

## ANNEX 2

### Water Pollution

#### Article 1 Authority

1. This annex to the Memorandum of Understanding (MOU) between the Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP) on Scientific and Technical Cooperation in the Field of Environment sets forth a framework for scientific and technical cooperation on water pollution.
2. Under this annex, agreements related to project activities, including those pertaining to financial and other relevant issues, will be developed by the participating institutions. These project agreements will be negotiated and executed by duly authorized representatives of implementing institutions, to include the EPA and MEP, together, the "Parties".

#### Article 2 Scope

Project activities under this annex may include work in the following areas:

1. Drinking water quality;
2. Water quality surveillance and control;
3. Sanitation and wastewater management;
4. Watershed management, including source water and wetlands protection;
5. Water resources conservation and pollution prevention;
6. Compliance with water quality policies and standards; and
7. Other areas as determined by the Parties.

#### Article 3 Forms of Cooperation

Cooperation under this annex may include the following forms:

1. Transfer or exchange of scientific and technical information in the field of environmental protection;
2. Joint organization of symposia, seminars, workshops and training;
3. Study tours, exchanges, and temporary assignments of personnel from one Party to the other;
4. Joint scientific publications;
5. Joint projects to demonstrate environmental management approaches and technologies;
6. Cooperative research on subjects of mutual interest;
7. Provision of samples, reagents, materials, data, instruments and components for testing, evaluation and other purposes; and
8. Other forms of cooperation as may be determined by the Parties.

#### Article 4 Project Plans

Specific cooperative activities and the terms under which they will be conducted, including financial arrangements, shall be described in project agreements, strategies, and work plans.

Article 5  
Designation of Management Officials

1. Management Officials administering activities under this annex will work with participating institutions to facilitate implementation of project agreements, strategies, and work plans.
2. The Management Officials for the United States are the EPA Deputy Assistant Administrator for the EPA Office of Water and the Deputy Assistant Administrator for the Office of International and Tribal Affairs.
3. The Management Official for China is the Deputy Director General for Water Pollution Control for the MEP Department of Pollution Prevention and Control.
4. Each Party may designate a replacement Management Official at any time upon written notice to the other Party.



## ANNEX 3

### Pollution from Persistent Organic Pollutants and Other Toxic Substances

#### Article 1 Authority

1. This annex to the Memorandum of Understanding (MOU) between the Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP) on Scientific and Technical Cooperation in the Field of Environment sets forth a framework for scientific and technical cooperation on pollution from toxic substances.
2. Under this annex, agreements related to project activities, including those pertaining to financial and other relevant issues, will be developed by the participating institutions. These project agreements will be negotiated and executed by duly authorized representatives of implementing institutions, to include the EPA and MEP, together, the "Parties".

#### Article 2 Scope

Project activities under this annex may include work in the following areas:

1. Implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs);
2. Managing Persistent, Bioaccumulative and Toxic chemicals
  - a. Pollution from pesticides (e.g., Chlordane and Mirex);
  - b. Pollution from unintentional POPs (e.g., dioxin and furans);
  - c. Mercury; and
  - d. Polychlorinated Biphenyls (PCBs); and
3. Other areas as determined by the Parties.

#### Article 3 Forms of Cooperation

Cooperation under this annex may include the following forms:

1. Transfer or exchange of scientific and technical information in the field of environmental protection;
2. Joint organization of symposia, seminars, workshops and training;
3. Study tours, exchanges, and temporary assignments of personnel from one Party to the other;
4. Joint scientific publications;
5. Joint projects to demonstrate environmental management approaches and technologies;
6. Cooperative research on subjects of mutual interest;
7. Provision of samples, reagents, materials, data, instruments and components for testing, evaluation and other purposes; and
8. Other forms of cooperation as may be determined by the Parties.

Article 4  
Project Plans

Specific cooperative activities and the terms under which they will be conducted, including financial arrangements, shall be described in project agreements, strategies, and work plans.

Article 5  
Designation of Management Officials

1. Management Officials administering activities under this annex will work with participating institutions to facilitate implementation of project agreements, strategies, and work plans.
2. The Management Officials for the United States are the Deputy Assistant Administrator for the EPA Office of Chemical Safety and Pollution Prevention and the Deputy Assistant Administrator for International and Tribal Affairs.
3. The Management Official for China is the Deputy Director General for Solid Wastes and Toxic Chemicals Management for the MEP Department of Pollution Prevention and Control.
4. Each Party may designate a replacement Management Official at any time upon written notice to the other Party.

## ANNEX 4

### Hazardous and Solid Waste

#### Article 1 Authority

1. This annex to the Memorandum of Understanding (MOU) between the Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP) on Scientific and Technical Cooperation in the Field of Environment sets forth a framework for scientific and technical cooperation on hazardous waste.
2. Under this annex, agreements related to project activities, including those pertaining to financial and other relevant issues, will be developed by the participating institutions. These project agreements will be negotiated and executed by duly authorized representatives of implementing institutions, to include the EPA and MEP, together, the "Parties".

#### Article 2 Scope

Project activities under this annex may include work in the following areas:

1. Prevention, minimization, and recycling of hazardous and solid waste pollution from entering into the environment and thereby reduce the impact to the human health and ecosystems;
2. Management of treatment, transportation, storage, and disposal of hazardous and solid waste by strengthening, implementing and enforcing sound regulations and policies;
3. Remediation of hazardous waste contamination by developing a comprehensive understanding of the nature of the contamination, the impacts to the human health and ecosystems, and employing sound technologies to eliminate or reduce the contamination thus protecting human health and the environment;
4. Emergency response to hazardous materials incidents by building response capacities, by providing training, and developing protocols that establish the responsibilities of various levels of the government; and
5. Other areas as determined by the Parties.

#### Article 3 Forms of Cooperation

Cooperation under this annex may include the following forms:

1. Transfer or exchange of scientific and technical information in the field of environmental protection;
2. Joint organization of symposia, seminars, workshops and training;
3. Study tours, exchanges, and temporary assignments of personnel from one Party to the other;
4. Joint scientific publications;
5. Joint projects to demonstrate environmental management approaches and technologies;
6. Cooperative research on subjects of mutual interest;

7. Provision of samples, reagents, materials, data, instruments and components for testing, evaluation and other purposes; and
8. Other forms of cooperation as may be determined by the Parties.

#### Article 4 Project Plans

Specific cooperative activities and the terms under which they will be conducted, including financial arrangements, shall be described in project agreements, strategies, and work plans.

#### Article 5 Designation of Management Officials

1. Management Officials administering activities under this annex will work with participating institutions to facilitate implementation of project agreements, strategies, and work plans.
2. The Management Officials for the United States are the Director for the EPA, Region 9, Superfund Division and the Deputy Assistant Administrator for International and Tribal Affairs.
3. The Management Official for China is the Deputy Director General for Hazardous and Solid Wastes Management for the MEP Department of Pollution Prevention and Control.
4. Each Party may designate a replacement Management Official at any time upon written notice to the other Party.

## ANNEX 5

### Development, Implementation and Enforcement of Environmental Law

#### Article 1 Authority

This annex to the Memorandum of Understanding (MOU) between the Environmental Protection Agency of the United States of America (EPA) and the Ministry of Environmental Protection of the People's Republic of China (MEP) on Scientific and Technical Cooperation in the Field of Environment sets forth a framework for cooperation to strengthen the development, implementation and enforcement of environmental laws.

#### Article 2 Scope

This annex addresses issues in the development, implementation and enforcement of environmental law that often cut across different environmental media. These issues include, for example, development of environmental laws and administrative procedures; mechanisms for public involvement and access to environmental information; enhancing rulemaking and permit writing; monitoring and promoting compliance; enforcement and imposing penalties to deter noncompliance; development and review of environmental impact assessments and strategic environmental assessments; clarifying intergovernmental authorities and relationships; strengthening of institutional accountability and performance measurement; information management; and tools for resolving environmental disputes.

#### Article 3 Forms of Cooperation

Cooperation under this Annex may include the following forms:

1. Transfer or exchange of information relevant to environmental law development, implementation and enforcement;
2. Joint organization of symposia, seminars and workshops for a range of audiences both within and outside government;
3. Training on environmental law development and enforcement, environmental management and information management technologies;
4. Study tours, exchanges, and temporary assignments of personnel of the Parties;
5. Joint publications;
6. Joint projects to demonstrate, test, or evaluate environmental management, environmental law enforcement, emergency response and information management approaches;
7. Cooperative research on subjects of mutual interest; and
8. Other forms of cooperation as may be determined by the Parties.

#### Article 4 Project Plans and Activities

The Parties intend to jointly develop any necessary financial arrangements, project agreements, strategies, and work plans setting out any specific cooperative activities jointly decided upon.

Project activities under this annex are designed to complement, not duplicate, cooperation under Annexes 1-4 that focus on specific programs or media (i.e., air, water, toxic chemicals and hazardous waste). Any program or media specific work will be carried out either under the auspices of the program-specific Annex or in close collaboration with those involved in work under the program specific Annex, whichever is most appropriate. For example, project planning for activities related to emergency response shall be addressed in conjunction with project planning for Annex 4.

Project activities under this annex may include work in the following areas:

1. Improving the scope and substance of environmental laws and systems for managing and implementing environmental programs created by those laws;
2. Ensuring the enforceability of environmental laws, regulations, permits and other environmental management instruments;
3. Improving environmental compliance assurance and enforcement procedures, policies, and practices, including roles for the public and enterprises;
4. Strengthening the environmental impact assessment and review processes for plans, policies and projects, including decision-making processes, public participation, and post project monitoring and enforcement;
5. Establishing and strengthening capacity building programs and institutions designed to reach practitioners at all levels of government in the development, implementation and enforcement of environmental laws;
6. Exploring approaches for effective environmental institutions, management approaches and intergovernmental relationships (among and between national and sub-national levels of government) for the development, implementation and enforcement of environmental laws and policies, including organizational structures, institutional design, management oversight and accountability systems with performance measures to ensure programs are implemented for environmental results;
7. Assessing the effectiveness of the environmental department in law enforcement and launching programs to enhance the department's capacity;
8. Establishing and improving regulations and policies concerning emergency response for environmental pollution accidents;
9. Building capacity for Regional Supervision Centers including but not limited to oversight of implementation and enforcement of environmental requirements in cooperation with other levels of government, emergency response for pollution accidents, inter-provincial and inter-regional environmental planning, coordination, and dispute resolution;
10. Evaluating penalty provisions in the environmental laws and regulations, and the effectiveness of their enforcement;
11. Improving the functions between environmental agencies and the judicial authorities, exchanging experiences on judicial proceedings, including prosecution for environmental interests, and fosters the judicial authorities' involvement in the implementation of environmental laws;
12. Fostering access by the public to environmental information, public participation in the environmental decision-making process, and improving procedural arrangements for public participation in implementation and enforcement of environmental laws;
13. Collaborating on the environmental law and enforcement dimensions of trade and investment liberalization; and
14. Other areas as may be determined by the Parties.

Article 5  
Designation of Management Officials

1. Management Officials administering activities under this Annex will work with participating institutions to facilitate implementation of project agreements, strategies, and work plans.
2. The Management Officials for the United States shall be the Deputy Assistant Administrator for the Office of Enforcement and Compliance Assurance and the Deputy Assistant Administrator for the EPA Office of International and Tribal Affairs.
3. The Management Official(s) for China will be the Director General for the MEP Bureau of Environmental Supervision.
4. Each Party may designate a replacement Management Official(s) at any time upon written notice to the other Party.