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Nara Institute of Science and Technology Chemical Substance Management Regulations

April 1, 2004
Regulations No. 38

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- I. General provisions

Article 1 (Purpose)

The purpose of these Regulations is to promote voluntary chemical substance management at the Nara Institute of Science and Technology (hereinafter referred to as "NAIST") to avoid environment effects and to prevent student and employee health impairment due to handling chemical substances under Article 26.3, of the Nara Institute of Science and Technology Safety and Health Management Regulations (Regulations No. 1, 2004; hereinafter referred to as the "Safety and Health Regulations").

Article 2 (Definitions)

1. "Chemical substances" refers to those described in Article 25 of the Safety and Health Regulations.
2. "High-pressure gas" refers to chemical substances subject to control under the High Pressure Gas Safety Act (Act No. 20, 1997).
3. "Chemicals" refers to chemical substances except high-pressure gas.

Article 3 (Scope of application)

These Regulations apply to all persons who use chemical substances at NAIST.

II. Management system

Article 4 (General Safety and Health Manager duties)

1. The General Safety and Health Manager oversees the chemical substance management at NAIST.
2. The General Safety and Health Manager may entrust to an employee (hereinafter referred to as the “Chemical Substance Management Assistant”) the duties to be performed under these Regulations, except the following duties:
 - (1) Permission of the General Safety and Health Manager under Article 10.1 hereof, and
 - (2) Implementing emergency measures under Article 23.2, hereof.

Article 5 (Graduate School Dean and Laboratory Manager Responsibilities)

1. The Graduate School Dean directs and supervises voluntary management of chemical substances at the graduate school and prevention of health impairment to affiliated students and employees from handling chemical substances in accordance with the provisions of applicable laws and regulations, the Safety and Health Regulations, and these Regulations.
2. The manager of a laboratory handling chemical substances (professor, who is the head of the relevant laboratory, or associate professor [or each project manager at the Interdisciplinary Frontier Research Complex]; hereinafter referred to as a “Laboratory Manager”) must be responsible for chemical substance management.
3. For workplaces handling chemical substances not belonging to a laboratory, the Graduate School Dean in charge of facilities containing the relevant workplace (or the institute Director for the Institute for Research Initiatives, or the Director General for the Administration Bureau) shall be responsible for the Laboratory Manager duties under these Regulations.

Article 6 (Student and employee responsibilities)

Students, employees, and persons specified in Article 2 of the Safety and Health Regulations must follow the precautions to prevent health impairment from handling chemical substances and due to chemical substances taken by the General Safety and Health Manager, the Laboratory Managers, and other concerned parties under applicable laws and regulations and these Regulations.

Article 7 (Health officer responsibilities)

Health officers must, if any safety and health issues on the use of chemical substances during an inspection throughout the campus under Article 12.3 of the Safety and Health Regulations are found, immediately report them to the General Safety and Health Manager, the Graduate School Dean, and the Laboratory Manager in charge of the relevant place.

Article 8 (Chemical Substances Handling Manual)

1. A Chemical Substances Handling Manual shall be developed to handle chemical substances at NAIST.
2. The Chemical Substances Handling Manual described in the preceding paragraph shall be

prepared by the General Safety and Health Manager, and adopted through a General Safety and Health Management Committee resolution.

3. The Chemical Substances Handling Manual described in Article 8.1 shall be disseminated by the General Safety and Health Manager by Laboratory Managers throughout NAIST.

III. Chemical substance management

Article 9 (Management categories)

1. In accordance with applicable laws and regulations, categories of chemical substance management at NAIST shall be as follows:

Level 4	Substances requiring permission of the national or prefectural government when using them
Level 3	Substances with acute toxicity equivalent to that of poisonous or deleterious substances
Level 2	Substances with chronic toxicity or carcinogenicity, or substances requiring fire prevention considerations (excluding those listed in Level 3)
Level 1	Any substances other than those listed in the preceding items

2. Mixtures composed of two or more chemical substances shall be managed as a component with the highest level among the comprising components.
3. Chemical substances shall be classified under the management categories by the Laboratory Manager, based on Table (1) and Material Safety Data Sheets provided for in Article 27.2 of the Safety and Health Regulations.
4. The Laboratory Manager shall, if it is difficult to determine the management category, refer to the General Safety and Health Manager and follow the determination on the management category.

Article 10 (Purchase and transfer standards by Level)

According to the management categories provided for in the preceding article, chemical substances shall be purchased and transferred as follows:

- (1) Persons, who intend to purchase Level 4 chemical substances, must obtain a permit from the Graduate School Dean and the General Safety and Health Manager through the Laboratory Manager, with Form No. 1-1 the first time and Form No. 1-2 the subsequent times.
- (2) Level 4 chemical substances shall not be transferred or carried off-campus.
- (3) Persons, who intend to purchase Level 3 chemical substances for the first time and to receive the transfer of or carry them off-campus, must submit notification by Form No. 2 to the General Safety and Health Manager through the Laboratory Manager; provided, however, that such notification in writing may be replaced by inputting necessary information into the Chemical Management System provided for in Article 17 hereof.
- (4) Persons who intend to purchase Level 2 chemical substances and to receive the transfer of or carry them off-campus must report it to the Laboratory Manager.
- (5) Level 1 chemical substances shall be managed by a laboratory, etc.

Article 11 (Storage)

According to the management categories provided for in article 9, chemical substances shall be stored at a laboratory as follows:

- (1) Level 4 and Level 3 chemical substances must be stored in a lockable cabinet (or a cylinder cabinet for high-pressure gas).
- (2) Level 2 chemical substances shall be stored properly at a storage location selected in a laboratory so that leakage, combustion, and theft shall not occur.
- (3) Storage standards for Level 1 chemical substances shall be voluntarily established by the laboratory.

Article 12 (Disposal)

The Laboratory Manager must dispose of the following chemical substances using environmentally friendly methods, in accordance with the Chemical Substances Handling Manual:

- (1) Chemical substances after use in experiments or other intended purposes
- (2) Chemical substances not used over three years after the purchase

IV. Handling of chemical substances in the laboratory

Article 13 (Safety education)

The Laboratory Manager shall endeavor to provide persons handling chemical substances in the laboratory with safety education on the following matters, in addition to the safety education specified in Chapter 6 hereof:

- (1) Properties and effects on the human body and environment of the chemical substances handled in the laboratory
- (2) Methods to prevent risk to the human body and effects on the environment
- (3) Safe disposal methods for the chemical substances used

Article 14 (Posting information)

1. The Laboratory Manager must post necessary information in a workplace where chemical substances harmful to the human body will be, or are currently, handled.
2. The posted information under the preceding paragraph shall be as specified in the Chemical Substances Handling Manual.

Article 15 (Chemical handling in a laboratory)

1. Persons who handle chemical substances specified as Level 4 must obtain permission from the Graduate School Dean and the Laboratory Manager.
2. The Laboratory Manager shall not allow students to handle chemical substances specified as Level 4 without the presence of faculty or staff.
3. Persons who handle Level 3 chemical substances must report it to the Laboratory Manager.
4. Persons who handle chemical substances must handle them in a draft chamber, laboratory bench, or other proper location, depending on the type of chemical substance.

5. The Laboratory Manager must require persons who handle chemical substances in a laboratory to use masks, gloves, glasses, and other protective equipment as necessary.

Article 16 (Changes to facilities and equipment)

With regard to the handling of chemical substances, when facilities for disposal and storage are newly installed, the structure thereof is changed, or they will cease to be used, prior notification must be made to the General Safety and Health Manager.

V. Information management

Article 17 (Chemical information management)

1. Persons who handle chemical substances shall register individually specified information into the Chemical Management System, on a purchase, use, and disposal basis.
2. If the Laboratory Manager purchases, or receives the transfer of, new chemicals not listed in the Chemical Management System in a laboratory, the Laboratory Manager must notify the General Safety and Health Manager; provided, however, that if permission under Article 15 hereof is obtained for chemicals specified as Level 4, such permission shall be deemed as notification.
3. In the case described in the preceding paragraph, if the Laboratory Manager receives the Material Safety Data Sheets for the relevant chemicals from another party for purchase or transfer, the Laboratory Manager must submit them to the General Safety and Health Manager.

Article 18 (Information management of high-pressure gas)

The Laboratory Manager must report once every six months to the General Safety and Health Management Office the type of high-pressure gas used in a laboratory and the number of gas cylinders owned by the laboratory.

Article 19 (Collection of information)

1. The Laboratory Manager shall endeavor to collect information on harmfulness to the human body and effects on the environment of chemical substances used in a laboratory and, if any important information is obtained, endeavor to report it to the General Safety and Health Manager.
2. The General Safety and Health Manager must, upon receipt of reports under the preceding paragraph or other acquisition of information on harmfulness to the human body and environmental effects of chemical substances, immediately notify laboratories using such chemical substances of the information.

VI. Safety education

Article 20 (Safety education)

1. The General Safety and Health Manager must provide students who are admitted and employees who are newly employed with safety education on the following matters, in accordance with the provisions of Article 20 of the Safety and Health Regulations:

- (1) Rules for the purchase, use, and disposal of chemical substances at NAIST
 - (2) Matters to prevent health impairment and environmental effects caused by the use of chemical substances
 - (3) Measures for emergencies when using chemical substances
 - (4) Law and regulation provisions for the control of chemical substances
2. The General Safety and Health Manager must provide safety education on the following matters, in accordance with the provisions of Article 21 of the Safety and Health Regulations, when having students and employees engaged in the duties listed in Table 4, items (2) and (3) of the same Regulations:
- (1) Matters to prevent health impairment and environmental effects caused by the use of the relevant controlled substances
 - (2) Measures for emergencies when using the relevant substances
 - (3) Law and regulation provisions for the control of the relevant substances
3. The safety education under the preceding two paragraphs may be omitted for persons who are approved by the General Safety and Health Manager.

VII. Considerations for the environment and health impairment

Article 21 (Use of alternative substances)

1. Instead of the chemical substances with an especially high impact on the environment and human body, which are to be used in a laboratory, the Laboratory Manager must endeavor to use alternative substances with less impact.
2. The General Safety and Health Manager may, unless he or she considers it a hindrance to research projects at NAIST, prohibit the use of chemical substances with an especially high impact on the environment and human body, through a General Safety and Health Management Committee resolution.

Article 22 (Survey under the PRTR Act)

The Director of General Safety and Health Management Office must survey the release of designated substances under the provisions of the Act on Confirmation of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Act No. 86, 1999 (PRTR Act)), and report results to the Nara Prefectural Government.

VIII. Emergency Measures

Article 23 (Contact in case of accidents)

1. Any person who discovers chemical substance accidents must immediately contact the General Safety and Health Manager and notify relevant agencies, in accordance with the separately specified emergency contact network.
2. The General Safety and Health Manager must take the appropriate precautions to prevent the spread of damage, etc. due to accidents, and when persons are exposed to harmful chemical

substances from accidents, promptly conduct medical examinations for such persons.

3. The Laboratory Manager must, in case of an accident using chemical substances in a laboratory, promptly report it to the General Safety and Health Manager through the Graduate School Dean.

IX. Working environment measurement

Article 24 (Laboratory where the measurement is made)

1. The places, where the working environment measurement of chemical substances under Article 32 of the Safety and Health Regulations is made, shall be as follows:
 - (1) Workplaces handling organic solvents
 - (2) Workplaces handling specified chemical substances
2. The measurement under the preceding paragraph must be conducted by a Working Environment Measurement Expert of NAIST or an external working environment measurement agency, using the methods provided for by the Working Environment Measurement Act (Act No. 28, 1975).
3. Working environment measurement results must be stored for three years (or 30 years if specifically provided for by the Ordinance on Prevention of Hazards due to Specified Chemical Substances (Ordinance No. 39, 1972 of the Ministry of Labor)), using the separately prescribed form.

X. Risk assessment

Article 25 (Survey of chemical substance risk and harmfulness)

1. The General Safety and Health Manager must, according to provisions of Item 3, Article 57 of the Industrial Safety and Health Act (Act No. 57, 1972; hereinafter referred to as the "Act"), survey the risk and harmfulness (Hereinafter referred to as the "Risk Assessment") stipulated in Item 1 of the same article and the Ordinance of Industrial Safety and Health (Ordinance No. 32, 1972)
2. The General Safety and Health Manager must endeavor to take measures according to the Act and other applicable rules and regulations, in addition to the necessary measures to prevent danger and health risks to those performing duties.
3. Necessary measures relating to Risk Assessment shall be provided for separately by the General Safety and Health Management Committee

XI. Measures against violators

Article 26 (Measures against violators)

The General Safety and Health Manager may take measures, such as restricting the handling of chemical substances, against persons who violate applicable laws, regulations and these Regulations, through a General Safety and Health Management Committee resolution.

XII. NAIST's social responsibility

Article 27 (Enhancement of local resident understanding)

1. The General Safety and Health Manager must take the appropriate actions to enhance the local resident and surrounding community understanding of chemical substance management.
2. The Environment, Safety and Health Management Office shall be involved in the adequate provision of necessary information to achieve the purpose of the preceding paragraph.

Supplementary provisions

1. These Regulations shall come into effect on April 1, 2004.
2. The laboratories that use Level 4 chemical substances under Article 10 hereof before the date of effect shall be deemed as of April 1, 2004 to have the permit from the General Safety and Health Manager under Article 10 hereof.
3. The laboratories that use Level 3 chemical substances under Article 10 hereof before the date of effect shall be deemed as of April 1, 2004 to have submitted the notification under Article 10 hereof.
4. The manuals prepared independently by the graduate schools before the date of effect shall be deemed as Chemical Substances Handling Manuals under Article 9 hereof.
5. The provisions of Article 17 hereof shall not apply for the period until the formal operation of the relevant Chemical Management System commences.

Supplementary provisions

These Regulations shall come into effect on April 1, 2007.

Supplementary provisions

These Regulations shall come into effect on August 1, 2010.

Supplementary provisions

These Regulations shall come into effect on April 1, 2011.

Supplementary provisions

These Regulations shall come into effect on April 1, 2015.

Table 1 (relating to Article 9)

<p>Level 4</p>	<p>Specific chemicals under the Act on Prohibition of Chemical Weapons and Control, etc. of Specific Chemicals, etc.</p> <p>Narcotics and psychotropic materials specified under the Narcotics and Psychotropics Control Act</p> <p>Stimulants and their raw materials under the Stimulants Control Act</p> <p>Opium, poppies, and opium puppies under the Opium Act</p> <p>Poisonous substances specified under the Poisonous and Deleterious Substances Control Act</p> <p>Substances prohibited from manufacturing under the Industrial Safety and Health Act</p> <p>Internationally controlled materials under the Act on Control of Nuclear Source Materials, Nuclear Fuel Materials and Reactors</p>
<p>Level 3</p>	<p>Poisonous substances and deleterious substances under the Poisonous and Deleterious Substances Control Act</p> <p>Psychotropics under the Narcotics and Psychotropics Control Act</p> <p>Class 1 and Class 2 Designated Chemicals under the Act on Prohibition of Chemical Weapons and Control, etc., of Specific Chemicals, etc.</p> <p>Special high-pressure gas under the High Pressure Gas Safety Act</p>
<p>Level 2</p>	<p>Chemical substances and organic solvents specified under the Industrial Safety and Health Act</p> <p>Hazardous materials under the Fire Service Act</p> <p>(Excluding those chemical substances included in Level 4 and Level 3.)</p>

First Purchase of Chemical Substance Permission Application Form (Level 4, For First Purchase)

To: General Safety and Health Manager
Graduate School Dean

Laboratory Name: _____

We hereby apply for the first purchase of the chemical substance below. Please complete necessary procedures with supervisory agencies and grant the permit.

- (i) Substance name ()
- (ii) CAS Number ()
- (iii) Regulatory laws (Circle the applicable item.)
- Specific chemicals under the Act on Prohibition of Chemical Weapons and Control, etc. of Specific Chemicals, etc.
 - Specified narcotics and psychotropic materials under the Narcotics and Psychotropics Control Act
 - Stimulants and their raw materials under the Stimulants Control Act
 - Opium, poppies, and opium puppies under the Opium Act
 - Specified poisonous substances under the Poisonous and Deleterious Substances Control Act
 - Substances prohibited from manufacturing under the Industrial Safety and Health Act
 - International controlled materials under the Act on Control of Nuclear Source Materials, Nuclear Fuel Materials and Reactors
- (iv) Supplier ()
- (v) Intended use ()
- (vi) Laboratory Manager ()
- (vii) Intended users ()

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(Notes)

- Procedures with supervisory agencies may take some time to complete. Please check the research time schedule and submit this form to the Environment, Safety and Health Management Office allowing sufficient time.
- You may leave item (ii) blank, if the CAS number is unknown or unavailable.
- Make sure to fill in items (iii) and (iv).
- You may leave item (v) blank, unless required to submit it to supervisory agencies.
- Please fill in item (vii) with the name of all intended users.
- Please contact the Environment, Safety and Health Management Office (ex. ****) for other inquiries.

(iv) General Safety and Health Manager: permission

Date:	
Signature	(Seal)

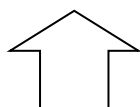


(iii) Environment, Safety and Health Management Office (Received:)
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(ii) Graduate School Dean: permission signature field

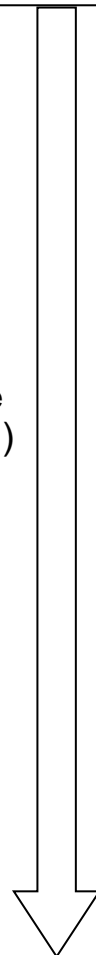
Date:	
Signature	(Seal)



(i) Laboratory Manager: permission application signature field

Date:	
Name	(Seal)

(v) Permit Issue
(Date:)



(Notes)

- A permit for first purchase shall be issued to the Laboratory Manager with the certificate of permission by supervisory agencies attached thereto.

Chemical Substance Purchase Permission Application Form (Level 4, For Continued Purchase)

To: General Safety and Health Manager
Graduate School Dean

Laboratory Name: _____

We hereby apply for the purchase of the chemical substance below. Please grant the permit.

- (i) Substance name ()
(ii) CAS Number ()
(iii) Supplier ()
(iv) Intended use ()
(v) Laboratory Manager ()
(vi) Intended users ()

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(Notes)

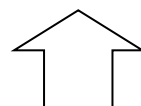
- You may leave item (ii) blank, if the CAS number is unknown or unavailable.
- Make sure to fill in items (iii) and (iv).
- You may leave item (v) blank depending on the research.
- Please fill in item (vii) with the names of all intended users.
- Please contact the Environment, Safety and Health Management Office (ex. ****) for other inquiries.

(iv) General Safety and Health Manager: permission

Date:	
Signature	(Seal)

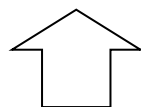


(iii) Environment, Safety and Health Management Office (Received on)
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(ii) Graduate School Dean: permission signature field

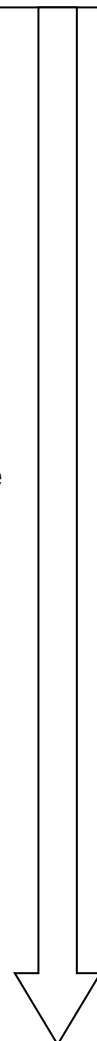
Date:	
Signature	(Seal)



(i) Laboratory Manager: permission application signature field

Date:	
Name	(Seal)

(v) Permit Issue
(Date:)



(Notes)

- A permit for first purchase shall be issued to the Laboratory Manager with the certificate of permission by supervisory agencies attached thereto.

First Use of Chemical Substance Permission Application Form (Level 3)

To: General Safety and Health Manager

Laboratory Name: _____

We hereby submit notification on the handling of the chemical substance below.

- (i) Name of the substance ()
- (ii) CAS Number ()
- (iii) Type of handling (Circle the applicable item.)
- (a) First purchase at the laboratory
- (b) Transfer (Other party which transfers to the laboratory:)
- (c) Carrying off-campus (Destination:)
- (iv) Regulatory laws (Circle the applicable item.)
- (a) Poisonous substances and deleterious substances under the Poisonous and Deleterious Substances Control Act
- (b) Psychotropics under the Narcotics and Psychotropics Control Act
- (c) Class 1 Designated Chemicals and Class 2 Designated Chemicals under the Act on Prohibition of Chemical Weapons and Control, etc. of Specific Chemicals, etc.
- (d) Special high-pressure gas under the High Pressure Gas Safety Act
- (v) Supplier ()
- (vi) Intended use ()
- (vii) Laboratory Manager ()
- (viii) Intended use ()

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(Notes)

- Please submit this form to the Environment, Safety and Health Management Office in advance. You may submit this form later if necessary for the convenience of research.
- It is not necessary to submit this form if specified information is inputted into the Chemical Management System.
- You may leave item (ii) blank, if the CAS number is unknown or unavailable.
- Make sure to circle applicable items for items (iii) and (iv). Please also make sure to enter the name of the other party in Sub-items (b) or (c) of item (iii).
- You may leave items (v) and (vi) blank, depending upon the research.
- Please fill in item (viii) with the names of all intended users.

General Safety and Health Management Office, Notification accepted on: Person in charge ()
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