III Chemical Substance Management System

The Chemical Substance Management System employed by Kanazawa University is outlined below:

1. Objective

The system aims at ensuring appropriate chemical substance management used within Kanazawa University and enhance precise management of consumption and discharge.

- 2. Overview of the system
  - 1) Chemical Substance Management System

System to manage the handling of chemical substances at all steps from purchase to disposal by utilizing the university LAN and personal computers (Refer to the Chemical Substance Management System flow chart on the page after next.)

- 2) Client (personal computers to be used)
  - (1) Personal computers with the browser indicated below and connected to the university LAN
  - (2) Browser: Internet Explorer 5.0 or later versions or Netscape 4.7 or later versions
  - (3) In addition, the group managers require software to view CSV data for the output of collected results (such as EXCEL).
- 3) Chemical substances covered by the Chemical Substance Management System (chemicals) All chemical substances handled at Kanazawa University (including newly-purchased chemical substances, inventory, and synthetic substances in solid, liquid, and gas form). They are registered and managed by containers.

Note that the chemical substances listed below are excluded:

- (1) Pharmaceutical products (chemical substances to be administered to humans or animals)
- (2) Radioactive substances (substances that require management as RI)
- (3) The consumption, destination of discharge, and discharge quantity of the substances listed below are managed separately and individually:
  - · Chemical substances used only for neutralization in monitor tanks or the like;
  - Substances used for combustion such as fuel oil A, kerosene, gasoline, and light oil; and
  - Other chemical substances purchased by tank lorry, etc. and stored in large storage reservoirs
- 4) Research groups
  - (1) All research groups and all departments that handle chemical substances at Kanazawa University
  - (2) Chemicals are registered by each group that manages them. (The respective groups can only use chemicals that they registered for storage.)
  - (3) Basic matters required for registration (campus, section, building, and department) are described on the Group Data Registration Sheet on page 17 (Appendix 1).
- 5) Center manager

Manager of the entire Chemical Substance Management System (Environment Preservation Center is in charge as the manager).

6) Group manager (Faculty members and university staff)

The responsible person in each research group who collects data and requests the disposal of liquid and other waste. Several managers can be appointed. Fill in the Group Data Registration Sheet on page 17 (Appendix 1) and send it to the Environment Preservation Center for registration.

7) Chemical substance manager (Faculty members and university staff)

The person in charge of the management of chemical substances such as purchasing, storage, and disposal shall be appointed from group managers. Register him/her to the Environment Preservation Center by using the Group DATA Registration Sheet.

8) General user (graduate students, undergraduates, etc.)

Those who obtain IDs and passwords from group managers and can use the system

9) Chemical container (Container filled with chemical substances)

Containers controlled with chemical container number labels (barcode labels) and containing chemical substances, such as bottles, plastic containers, 18-liter metal square cans, gallon containers, ampoules, paper boxes, kits, gas cylinders, etc.

- 10) Containers for liquid and solid waste
   Containers controlled with liquid/solid waste container number labels (barcode labels:
   Waste) and specifically designated
- Registration to the Chemical Substance Management System Research groups that handle chemical substances at Kanazawa University must register in the

Chemical Substance Management System.

<Registration procedure for the system>

- 1) Contact the Environment Preservation Center and obtain the Group Data Registration Sheet shown on page 17 (Appendix 1).
- Fill in the Group Data Registration Sheet and send it to the Environment Preservation Center (by e-mail).
- 3) The Environment Preservation Center will send a notification of registration completion and ask about the number of required container number labels for chemical containers and waste containers (barcode labels).
- 4) Please notify the Environment Preservation Center of the number of required labels for these containers.
- 5) The Environment Preservation Center will send the container number labels.
- 4. Registration and use of chemical substances

Chemical substances to be handled at Kanazawa University become usable after they are registered in the Chemical Substance Management System. The group manager shall send information necessary for the registration of substances (refer to Appendix 2: Information for the Registration of Chemicals (pure substances and compounds) on page 18) to the Environment Preservation Center, which in turn registers the substances in the Chemical Substance Management System.

Application for registration shall include the Japanese name, English name, CAS No., and information about applicable laws and regulations (Poisonous and Deleterious Substances Control Act, Act on Hazardous Materials, PRTR Act, Ordinance on the Prevention of Organic Solvent Poisoning, Ordinance on the Prevention of Hazards Due to Specified Chemical Substances, Ordinance on the Prevention of Lead Poisoning, Water Pollution Prevention Act, Air Pollution Control Act, Rules for the Use of Internationally Controlled Materials, and Hazards [Carcinogenicity] of Narcotics and Psychotropics). However, chemical substances can be registered even with some items remaining blank (CAS No. [excluding compounds]; necessary for poisonous and deleterious substances). Missing data will be supplemented afterwards once they become known. Component names and component ratios are also necessary for compounds.

When using chemical substances and storing liquid or solid waste after use, be sure to use the Chemical Substance Management System.

5. Specific operation procedures

The outline of operation is described in Sections 5-1 through 5-8 below. The Operation Manual of the Chemical Substance Management System can be viewed on the menu screen after you log into the system.

化学物質管理システム処理フロー図	
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担		各	部局		環境保全	産業廃棄物
当	担当係	各部	『/各研究グループ	センター	処理業者	
薬品の流れ / 処理	受入	<ul> <li>○</li> <li>○</li> <li>○</li> <li>●</li> <li>●<td>使用 使用 返却 ・薬品の使用状況の入力 ・薬品/化学物質の使用 量、使用記録等の集計 問合せ</td><td>廃液容器・廃棄物 番号シール貼付 廃液容器(9分類) 廃棄物(8分類) ● (8分類) ● (8分類) ● (8分類) ● (8分類) ● (8分類) ● (1000 ● (1000) ● (100) ● (1000) ● (100)</td><td><ul><li>院液容器の 引取り</li></ul></td><td>運搬収集 処分 エ場 廃液・廃棄物 最終処理</td></li></ul>	使用 使用 返却 ・薬品の使用状況の入力 ・薬品/化学物質の使用 量、使用記録等の集計 問合せ	廃液容器・廃棄物 番号シール貼付 廃液容器(9分類) 廃棄物(8分類) ● (8分類) ● (8分類) ● (8分類) ● (8分類) ● (8分類) ● (1000 ● (1000) ● (100) ● (1000) ● (100)	<ul><li>院液容器の 引取り</li></ul>	運搬収集 処分 エ場 廃液・廃棄物 最終処理
		薬品の登録	薬品の使用	廃液の搬出	<b>凑</b>	
ソフ					・廃液容器の	マニフェスト管理 ・登録
トウ		登録薬品の追加・変更 ・薬品名	薬品の返却	廃液容器管理	・処理済み容器	・更新・則际 
エア		・物質番号 ・CAS-No	集計/問合せ		番号の削除	
ア の 処 理		<ul> <li>MSDS</li> <li>取扱説明書</li> <li>有害性情報</li> <li>関係法規制</li> </ul>	<ul> <li>・化字物質排出移動量</li> <li>・薬品取扱量</li> <li>・廃液取扱量</li> <li>・薬品使用簿他</li> </ul>		集計/問合せ ・排出移動量 ・薬品保管量 ・廃液取扱量他	マニノェスト集計 ・処理状況報告 ・特管 処理状況 ・未回収報告

# 5-1 Login screen



# 5-2 Menu screen



to be returned on receipt or after collection, a message appears in red

Operation instructions

#### 5-3 Registration of chemicals and containers

[薬	品·容器登錄	₹]		
検索条件 CAS マスタかられ	Fを設定してください           S NO         青劇物         危険物           ダイズ         ダーレック           タイズ         ダーレック           東京         グループの検索	<b>日本結薬品名</b> ロホルム	Namo-Eng	
薬品の「 CAS-NO	日本語薬品名」の領域を選択して 日本語薬品名	ください Name-Eng	区分	純物/
67-66-3	<u>クロロホルム</u>	Chloroform	P1,特化2,劇物、大気、変異,癌疑、急性毒性 (低),腐食性,発がん性、水生環境有毒性,RA(労働 安全衛生リスクアセスメント)	純物
10025- 78-2	シリコクロロホルム	Trichlorosilane	劇物. 危険	純物
865- 49-6	<u>クロロホルム-d1</u>	Chloroform-d1	P1.特化2.劇物	純物
57-15-8	アセトンクロロホルム	Acetonechloroform		純物
67-66-3	200本ルム(脱水)	Chloroform	P1,特化2,劇物,大気,変異, 癌疑, 急性毒性 (低), 腐食性, 発がん性, 水生環境有毒性, RA (労働 安全衛生リスクアセスメント)	純物
865- 49-6	<u>クロロホルム-d1 TMS 1%添加</u>	Chloroform-d1, TMS 1%	P1,特化2,劇物	純物
865- 49-6	<u>クロロホルム-d1 TMS 0.05%添加</u>	Chloroform-d1, TMS 0.05%	P1,特化2,刷物	純物
865- 49-6	<u>クロロホルム-d1 TMS 0.03vol%添加</u>	Chloroform-d1,TMS 0.03%	P1,特化2,劇物	純物
	クロロホルム/イソアミルアルコール (CIA 49/1)	Chloroform/isoamylalcohol(CIA 49/1)	P1,特化2	混合物
	<u>クロロホルム/イソアミルアルコール (CIA 24/1)</u>	Chloroform/isoamylalcohol(CIA 24/1)	P1,特化2,劇物	混合物
1470- 61-7	ジェチルジチオカルバミン酸銀-ブル シン-クロロホルム溶液	Silver diethyldithiocarbamate-burucine- chloroform solution	P1,有2,大気	混合物

Select chemicals and containers from the chemicals database. For those not included in the database, fill in and send Appendix 2 on page 18 to the Environment Preservation Center.

If a chemical is a compound, click 'Compound,' and component names and component ratios

appear.

Compounds that have different compositions depending on the manufacturer shall be registered when necessary (please consult with the Environment Preservation Center). The Center will distinguish them based on manufacturer name and concentration.

[薬品・容器登録]									
登録する薬品	品の情報を設定し、フ	ドタンを押し	てください 履歴検索						
日本語薬品 名	クロロホルム								
Name—En g	Chloroform								
MSDS	MSDSへのリンク	E A	P1 劇物 大気 癌疑 特化2 愛男 🏠 🚓						
取扱説明		БЛ	ALLA ALLA ALLA ALLA ALLA ALLA ALLA ALL						
		注意喚起語	危険						
CAS-NO	67-66-3	現有コード	(省略可)						
登録日	2017/10/02	管理者	○道上 義正 ✔						
容器形状	10 V	容器容量	mL(ミリットル) マ						
容器色	茶(褐色) 🗸	全体重量只 は圧力	(J70)						
保管場所	ಸ್ರ್ರಶನ 🗸		Mandatory field						
比重	1	メーカ/等 級	7クロス (ACROS) V 内級						
使用量の計 量方法	使用前後の重量差 💙	家間前方	Mandatory field						
登録薬品数	1 (1~10本)	鏡度							

登録実行

In the registration of chemical containers, the container shape, container color, manufacturer name, grade, and container capacity vary according to the user, so their default values can be used unless changing them is necessary. The container capacity (size of bottle, for example) must be entered since no default value is set. When 'Enter the quantity of consumption (capacity)' is selected with regard to the calculation method for the quantity of consumption, or when 'ml' is selected as the unit for the default capacity, the entry of specific gravity is indispensable. If you select options other than the above, the default value of 1 may be used without any changes.

The red arrows in the above figure indicate mandatory fields.

In particular, values and units for the entire weight and capacity shall be entered carefully since they cannot be changed later. It is recommended to use g as the unit of weight and ml for volume wherever possible.

If any entry errors are found after registration but before the start of use, the chemical number shall be designated as a missing number, and a new chemical No. will be used to register it from the beginning. If the chemical container has already started to be used, consult with the Environment Preservation Center.

The chemical container is registered with regard to its capacity by designating ml as the unit of initial capacity at the time of container registration, and the residual quantity is shown in ml thereafter. In this case, no specific gravity is required to be entered (it must be set for each chemical container).

MSDS (SDS) can be viewed by clicking the 'Link to MSDS.'

Carefully handle the chemicals and their containers by referring to MSDSs and GHS pictograms.

In principle, chemicals shall be registered by each container. When the entire capacity of a container is consumed at one time, however, they can be registered by a box containing containers.

Numbers in a barcode look as if they are divided by 4 digits, but are continued. For example, 1 1124 is 11124.

If purity does not significantly deviate from 100%, it may be entered as 100%.

5-4 Registrat	ion of fiquid and solid waste	e containers	
[廃液	·廃棄物容器	の登録]	
下記の情報を指う	定して「登録実行」のボタンを押して	てください	
分割化登録	<ul> <li>●しない</li> <li>○する 分割元の容器番号</li> </ul>		
管理者	□		
容器形状	ポリタンク 🗸		
容器色	[茶(褐色) ✔		
容器容量	L(リットル)		
 分類	水銀系化合物		
保管場所	分析室 🖌		
容器番号(コメント)			
容器本数	1 (1~10本)		
<席液の分類> 水銀系化合物:水 酸クロム系:酸 シアンヒ素系:シ アルカリ系:ア フッ化水素酸系: 水銀試薬	銀及びその化合物 、クロムおよび重金属 アン化物、シアン諸化合物及びヒ素化合物 ルカリ系 無機系フッ化水素酸及びその塩	廃溶媒類 : 廃溶媒類 難燃不燃性:難燃性、不燃性溶媒類 廃油類 : 廃油類 希薄有機 : 希薄有機水溶液 写真定着液:定着液	
< 廃棄物の分類> (水銀系) Hs汚泥類 : 汚泥 Hgガラス類 : 汚泥 Hgブラ類 : ゴム Hg金属製類:金属	類(スラッジ) ス類(陶器類含む) /ブラスティック類 製容器類	(非水銀系) 汚泥類 :汚泥類(無機スラッジ) ガラス類 :ガラス類(陶器類含む) ブラ類 :ゴム/ブラスティック教 有機汚泥類:汚泥類(有機スラッジ)	Ĩ
登録実行			メニューページへ戻る

5-4 Registration of liquid and solid waste containers

Liquid and solid waste containers shall be registered before starting to use chemicals.

The comment field beside the container No. may be used to facilitate the classification of liquid waste containers.

Since classification cannot be changed later, it shall be registered with care.

Up to 10 containers can simultaneously be registered at one time. In such a case, enter the first number of the serial numbers in the Container No. field and the number of containers to register in the Number of Containers field.

Liquid waste in a currently used liquid waste container No. can equally be divided to 1 to 10. In such a case, check 'Yes' in the Division Registration field, enter the manager of the currently-used liquid waste container number and container shape in the container No. before division as usual. Also enter the first number of the new serial container numbers of a required quantity in the Container No. field and the number of divisions (1 to 10) in the Number of Containers field.

If classification must be changed, the content can be emptied and then replaced by selecting 1 for the number of divisions in the above method.

If necessary serial container numbers are not available, notify the Environment Preservation Center of the necessary quantity of liquid waste container numbers by e-mail. In the notification, please specify the section name, research group name, manager name, and address (only when sent to a destination other than the manager).

# 5-5 Use and return of chemicals

) 化学物質管理システム V1.2L11 - V	Windows Internet Explorer			
🕘 💽 🔻 🙋 http://prtr.epc.kanazawa	-u.ac.jp/cmsys/script/login.asp		Google	
ファイル(E) 編集(E) 表示(V) お気に入) ▶ ▼	)(A) ツール(T) ヘルプ(H)			
12 🔓 🍄 🌈 化学物質管理システム V1.2L	11		לי די אין די אין אין אין אין אין אין אין אין אין אי	µ@)
HEAL	化学物質	管理システム (************************************		
環境保全センター/Env	。 ironment Preservation Center 境保 環境	<mark>いっこそ</mark> ・環境保全センター/Envir 全センター 保全さん	onment Preservation Cente	r 環
環境保全センター/Env <b>薬 品</b>	ironment Preservation Center 境保 環境 <b>廃 液</b>	tうこそ - 環境保全センター/Envir 全センター 保全さん 集計・問合せ	onment Preservation Cente 構成定義・変動	r 環
環境保全センター/Env 葉品の変更 ・ <u>業品のの変更</u> ・ <u>業品の変更</u> ・ <u>業品の処理</u> ・ 業品の処理 ・ 業品の処理 ・ 業品の処理 ・ 業品の処理	ironment Preservation Center 境保 環境 <u>廃液・廃棄物容器の登録</u> ● <u>擴出処理</u> ● <u>廃液・廃棄物容器の欠番化</u>	tうこそ - 環境保全センター/Envir 全センター 保全さん <u>集計・問合せ</u> ●問合せ ●ご参音 ●薬品取扱・保管量 ●薬品度用簿 ●薬品保管簿	onment Preservation Center <mark>構成定義・変]</mark> ①ID追加·変更 ●使用法定義追加•変更	r 環
環境保全センター/Env <b>薬品</b> 参品の使用 ・ ・ 楽品の数用 ・ ・ ・ 楽品の数用 ・ ・ 楽品の処理 ・ 楽品の数用 ・ ・ 楽品の数用 ・ ・ 楽品の数用 ・ ・ 楽品の数用 ・ ・ 楽品の数用 ・ ・ 楽品の数用 ・ ・ 楽品の数目 ・ 楽品の数目 ・ ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ ・ 楽品の数目 ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ 楽品の数目 ・ ・ ・ 楽品の数目 ・ ・ 本品の数目 ・ ・ 本品の数目 ・ ・ 本 ・ 本品の数目 本 ・ 本 ・ 本品の数目 本 ・ 本 ・ 本 ・ 本 ・ 本 本 ・ 本 ・ 本 ・ 本 ・ 本 本 本 本 本 本 本 本 本 本 本 本 本	ironment Preservation Center 境保 環境 <b>廃 液</b> ●廃漆・廃棄物容器の登録 ●廃液・廃棄物容器の欠番化 □2	はうこそ ・ 環境保全センター/Envir 全センター 保全 さん 集計・問合せ ●問合せ ●代学物質排出・移動量 ●薬品取扱・保管量 ●薬品使用簿 ●薬品使用簿 ●薬温使管簿 ●廃液・廃棄物保管簿 3イノページへ戻る	onment Preservation Center <b>構成定義・変引</b> ①D追加・変更 ④使用法定義追加・変更 操作マニュアル参照	r 環

Use refers to the act of taking chemicals out of the chemical cabinet or other storage location. Unless a chemical is used, it cannot be returned (e.g. entry of consumption).

Location of use and intended use can only be selected from the options and cannot be entered. If no applicable option is available, consult with the Environment Preservation Center by e-mail. The center will add the option.

[薬品	るの使	用]	
構想され思っ	1. 公面接相子	**:ウレマボタ	、 ナ 相目 - デノチャル 、
情報を確認の	ノエ、必要情報を	<b>指定してホタ</b>	ンを押してくたさい
音音信ち	4/8 200±11/	現有コート	
日本語朱丽石	Oblamafarma		
Name-Eng	Chloroform		
MSDS	<u>MSDSへのリンク</u>	E A	P1 劇物 大気 癌疑 特化2 愛男 👥 🙀
取扱説明		БЛ П	健康有害性 水環境有害性 水環境有害性 GHSマークの説明
		注意喚起語 (GHS)	危険
CAS-NO	67-66-3	管理者	O道上 義正
登録日	2005/3/11	容器容量	500 mL(ミリリットル)
容器形状	ビン	使用前全体 重量	1066.5 g(グラム)
容器色	茶(褐色)	使用前内容 量	750 g(グラム)
保管場所	薬品庫劇物保管 庫左	メーカ/等級	関東化学/特級
比重	1.5	純度	90%
使用量の計量 方法	使用前後の重量	ž	·
使用場所 使用目的	測定室 <b>&gt;</b> 処理 <b>&gt;</b>		

Select 'To Return Process' on the above screen to proceed to the 'Return of Chemical' screen shown below:

化学物質管理システ	ī∠ V1.2L10 - Microsoft	Internet Explorer		
ファイル(E) 編集(E) ヨ	表示(V) お気に入り( <u>A</u> ) ツール	しつ ヘルプ(日)		リンク 🎽 🥻
[薬品	の返却	]		
情報を確認の上	こ、必要情報を指定し	てホタンを押して	ください	
合命軍与 日本語薬品タ	クロロホルム	ᇄᄱᅴᅳᅛ		
	Chloroform			
Hume Ling	Childrenorm			11111
MSDS		—区分	P1 劇物 水質 大気 癌疑 有1	
取扱説明			変異	
CAS-NO	67-66-3	管理者	道上義正	
登録日	2002/5/20	容器容量	500 mL(ミリリットル)	
容器形状	ビン	使用前全体重 量	1019.8 g(グラム)	
容器色	茶(褐色)	使用前内容量	740 g (グラム)	
保管場所	藥品庫劇物保管庫左	▼ メーカ/等級	ナカライテスク/特級	
比重	1.48	純度	100%	
使用量の計量方 法	使用前後の重量差			
使用場所 使用法 使用後重量 □この容器(2	測定室 フリー 1000.0 は空容器として廃棄	052) 💌		
ページが表示されました			🔮 ብンጵ	ーネット

Use correct units for quantities. It is recommended to use g as the unit for weight and ml for volume wherever possible.

Check 'Dispose of this container as an empty container' when the chemical container becomes empty. The container cannot be used thereafter.

When a chemical is returned, the storage site can be changed.

If the usage is defined, select a usage. Once the usage is selected, the discharge destination and discharge factor will be auto-populated with predetermined values. The usage can be defined with the Define/Change Usage function on the menu screen by the manager. If chemicals are routinely used or discharged to the same place, it will be convenient to define the usage.

There are two registration methods: Register the discharge destination and discharge factor now (by selecting 'Next (designate the discharge destination)' and proceed to the next screen); or return the chemical (so that the next person can use it), and register the discharge destination and discharge factor later (by selecting 'Return (withhold selecting the discharge destination)').

When selection of the discharge destination is withheld, the discharge destination, discharge factor, and liquid waste container can be entered in the 'Processing of chemicals with their discharge destination withheld' on the menu screen. The withheld quantity can be partially discharged in percentage increments.

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Select the No. of the liquid/solid waste container in which used chemical is stored. Click the flask-shaped icon, and the contents stored in the container can be confirmed. Set the discharge factor to 100%.

Use the option 'Discharge to soil' if a chemical was inadvertently spilled on the ground or discarded, or an agricultural chemical was sprayed. Discharge to the soil is prohibited in principle.

The option 'Discharge to rivers' refers to discharge via routes other than sewers such as dumping to rainwater ditches or washing used instruments. (Discharge to public waters [including the ocean, lakes, and swamps]) Discharge to rivers is prohibited in principle.

The option 'Conversion' refers to transformation to substances other than the original materials (by synthesis or combustion). (E.g. from benzene to nitrobenzene) In principle, converted substances shall be registered to this system. (However, converted substances after combustion do not require registration.)

If converted substances will not be used, do not select 'Conversion,' and enter that the original substance was discharged. In this case, enter the details in the Remarks field on the discharge screen when requesting discharge. (For example, iron hydroxide is generated by iron sulfate and sodium hydroxide. Iron sulfate and sodium hydroxide are sorted to solid waste (sludge) and liquid waste, respectively. In actuality, however, the sludge and liquid waste is iron hydroxide and sodium sulfate, respectively.)

When samples obtained by preparing dissolved samples are to be registered in the system, select 'Conversion' as a destination of the original substance (to avoid double registration). When sulfuric acid is diluted to prepare a 30% sulfuric acid solution and the chemical container is registered for 30% sulfuric acid, for example, the discharge destination of the original 100% sulfuric acid must be 'Conversion.' Alternatively, there is a method for discharge registration to withhold the sulfuric acid discharge destination and apply processing for the destination-withheld chemical as though using the original sulfuric acid.

# 5-6 Request for collection of liquid waste

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<ul> <li>◆薬品・容器登録</li> <li>◆薬品の使用</li> <li>◆薬品の返却</li> <li>●廃決</li> </ul>	<u>後・廃棄物容器の登録</u> 出 <u>処理</u> ★ 「廃棄物容器の欠番(	<ul> <li>●問合せ</li> <li>●化学物質排出・移動量</li> <li>●薬品取扱・保管量</li> <li>●薬品使用薄</li> <li>●薬品保管薄</li> <li>●廃液・廃棄物保管薄</li> </ul>	● <u>ID追加•変更</u> ●使用法定義追加•変更	
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[搬出処理]				
搬出の情報を指定してボタンを押し 容器番号 管理者 内容物種類	してください 容器形状 容器色 容	器容量 保管場所		
2491   迫上 義止   廃浴媒類	ホリタンク   日	8L 分析至		
依頼日         依頼者名         搬出化当           2008/05/07 ▼         環境保全         ▼	学物質重量 搬出 984.435 g	内容量 pH 含水率(9 _(リットル〉 ▼	6) 搬出先     内容物       環境保全センター     ◆	
※業者へ搬出した場合は業者名を設定	してください 処分業	者名	<b>v</b>	
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船出体預の実行	/			
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The pH level and moisture content must be entered. (If the pH level cannot be measured in the case of solids, for example, enter 7.)

Enter a message to the Environment Preservation Center. (Such as information about pre-treatment or substances that cannot be registered to the system and their quantities. Substances such as plastic sludge can be registered with an entry in the Remarks field without entering content details.)

As for the discharge destination, select an option from the dropdown list. (If no applicable option is

available, consult with the Environment Preservation Center and the Center will add the option.)

When you select the disposal waste contractor, select a contractor name. (If no applicable option is available, consult with the Environment Preservation Center.)

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環境保全センター /Environment Preservation Center	環境 保全 セン ター	測定室	道上義正	道上義正	処理済	2007/4/4	2007/4/4		2007/5/9 10:00	2007/5/9		2007/6/21	ポリンク	赤	16L	環保全ン ター		表示
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When the request is accepted, the reception date app When the collection date is determined, the date and time of collection appear.

Whether a requested liquid/solid waste container is accepted and the scheduled collection date and time can be confirmed by this table. To confirm, two search methods are available: Designate the period for the requested discharge date, and select 'All' for the state; or designate 'Accepted' or 'Scheduled to be collected' for the state, and start the search.

If a container is improperly returned at the time of receipt, search it with the state of 'Returned on receipt' or 'Returned after collection.' {MSG, Yes} appears in red in the Remarks field. When <u>View</u> in the Remarks field is clicked, the reason for returning appears.

## 5-8 Calculation of Total Values

Only managers can calculate the total values for their own research groups.

Period within the fiscal year can only be designated for the calculation (from April 1 to March 31 of the next year).

Total values cannot be calculated over the fiscal year end.

To print the results, output them by CSV and print by using spreadsheet software such as Excel.

#### 6. Other precautions

When you request the issuance of container numbers for chemical or liquid waste containers (barcode labels) or make an inquiry to the Environment Preservation Center, make sure to convey your department, name, and research group name.

When treatment is outsourced to external contractors, the manifest management system that coordinates with this system can be used. For details of usage, please consult with the Environment Preservation Center.

When mixed chemicals are used for a long period of time, the three methods described below under 1) to 3) are available. In the description, a chloroform-phenol mixture (hereinafter abbreviated as CHCl<sub>3</sub>-PhOH liquid mixture) is used for several months.

1) Method to register a new chemical database

Request registration of 'CHCl<sub>3</sub>-PhOH liquid mixture' in the chemical database as a new mixture. Prepare the CHCl<sub>3</sub>-PhOH liquid mixture. Enter the consumed amounts of chloroform and phenol used for preparation in grams (or mls) in the system, respectively, and designate 'Conversion' as the discharge destination. Then, attach the chemical barcode label to the prepared CHCl<sub>3</sub>-PhOH liquid mixture and register it as a chemical in the system. Register other necessary information including usage in the system as in procedures for ordinary chemicals.

Note: Once a chemical is registered as liquid mixture, it can be used with the compound name thereafter, and the component ratios are automatically calculated by the system. (This method is also effective when subdividing to several portions or preparing dilutions.)

### 2) Method of using the discharge destination withholding option

Prepare a CHCl<sub>3</sub>-PhOH liquid mixture. Register chloroform and phenol used for preparation as Use/Return in the system and select Discharge Destination Withheld on returning. When the mixture is stored as liquid waste in a tank or when you request disposal of the liquid waste tank, select original chloroform for discharge from the discharge destination withheld chemical list, and designate the quantity of discharge by percentage. Select a liquid waste tank to which chloroform is discharged as in other ordinary discharge cases, and discharge it. Carry out the same procedure for phenol. Complete the procedure until no chemicals are withheld.

3) Method to temporarily store a mixture in a liquid waste tank and discharge it by subdividing it later

Prepare a CHCl<sub>3</sub>-PhOH liquid mixture. Register chloroform and phenol used for preparation as Use/Return in the system and designate as though the mixture will be discharged to a single liquid waste tank. Once the discharge destination is determined, divide the liquid waste tank and request disposal. In this method, you must pay attention to the liquid waste acceptance criteria. It is effective when decomposition is required.

# Appendix 1

# Group Data Registration Sheet

(1) Research group name (up to 20 double-byte characters)	(8) Campus	(9) Building (Select the liquid waste collection site.)	(10) Section (Select one.)	(11) Department (up to 20 double-byte characters. Refer to the description example.)	
Enter the research group name in Japanese using double-byte characters. (Up to 20 characters can be entered.)	Select one from the pulldown menu. If no applicable option is available, consult with the Environment Preservation Center.	Corresponding to the liquid waste collection site. Select one from the pulldown menu.	Select one from the pulldown menu. If no applicable option is available, consult with the Environment Preservation Center.	Refer to the table on the attached sheet (description omitted). If no applicable option is found in the table on the attached sheet, consult with the Environment Preservation Center.	
(2) Group manager (up to 20 double-byte characters)	(3) ID (up to 12 single-byte alphanumeric characters)	(4) Password (up to 12 single-byte alphanumeric characters)	(5) Job title (up to 20 double-byte characters)	(6) Telephone number (up to 20 single-byte alphanumeric characters)	(7) E−mail (up to 64 single−byte alç characters)
Enter the full name of the group manager in Japanese using double-byte characters. (Up to 20 characters can be entered.)	Enter the ID of the group manager in single-byte alphanumeric characters to log into the Chemical Substance Management System. (Up to 12 characters can be entered.)	Enter the password of the group manager using single-byte alphanumeric characters to log in the Chemical Substance Management System. (Up to 12 characters can be entered.)	Enter the job title of the group manager in Japanese using double-byte characters. (Up to 20 characters can be entered.)	Enter the telephone number of the group manager using single-byte alphanumeric characters and single-byte hyphens. (Up to 20 characters can be entered.)	Enter the e−mail addre group manager using sin, alphanumeric characters 64 characters can be en
* Only faculty members can serve as group managers.	* A change may be requested due to overlap.	* Enter a tentative password, and change it before actual use. ID may be used as the tentative password.			The domain (kanazawa may be omitted.
* Several group managers can be registered. Use one line per manager. Add lines if necessary.	Note: Entry is case-insensitive.	Note: Entry is case-insensitive.			
(12) Storage site (up to 64 double-byte characters)	(13) Location of use (up to 64 double-byte characters)	14) Intended use (up to 64 double-byte characters)	<ul> <li>(15) Storage site of liquid/solid waste containers</li> <li>(up to 64 double-byte characters)</li> </ul>		
Enter the chemical storage site in Japanese using double-byte characters. (Up to 64 double-byte characters can be entered.) Use one cell for each site.	Enter the location of use of chemicals in Japanese using double-byte characters. (Up to 64 double-byte characters can be entered.)	Enter the intended use of the chemicals in Japanese using double-byte characters. (Up to 64 double-byte characters can be entered.) If university-wide standards become necessary, reconsider the intended use.	Enter the storage site of the liquid/solid waste container in Japanese using double-byte characters. (Up to 64 double-byte characters can be entered.)		

\* If you have any questions, please consult the Environment Preservation Center.



# Information for the Registration of Chemicals (pure substances and compounds) Appendix 2

CAS No.	Chemical substance name	English name	Component CAS No. or name	W t .%	Component CAS No. or name	W t .%	Component CAS No. or name	W t .%	Alternate name	
Omitted if no description is available			Enter the component CAS No. if known. (Enter Wt.% to two decimal places. Use the next line if necessary.)						Enter if known.	Enter th substan Ordinar Poisoni to Spec Prevent Internat Control informa drugs, r

# Remarks

ne classification of poisonous/deleterious ces and hazardous materials, PRTR No., nce on the Prevention of Organic Solvent ng, Ordinance on the Prevention of Hazards Due ified Chemical Substances, Ordinance on the tion of Lead Poisoning, Rules for the Use of tionally Controlled Materials, the Air Pollution Act, the Water Pollution Prevention Act, and ation about stimulants, narcotics, psychotropic mutagenicity, and carcinogenicities if known.