

Facility Management Regulations

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Amended May 29, 1989
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Amended Mar. 1, 1994

Amended Jun. 18, 1994
Amended Apr. 1, 1997
Amended Dec. 24, 1998
Amended Jun. 1, 2001

Chapter 1 General Provisions

Article 1 (Purpose) These regulations set a management standard for the facilities installed at Pohang University of Science and Technology (hereinafter referred to as “University”).

Article 2 (Application Scope) These regulations shall apply except matters specifically stipulated by law or other regulations concerning the management of facilities.

Article 3 (Definition of Terms) The terms used in these regulations shall be defined as follows:

1. “Facility” refers to all tangible fixed assets of the University.

A. Building

Main classification	Sub-classification
All construction structures of the University	Attached and additional facilities

B. Machinery

- (1) Generator, boiler, freezer, heat exchanger, etc.
 - (2) Electrical, communication, automatic control, plumbing, firefighting, cooking, transportation equipment, etc.
 - (3) Computer, machine tool, experiment equipment
2. “Maintenance” refers to examination, test, and adjustment/repair or a set of work performed by a technician on the facilities for the purpose of performance recovery or improvement.
 3. “Facility management” refers to a variety of activities to keep the facilities in optimum conditions for maximum use, including tasks related to plan, design, installation, operation, use, maintenance, and cleaning of the facilities.
 4. “Facility management department” refers to a department that performs the operation and maintenance of the facilities.
 5. “Routine inspection” refers to appearance check, routine lubrication, cleaning, and simple adjustment work performed during/before/after an operation or use of the facilities.
 6. “Regular inspection” refers to repair or improvement work through conducting a regular appearance check or open check on the facilities’ deterioration level.
 7. “Precision inspection” refers to tests performed when necessary by disassembling or assembling the facility with a precision measurement tool.
 8. “Minor repair” refers to the repair job on a routinely inspected part of the facility that can be easily restored to a normal state.
 9. “Regular repair” refers to repair work performed on a regular basis during a planned interruption of operation of each facility unit.
 10. “Major repair” refers to repair work performed on a regular basis (once or twice a year) according to the operation plan for each facility unit to recover from deterioration or maintain its performance.
 11. “Unexpected repair” refers to repair work performed to fix any failure or accident that suddenly occurs during the operation or use of the facility.

Chapter 2 Classification of Work

Article 4 (Classification of Work) Facility management work shall be classified as follows:

1. Department responsible for operation and use of the facility (hereinafter referred to as “Operation Department”)
 - A. Routine check, lubrication, cleaning, and simple adjustments for operation
 - B. Regular repair and unexpected repair
 - C. Test operation and acceptance of a facility repaired by the facility management department
2. Department responsible for management and maintenance of the facility (hereinafter referred to as “Facility Management Department”)
 - A. Repair job related to major repair, regular repair, and sudden repair
 - B. Minor repair job
 - Civil engineering and construction-related work: Maintenance repair for civil engineering, construction, landscaping facility, and other related work
 - Electric facility –related work: Maintenance of sanitation, heating, air conditioner, fire extinguishers, lighting and electric power facilities, and other related work

Article 5 (Duties of the Operation Department) The operation department shall have the following responsibilities with regard to operation and use of the facilities:

1. Safe operation of the facilities
2. Reporting to the facility management department concerning maintenance
3. Routine and preventive checks by the facility operator
4. Maintaining cleanliness of the facilities
5. Proper lubrication for the facilities
6. Minor repairs to the facility for which the department is responsible
7. Keeping operation record
8. Reporting to the facility management department when breakdown or any sign of breakdown is found
9. Other matters necessary for operation

Article 6 (Duties of the Facility Management Department) The facility management department shall have the following responsibilities with regard to the facilities:

1. Preparation of facility ledger (equipment history card)
2. Management and check of facility, establishment and implementation of inspections
3. Conducting regular checks and major repairs
4. Establishment and implementation of the repair work plan
5. Securing parts for maintenance
6. Preparation of maintenance budget and history records
7. Participation in test operation and technical support for operation

Chapter 3 Facility Management Procedure

Article 7 (Prior Actions for Facility Management) The facility management department shall establish a basic plan for maintenance management based on the facility plan and construction plan, and send necessary reference data for facility operation upon completion of the facility to the head of the operating department.

Article 8 (Request for Facility Management) ① The operation department shall fill out the facility maintenance application form and send it to the management department if maintenance service is needed for continued use.

② When a request for facility maintenance as prescribed in Clause 1 is made, the following documents shall be submitted in duplicate:

- A. Facility specifications
- B. Facility drawing
- C. User’s manuals
- D. Lubrication table
- E. Spare parts list
- F. Test operation record

G. Other maintenance data

③ A budget for facility management must be set aside by the operation department.

Article 9 (Implementation of Maintenance Work) ① Upon a preliminary examination of a maintenance work, the work can be done through collaboration or outsourced for reasons of technicality, time criticality, or economic benefits,.

② The operation department shall conduct routine and regular inspection in accordance with inspection standards and request the maintenance department to perform precision inspection if necessary.

③ Necessary minor repair works found during routine and regular inspections shall be performed by the operation department after reporting to the department head.

Article 10 (Test Operation) ① A test operation shall be performed after a repair work is completed. A test operation may be skipped if it is deemed impossible or unnecessary to be done.

② A test operation shall be performed by the facility management department, with the operation department and the contractor participating as observers.

Article 11 (Equipment Subject to Inspection) ① The facilities subject to inspection by a government agency shall be lawfully treated as long as it does not interfere with education.

② The following items shall be subject to check:

1. Safety check for the continued use of the boiler (pressure vessel): Once a year
2. Boiler performance check (5 tons or more): Once a year
3. LPG tank opening check: Once every five years
4. LPG tank regular check: Once a year
5. Electric power facility regular check: Once every 3 years
6. Elevator facility regular check: Once a year
7. Crane facility regular check : Once a year
8. Electric generator regular check: Once every three years

Article 12 (Management of Dangerous Article) A checklist for the management of dangerous article shall be specified in the Attached Table 1.

Article 12-2 (Management of Radioactive Isotope-related Facilities) Matters concerning radioactive Isotope-related facilities shall be stipulated separately in the Regulations on Safety Management of Radiation.

Article 12-3 (Management of LPG Facilities) Matters concerning the management of Liquefied Petroleum Gas facilities shall be stipulated separately in the Safety Management Regulations for Liquefied Petroleum Gas

Article 12-4 (Management of Firefighting Facilities) Matters concerning firefighting facilities shall be stipulated separately in the Regulations on Fire Safety Management.

Chapter 4 Facility Accident

Article 13 (Definition of Facility Accident) A case, where a facility unexpectedly comes to a halt (or stops operation) for 10 minutes or longer because of a failure to detect a defective part in advance through routine and regular checks, shall be deemed an accident regardless of the availability of a facility in reserve for emergency. However, a halt planned in advance or an extension of regular repair shall not be deemed a facility accident.

Article 14 (Classification of Accidents) Facility accidents shall be classified into A, B, and C as follows:

1. Class A: Utility supply suspension for three days or longer, or more than 30 million KRW in direct loss
2. Class B: Utility supply suspension for one day or longer, or more than 10 million KRW in direct loss
3. Class C: Utility supply suspension for one day or longer, or not more than KRW 10 million

in direct loss

Article 15 (Establishment of Safety Management Committee) The Safety Management Committee shall be established to respond to and deal with facility accidents, etc.

Article 16 (Organization of the Safety Management Committee) ① The Head of the University Service Center shall serve as chairman of the committee.

② The committee members shall include the Director of the Planning and Budget Team, Director of the General Affairs and Safety Team, Director of the Purchasing Team, and school staff members appointed by the chairman as necessary (in case of various safety accidents in and around the apartment for professors, however, the Head of the Residential Operation Team and the chairman of the apartment residents council may be appointed as members of the committee)

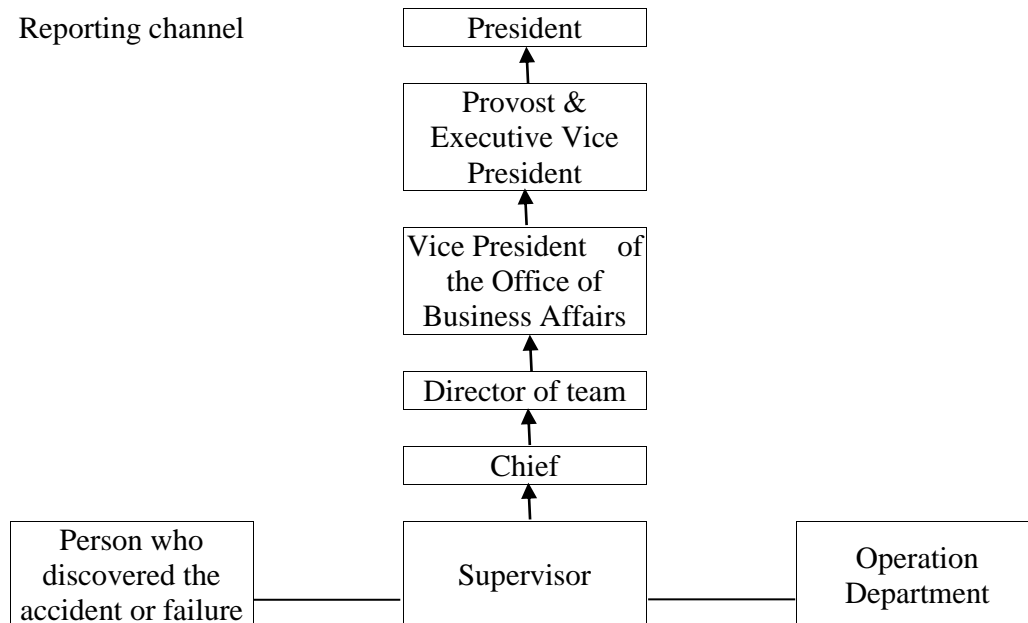
③ The Director of the Facilities Management Team shall serve as the secretary of the committee.

Article 17 (Functions of the Safety Management Committee) The Safety Management Committee shall review the following matters on safety operation of facilities/substances (electric, firefighting, machinery, facility, gas, wastes, pollutants, radioactive materials, etc.) and preservation of the environment:

1. Matters regarding causes and loss estimations of accidents
2. Matters concerning accident recovery and preventive measures
3. Matters concerning finding the responsibility for accidents
4. Establishment of basic plan, discussion of countermeasures, and matters concerning adjustment
5. Important matters on environment pollution
6. Matters concerning the establishment and abolishment of various relevant regulations

Article 18 (Procedure for Reporting Accidents) ① In case of a facility accident, the operator of the facility or the person who first discovered the accident shall immediately report through the accident reporting channel after taking emergency action; the person in charge of operation shall report in writing the details of the accident and the countermeasure.

② A staff who receives the details of the failure or accident shall record them in the business log, immediately report them through the reporting channel, and publish a news advisory on the failure or accident for reporting by 9 am of the following day.



Article 19 (Dealing with Accidents) ① The facility management department must do its best in

recovering the facility to a normal state and minimizing the loss resulting from the facility accident.

② The operation department must perform a onsite investigation jointly together with the facility management department immediately after a failure or an accident of the facility and fully cooperate by giving priority to recovery.

③ The operating department must notify the relevant department of the failure or accident within 24 hours to claim insurance money if such failure or accident occurs on a facility covered by insurance.

Article 20 (Scope of Responsibility) The scope of responsibility for a facility accident shall be as follows (however, this shall not apply if the accident occurs due to unavoidable causes such as natural disaster or force majeure):

Classification	Direct responsibility	Supervisory responsibility		Managerial responsibility	
	Person in charge	Supervisor	Chief	Director of team	Head of center
Class A:		○	○	○	○
Class B:	○	○	○	○	—
Class C:	○	○	○	—	—

Article 21 (Accident Record) To maintain facility accident records, the operation department shall manage accident registers and accident reports as basic data for statistical analysis.

Chapter 5 Environment Management

Article 22 (Appointment) ① A person in charge of environment management shall have the qualification stipulated by the applicable law; a person shall be appointed for each department.

② To operate a wastewater treatment plant properly, a technical manager shall be appointed to a facility with capacity above a certain level.

Article 23 (Duty) ① An environment manager shall perform following duties:

1. Maintenance of record for the daily report of pollutant discharge facilities
2. Other matters specified by the applicable laws

② A technical manager shall perform following duties:

1. Normal operation of treatment facilities
2. Maintenance of record for the daily report for a treatment facility
3. Other matters specified by the applicable laws

Article 24 (Obligation) Ⅱ A person handling wastes must not be involved in any activity that causes -- or likely to cause -- pollution of the surrounding environment such as leaving unprocessed pollutants, inappropriately treating or discharging pollutants, etc.

② Actions must be taken to prevent flying dusts, falling of an object, and water leak during transportation of wastes, and ensure wastes are not dispersed.

③ Produced wastes must be separated into workplace wastes and designated wastes in accordance with relevant laws to be lawfully treated.

Addendum

These amended regulations shall take effect on October 9, 1993.

Addendum

These amended regulations shall take effect on March 1, 1994.

Addendum

These amended regulations shall take effect on June 18, 1994.

Addendum

These amended regulations shall take effect on April 1, 1997.

Addendum

These amended regulations shall take effect on December 24, 1998.

Addenda

1. (Enforcement Date) These amended regulations shall take effect on June 1, 2001.
2. (Interim Measure) Following the amendment of these regulations, the environment management regulations are hereby abolished as of the date of enforcement of the amendment.

(Attached Table 1)

Major Inspection Items for Management of Dangerous Materials

Items	Check Point
1. Limitation on use of fire source	A. Check if a fire source is used in hazardous condition as a pretext for increased work efficiency. B. Check if anyone smokes in and around a facility where a dangerous material is stored.
2. Arrangement in good order	A. Check if any unnecessary flammable material is left unattended. B. Check if a dangerous material (such as used oil, etc.) is treated properly by using a burning or burying method.
3. Restriction on access to a storage facility	A. Check if any person other than the designated worker enters the facility. B. Check if any person other than the designated worker handles the apparatus or instrument, etc.
4. Electric facility	A. Check if the electric wire or apparatus is damaged. B. Check if a temporary wiring, light bulb, etc., is used while the facility is being repaired or modified.
5. Firefighting equipment	A. Check if the automatic fire extinguisher is in normal working order. B. Check if the responsible worker is familiar with the handling method.
6. Tank and attached facilities	A. Check for any structural defect in the tank's main body. B. Check if the automatic sensor and air vent are working properly. C. Check if the pressure and various temperatures are within the specification. D. Check for any leaks in the pipe. E. Check if any iron structure is rusty.
7. Existing building facility	A. Check if the existing facilities are perfectly installed in accordance with the Fire Services Act.

(Attached Form #1)

Accident report for abnormality and failure

App rove d by				Supervisor	Chief	Director	Vice President
Description of the accident				Date and time of occurrence			
Shutdown period		Facility involved in failure or accident		Reference drawing			
Type of damage		Department					
Details of the accident				Preventive measures			
Actions taken							
Cause				Opinion			