

ANNUAL REPORT UNDER THE PROTOCOL ON ENVIRONMENTAL PROTECTION TO THE ANTARCTIC TREATY

JAPAN
2000/2001 SEASON

1 Notification pursuant to Article 17 of the Protocol on Environmental Protection to the Antarctic Treaty

1-1 Notification of the measures taken pursuant to Article 13, paragraphs 1 and 2, of the Protocol

A law enacting the Protocol in Japan, *the Law relating to Protection of the Environment in Antarctica (Antarctic Environment Law)* was promulgated in the gazette on 28th May 1997 and entered into force on 14th January 1998 at the same time the Protocol itself entered into force.

The Cabinet Ordinance for enforcing the Antarctic Environment Law and the Prime Minister's Office Ordinance for enforcing the Antarctic Environment Law was promulgated in the gazette from July to September 1997.

The instrument of acceptance of the protocol was received by the Government of the USA on December 15 1997.

The text of *the Antarctic Environment Law* is available from:

<<http://www.env.go.jp/en/lar/antarctica/index.html>>

The Ministry of Environment of Japan published small pamphlet “Antarctica”(Japanese and English version), including outline of natural environment in Antarctica, procedures for visiting Antarctica and short history of Japanese Antarctic research.

1-2 Contingency plans established in accordance with Article 15 of the Protocol

Syowa Station Oil Spill Contingency Plan has been finalised in 1996 according to the COMNAP guidelines. That plan (Japanese version) is available from:

Environmental Section

National Institute of Polar Research
 1-9-10 Kaga, Itabashi-ku, Tokyo
 173-8515 JAPAN
 sano@nipr.ac.jp

2 Report pursuant to Annex I, Article 6 (1) of the Environmental Protocol

2-1 Procedures to consider the environmental impacts of proposed activities in Antarctica (Annex I, Article 6 (1a))

All activities in Antarctica are subjected to rigorous environmental impact assessment procedures. These procedures are in accordance with Annex I of the Environmental Protocol. Further information can be obtained at the following address:

Global Environment Issues Division, Global Environment bureau
 Ministry of the Environment
 1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo
 100-8975 JAPAN
 antarctic@env.go.jp

2-2 List of Initial Environmental Evaluations developed in accordance with Article 2 and decisions taken (Annex I, Article 6 (1b) and also ATCM Resolution 6 (1995))

During the 2000/2001 season, some Initial Environmental Evaluations were prepared in accordance with Annex I, Article 2, of the Protocol on Environmental Protection to the Antarctic Treaty. The Annual list of Environmental Impact Evaluation is provided in appended table.

2-3 Significant information obtained, and any action taken in consequence thereof, from procedures put in place in accordance with Annex I, Articles 2(2) and 5, of the Protocol (Annex I, Article 6 (1c))

During the 2000/2001 season, no significant information has been obtained from monitoring procedures put in place in accordance with the provisions of Annex I.

2-4 Information referred to in Article 3 (6) on Comprehensive Environmental Evaluations (Annex I, Article 6 (1d))

During the 2000/2001 season, no draft CEEs or final CEEs have been prepared for Japanese activities in Antarctica.

3 Report pursuant to Annex II, Article 6 of the Environmental Protocol

3-1 Number and nature of permits issued under Annex II of the Protocol during the 2000/2001 season (Annex II, Article 6 (2) of the Protocol)

The following permits were issued under Annex II of the Protocol during the 2000/2001 season.

| Date issued | Species | Location | Purpose | Number/ Amount permitted | Number/ Amount actually taken |
|----------------|--------------|--|-----------------------------------|--------------------------|-------------------------------|
| 2000 Oct.13 | Weddell Seal | Vicinity of Syowa Station (69° 00S, 39° 35E) | Attaching tag (catch and release) | 300 | None to present |

4 Report pursuant to Annex III, Article 9 of the Environmental Protocol

4-1 Waste Management Plans Prepared in Accordance with Annex III, Article 8 of the Protocol (Annex III, Article 9 (1) of the Protocol)

The Japanese Antarctic Research Expedition (JARE) introduced the Waste Management Plan to implement necessary operating procedures such as segregation, disposal and management of wastes after the Madrid Protocol was completed in 1991.

According to the plan, some combustible wastes are incinerated and sewage is treated by the biological treatment plant. The ash and the sludge are brought back to Japan. Other wastes are removed from Antarctic treaty area for proper disposal

Larger wastes such as oversnow vehicles trucks and building materials stored at Syowa station are also back to Japan every year according to the five years clean up operation plan.

4-2 Report on implementation of waste management plan (Annex III, Article 9 (1) of the Protocol)

The Japanese Antarctic Research Expedition Waste Management Plan is implemented during the 2000/2001 season.

| Category and Type | Disposal method | Quantity |
|---|--|----------|
| Group 1 – Sewage and Domestic Liquids | | |
| Sewage (from summer accommodation) | Maceration and Sea | 6 kl |
| Grey water (from summer accommodation) | Sea | 340 kl |
| Sewage and Grey water (from winter accommodation) | Treatment process (Contact aeration process) and Sea | 1700 kl |
| Sludge | Incineration(74kg) to ash | 1.5kg |

| Group 2 – Other liquid chemicals & waste (including fuels & lubricants) | | |
|--|------------------------------|----------|
| Photographic chemicals | Removed from Treaty area | 0.32 kl |
| Other liquid chemicals | Removed from Treaty area | 15.14 kl |
| Lubricants | Removed from Treaty area | 28.62 kl |
| Group 3 – Combustible wastes | | |
| Paper products | Basic Incinerator | 1.84 t |
| Corrugated carton | Removed from Treaty area | 0.53 t |
| Untreated wood | Removed from Treaty area | 19.64 t |
| Food scraps | Other (Carbonization system) | 1.15 t |
| Polyurethane & polystyrene foams | Removed from Treaty area | 0 t |
| Other plastics | Removed from Treaty area | 6.47 t |
| Rubber | Removed from Treaty area | 1.20 t |
| Bedding, cloth | Removed from Treaty area | 1.02 t |
| Clinical waste | Removed from Treaty area | 1.03 t |
| Group 4 – Other solid wastes | | |
| Glass | Removed from Treaty area | 2.41 t |
| Metal cans | Removed from Treaty area | 9.08 t |
| Aluminium | Removed from Treaty area | 0.94 t |
| Building waste | Removed from Treaty area | 27.47 t |
| Vehicles | Removed from Treaty area | 34.00 t |
| Batteries | Removed from Treaty area | 5.62 t |
| Non – liquid chemicals | Removed from Treaty area | 0 t |
| Incinerator residue | Removed from Treaty area | 3.87 t |
| Other solid wastes | Removed from Treaty area | 69.14 t |
| Unopened waste food | Removed from Treaty area | 3.46 t |
| Waste fluorescent light bulbs | Removed from Treaty area | 0.15 t |

* Including lager wastes brought back according to the five years clean up operation plan.

5 Report pursuant to Annex V, Article 10 of the Environmental Protocol

5-1 Number and nature of permits issued under Annex V of the Protocol during the 2000/2001 season (Annex V, Article 10 (2) of the Protocol)

No permits under Annex V have been issued for the 2000/2001 season.

5-2 Summary descriptions of activities conducted in ASMA or ASPA (Annex V, Article 10 (3) of the Protocol)

During the 2000/2001 season, Japan has not conducted any activities in ASMA or ASPA.

5-3 Measures taken to implement the provisions of Annex V (Annex V, Article 10 (4) of the Protocol)

Implementation of Annex V is through national legislation (*Antarctic Environment Act*, see 1-1).

During the 2000/2001 season, Japan has not conducted any site inspections in protected area.

6 Inventory of Past Activities in accordance with Annex III, Article 8 (3) of the Environmental Protocol

| Station Name | Type of Activity | Period of Occupation | Average level of Activity | Remnants & Date last visited | Diposal plans & dates |
|------------------------------------|--|------------------------------------|----------------------------------|---|----------------------------------|
| Mizuho (70° 42S, 44° 20E) | Scientific observation Logistics | From July 1970 to present | 4 times × 8 persons / yr | Now visited | None planned |
| Asuka (71° 32S, 24° 08E) | Scientific observation | From january 1985 to present | Now temporarily closed | 1991 winter | None planned |
| Dome Fuji (77° 19S, 39° 42E) | Scientific observation | From january 1995 to present | 1 time × 10 persons / yr | 2001 summer | None planned |

Table

THE ANNUAL LIST OF IEE 2000/2001 (JAPAN)

| Date | Location | Activity | Organization | Decision |
|----------|---|---|---|---|
| 2000. 9 | Amunsen Bay Mt.Riiser- Larsen (50,41E、 66,45S) | • Construction of observation huts and the removal | National Institute of Polar Research | All the proposed activities were certificated by the Minister of the Environment as having no more than a minor or transitory impact |
| | Tonagh Island (50,15E、 67,05S) | • Removing observation huts that were built in 1998 | | |
| 2000. 9 | Syowa Station (39,35E、 69,00S) | <ul style="list-style-type: none"> • Repairing the roof of storehouse • Construction of a bank for contaminant of oil spill, an establishment for oil transference and solar wall units of workshop • Coating the heliport with dustproof paints • Maintenance of water pipes and construction of facilities for precaution against drift | National Institute of Polar Research | All the proposed activities were Certificated by the Minister of the Environment as having no more than a minor or transitory impact |
| 2000. 9 | Syowa Station (39,35E、 69,00S) | <ul style="list-style-type: none"> • Construction of solar panels and hot water supply facilities by solar heat • Construction of a fuel tank and movement of existing fuel tanks • Replacement of plumbings and electric wires | National Institute of Polar Research | All the proposed activities were Certificated by the Minister of the Environment as having no more than a minor or transitory impact |
| 2000. 12 | Dome Fuji Station (39,42E、 77,19S) | • Deep Drilling Activity (Second Dome Project) at the Dome Fuji Station on the Antarctic ice sheet | Institute of Polar Research | Under procedure in accordance with a law enacting the Protocol Japan, The Law Relating to the Protection of the Environment in Antarctica |

| | | | | |
|----------|--|---|--|---|
| 2000. 12 | Mizuho Plateau (41,59E、 69,35S and vicinity) | structure · Seismic survey of eath's crustal | of Polar Research National Institute | Under procedure in accordance with a law enacting the Prot Japan, The Law Relatin Protection of the Environment in Antarctica |
| 2000. 12 | Syowa Station (39,35E、 69,00S) | of waste storage · Construction | of Polar Research National Institute | Under procedure in accordance with a law enacting the Prot Japan, The Law Relatin Protection of the Environment in Antarctica |