

International EMECS Center Fiscal 2001 Operating Plan

April 1, 2001 - March 31, 2002

1. Operating policy

To make effective use of personnel and knowledge-based networks to strengthen ties with, and actively contribute to, efforts to preserve the environments of enclosed coastal seas in Japan and other countries throughout the world, and gain the participation of researchers and organizations engaged in efforts to preserve enclosed coastal seas both at home and abroad, in order to promote activities aimed at achieving "a sustainable society in which man can coexist with the myriad forms of nature."

2. Operating plan**(1) Projects to promote the environmental preservation of enclosed coastal seas****a. Study using marine plants for medium and long-term monitoring of coastal ecosystems (contracted by Kansai Electric Power Co., Ltd.)**

The advantages of, and problems involved in, the use of marine plants as the object of monitoring to determine medium and long-term changes in coastal ecosystems must be verified through comparisons using other organisms (animals, phytoplankton, bottom dwelling creatures, fish, etc.). Accordingly, species to be the subject of research (monitoring) conducted jointly with the Kobe University Research Center for the Inland Sea will be selected, and a study of the monitoring locations (ocean regions) and monitoring frequency will be conducted, after which the following will be studied:

1. Case studies of similar surveys conducted in the past
2. Study of monitoring techniques
3. Preparation of study manuals and reference materials to aid in organism identification

b. Study to establish a plan for the Amagasaki Century 21 Forest Project (tentative name)

In the Amagasaki Waterfront Area south of National Route 43, an area in which an increasing number of factory sites and the like are being made vacant due to changes in the structure of industry and so on, studies relating to the Amagasaki Century 21 Forest Project (tentative name) are being conducted. This project is designed to create an urban oasis, a rich natural environment in which people and nature can coexist, and act as a new direction for urban development in the 21st century, which is being called the "environmental century." In fiscal 2000, studies were conducted, including the establishment of the draft for the Amagasaki Century 21 Forest Project (tentative name), organization of issues and so on. In fiscal 2001, a committee composed of experienced people and/or those of academic standing will be established and concrete studies aimed at the realization of the Amagasaki Century 21 Forest Project will be conducted.

c. Study and research relating to environmental restoration and creation measures for waterfront areas (contracted by the Hyogo Prefectural Environmental Creation Center Public Corporation)

Since ancient times, waterfront areas have been used for manufacturing activities, and landfills have been created in various locations. These reclamation activities have brought about a wide variety of environmental changes, including degradation of water quality, changes in the ecosystems and other environments inhabited by living organisms, changes in the natural scenic beauty, and reduction of fishing grounds and areas in which people can come in contact with the sea.

At present, the emphasis of environmental management efforts has changed from improving water quality and other pollution control measures, which was the emphasis in the initial stages, to environmental creation efforts that include ensuring biodiversity, restoring healthy water circulation, promoting recycling, securing places where people can come in contact with rich natural environments and so on. For this reason, there is a strong desire to ensure that efforts to restore and create good environments in waterfront areas as well are continued in future generations.

A study committee composed of experienced people and/or those of academic standing will be established and the following studies and research will be conducted:

1. Collection, analysis and study of up-to-the-minute data on environmental restoration and creation measures for waterfront areas
2. Implementation of case studies in model regions

d. Surveys relating to environmental impact of oil dispersants, etc. (contracted by the Ministry of the Environment)

Regarding the standards established under the Law for the Prevention of Marine Pollution and Sea Disasters relating to the agents used to prevent pollution of the ocean by oil and toxic liquid substances, standards relating to acute toxicity, etc. have been established under the ministerial ordinances of the Ministry of National Land and Transport and the Ministry of the Environment. Approximately 70 varieties of oil dispersant and oil gelling agents that meet these standards have been formally approved. During a major oil spill or the like, speedy collection and processing are important to prevent the damage from spreading. Oil dispersants are expected to play a major role in these efforts. However, not enough is yet known about their impact on the environment.

For this reason, the effect of existing oil dispersants and oil gelling agents on marine environments will be checked from a variety of perspectives and the results compared with knowledge from overseas countries and so on. This data will be provided to local governments and other entities, and studies of existing standards will also be conducted. In addition, a committee composed of experienced people and/or those of academic standing, etc. will be established to deal appropriately with oil and other spills through studies including review of existing criteria.

e. Holding of the 5th EMECS Conference

In November 2001, the 5th International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS), and the first of the new century, will be held in Kobe and on the island of Awaji, marking the 11th year since the first EMECS conference was held in 1990.

The goal is to ensure that EMECS 2001 is an important conference, one with participation by many researchers and organizations engaged in efforts to preserve the environments of enclosed coastal seas both at home and abroad, and one that gathers together the wisdom of a variety of disciplines, not only the natural sciences but the social sciences as well, and aims at "sustainable development with a balance between nature, ecosystems and human society." In order to accomplish this goal, the cooperation of relevant organizations and leaders will be obtained, and the International EMECS Center will cooperate with the other sponsors -- the Environment Agency, Hyogo Prefecture and the City of Kobe -- to ensure that the various preparations for the conference move ahead smoothly.

f. Project to create materials, etc. for the 5th EMECS Conference (contracted by the Ministry of the Environment)

In preparation for the holding of the 5th International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS), information on efforts in various countries to preserve the environments of enclosed coastal seas will be gathered, and case studies that should be introduced and issues that should be given priority for efforts in cooperation with other countries will be studied, and this information will be compiled as reference materials for the conference. In addition, based on this information, a CD-ROM introducing the present status of, and measures relating to, environmental management of enclosed coastal seas in Japan will be prepared.

g. Projects to support activities to preserve the environments of enclosed coastal seas

Assistance will be given to academic conferences, etc. whose objective is the environmental management and appropriate use of enclosed coastal seas. This will forge relationships with other relevant organizations, and the achievements of these conferences, etc. will be reflected in Center activities.

(2) Projects to gather, organize and use information**a. Construction of an enclosed coastal sea environmental information system (contracted by the Ministry of the Environment)**

Japan has played a leading role in efforts to preserve the environments of enclosed coastal seas, through the creation of the EMECS Conferences and other activities. While establishing ties with relevant nations, an international data network for environmental information on enclosed coastal seas will be created, and databases containing the results of research in various research fields relating to enclosed coastal seas, as well as water quality and other environmental data, socioeconomic data and so on will be created, creating a system that researchers, government agencies and so on can use via the Internet.

b. Publication of an Environmental Guidebook to the 88 Enclosed Coastal Seas of Japan (Ministry of General Affairs assistance project, promoted through charitable New Year's greeting cards)

To ensure that the health and beauty of the natural environments of Japan's inland seas, ranked as an important environmental resource, are preserved for future generations, the status not only of the ocean environments but society, economy and culture must be determined, organized and widely communicated. For this purpose, an Environmental Guidebook to the 88 Enclosed Coastal Seas of Japan that can be used by private citizens, NGOs, researchers (not only on the environmental side but the development side as well), local public organizations, private companies and various other entities nationwide, and that can contribute to the preservation and creation of the environments of enclosed coastal seas, will be published, in order to create enclosed coastal seas in Japan that fuse the activities of human beings with the workings of nature and that are capable of sustainable development, and whose natural environments can be maintained in a state that is both beautiful and sustainable.

c. Publication of EMECS Newsletter

The EMECS Newsletter will be published in order to promote the exchange of information relating to enclosed coastal seas. It will contain papers that have been contributed to the Newsletter and will report on the status of preparations for the 5th EMECS Conference and conference achievements, introduce organizations working to preserve the environments of enclosed coastal seas, provide information on upcoming relevant international conferences and so on. In addition, the newsletter will also be provided in electronic form on a trial basis.

d. Improvement and operation of systems to gather and distribute information

The operation and management of systems to collect and process information on the environmental management and appropriate use of the world's enclosed coastal seas, and to provide information via the Internet and encourage communication between related entities, will be upgraded.

During fiscal 2001, the researcher database and the database containing environmental data on enclosed coastal seas will be further upgraded.

e. Management and operation of "Web-Conference on Coastal Environment" (in which anyone can participate; Japanese only)

The existing International EMECS Center web site will be used to operate an " Web-Conference on Coastal Environment " that allows anyone with information or suggestions (private citizens, NGOs, researchers, government representatives etc.) to participate and exchange views and information directly on topics (themes) proposed for the environmental preservation and creation of enclosed coastal seas. Discussions on the web site (consisting of participants writing their opinions and posting information) will be held on specific topics proposed by any of

the participants in various sectors. Since the views will be organized in message threads, this will help provide advice on future efforts to preserve and create ocean environments.

f. Promotion of EMECS activities by regional leaders

Regional leaders in locations in which past EMECS Conferences were held will be asked to conduct the following activities, in order to establish a network of people to promote international study and research projects.

In fiscal 2001, as a continuation of the activities of fiscal 2000, this will be requested of Scientific & Program Committee members active in the United States, Sweden, Turkey, etc.

1. Form and maintain a network of regional specialists
2. Gather and provide regional environmental data such as the current status of the environment and the status of environmental training
3. Promote EMECS activities

(3) Education and training activities

a. Project to prepare a text on environmental management activities entitled "Finding Out, Thinking About and Taking Action for Coastal Environment" (project to assist the Japan Environment Corporation)

The rapid increase, starting in the 1960's, in the amount of household and industrial waste water flowing into coastal zones in Japan resulted in the inflow of large quantities of nutrient salts into coastal zones, leading to eutrofication and frequent "red tides " and oxygen-deficient water masses in coastal zones.

In addition, modification of the coastal areas through reclamation and waterfront construction progressed, and much of the natural coastline, seaweed beds, tidelands and so on were lost. Japan's coastal areas were said to be in a state of crisis. For this reason, the preservation of remaining natural environments in coastal regions, and the restoration and creation of those environments that have been lost, have become major issues.

For this reason, a text on environmental preservation activities entitled " Finding Out, Thinking About and Taking Action for Coastal Environment" will be prepared. Designed for private citizens and NGOs, this text will explain the properties, mechanisms and functions of coastal zones.

b. Training in the techniques of environmental management of enclosed coastal seas (contracted by the Japan International Cooperation Agency [JICA])

Based on Japan's experience in implementing environmental management policies for enclosed coastal seas, "training in management techniques for enclosed coastal seas" will be conducted for mid-level government officials from developing nations.