Chapter 6 Office of Seculity and Health

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1. Introduction

The safety and health of staff in national universities was controlled under the rules of the National Personnel Authority. As a result of reforms in April 2004, national universities, as agencies, fall under the application of the Labor Safety and Sanitation Law. The Preparatory Office of Safety and Health, consisting of Prof. Norio Kobayashi, Manager, and one technical staff member was established in September 2003 to prevent labor accidents, protect health and safety of staff, and maintain consistent safety and health activities. In April 2004, the Office of Safety and Health was officially inaugurated.

2. Organization

The Office of Safety and Health comprises a Deputy Director as the office manager, four professors, and five expert groups. The Office Manager, staff, and group managers attend the Committee for Safety and Health meeting to define plans and proposals. These plans and proposals are then made known to all the personnel via the staff of its subordinate organ, the Liaison Conference of Safety and Health, comprising representatives of the research division, affiliated facilities and a supporting organization.

3. Major Activities in Fiscal 2004

3.1 Safety and Health Group

(Management of safety and health based on the Labor Safety and Sanitation Law)

(1) Inspection of laboratories

The Group executes inspections by managers of working sites and safety, industrial doctors, staff of the Office of Safety and Health, and persons responsible for safety and health. Inspection results are sent to each laboratory in the form of an “Inspection Report.” Then, a report on improvement is submitted to the Group. Each inspection round is completed when the Group confirms the improvement results. In fiscal 2004, 37 inspection rounds of a total of 84 laboratories (524 experimental work sites) were made mainly to check up on treatment of high-pressure gas, condition of arrangement of articles, and electricity facilities.

(2) Medical examinations

In addition to ordinary medical examinations and special medical examinations (for those who use radiation equipment and organic solvents), the Group decided to undertake medical examinations for those who use specific chemical substances and VDTs. In fiscal 2004, the rate of those who underwent medical examinations to total staff was approx. 80%. Therefore,

improvement of this rate and guidance for those who require observation should be further promoted.

(3) “Safety Day” and “Safety Week”

Developmental activities are promoted on July 1, “Safety Day,” and in the period from July 1 to July 7, “Safety Week,” every year. In fiscal 2004, the Group executed inspections by persons in charge of working places and staff-initiated inspections at each experimental work site. A lecture meeting was held with a guest speaker, Mr. Kanji Kurushima, Manager of the General Affairs Office, Division of Research Planning, Steel Laboratory, JFE Steal Corp.

3.2Chemistry Group

(Inventory and storage control of chemicals and control of exhaust, drainage, and waste fluids)

(1) Introduction of chemical control system (iaso)

A chemical control system (iaso) was introduced in March 2004 and the registration of almost all chemicals and gas cylinders in the Laboratory has now been completed. As a result, the storage and quantities of chemicals can be controlled in a centralized manner.

(2) Control of drainage

Because deviations from the pH standard were found in a measurement by the Environment Preservation Center, the Group decided to execute a voluntary measurement once every two weeks in fiscal 2004. Additionally, the Group made posters to promote the thorough collection of experiment drainage to laboratory staffs.

3.3 Lifeline Group

(Control of electricity, gas, water supply, and drainage)

(1) Inspection of electrical facilities

Because defects often occur in wiring on the secondary side, group staff executed inspection rounds together with persons responsible for safety and health to promote proper examination and management of electrical facilities.

(2) Fire drills

In fiscal 2004, the Group supplied helmets to all staff as a safety measure for use in an emergency. In addition to regular fire drills, some measures should be taken to in the event of an earthquake.

3.4 Radiation Control Group

(Control of radioactive substances, nuclear fuel materials, radiation generators, and X-ray generators)

(1) Workshop measurements

Workshop measurements were conducted once a month by persons responsible in radiation control areas, and once every six months by workshop managers and x-ray inspectors for

X-ray generators.

(2) In line with the Laws Concerning the Prevention from Radiation Hazards Due to Radioisotopes and Others, educational training was given to all radiation workers.

(3) In line with the guidance of the Ministry of Education, Culture, Sports, Science and Technology, inspections of all rooms, including private areas, were undertaken to check for the existence of radioactive substances.

3.5 Low-Temperature High-Pressure Gas Group

(Treatment of liquid helium, liquid nitrogen, and high-pressure gases)

(1) Control of liquid cryogen

In accordance with the High-Pressure Gas Safety Law, facilities that supply liquid nitrogen and helium are classified as First-Class Manufacturing Facilities. Maintenance training is given to staff who use liquid cryogen. Additionally, those facilities are subject to inspection by Miyagi Prefecture.

(2) Storage of gas cylinders

Rules for the return of empty gas cylinders, the preparation of appropriate storage space in laboratories, and stable stacking to prevent falling were made known to all staff.