#### Waste Disposal Rules [NanoLSI]

Please follow the procedure below to dispose of waste (garbage) in the building of the Nano Life Science Institute.

Waste paper, industrial waste, etc. can be used in the garbage storage area of the Cancer Research Institute.

Please refer to Attachment and dispose of it individually.

#### 1. General Waste

Sort general waste according to the type as described below, please dispose of it in the trash can installed on each floor.

| Type of waste                    | Details   | Precautions  |
|----------------------------------|---|--|
| Burnable waste                   | Waste paper, dirt, food waste, clothes, rags, disposable chopsticks, desiccants, etc.   |  |
| Empty cans*                      | Beverage cans, food cans, crown caps, metal bottle tops, seaweed laver cans, or sweets cans less than 25 cm in length   |  |
| Empty bottles*                   | Bottles for beverages, instant coffee or honey  | Discard metal caps with empty cans, and plastic caps with plastic packages and containers.               |
| Plastic (PET) bottles*           | Plastic bottles for beverages, sweet <i>sake</i> , soy sauce, noodle soup base, etc.  | Detach and discard caps with plastic packages and containers. Labels may be left attached, in principle. |
| Plastic packages and containers* | Plastic shopping bags Plastic bags (including plastic packages for toilet paper, bags for sweets [including silver lined], bags for rice, general-purpose plastic bags, or bag packages for ramen noodles)  |  |
|                                  | Styrofoam (including containers for convenience foods or cup noodles, or trays for meat, fish, vegetables, or ready-made foods)  Plastic containers (for ready-made foods, seaweed laver, sweets, miso, tofu, tea, eggs, curry, margarine, or strawberries) | Wash trays and cups before discarding.   |

| Plastic wrap (including packaging film for caramels, cigarettes, notebooks, 3-piece yoghurt, <i>natto</i> , cup noodles, meat, vegetables, fish, etc.) |   |
|--|---|
| Cups (including plastic containers<br>for ice cream, probiotic drinks,<br>yoghurt, or convenience foods)   |   |
| Bottles (including bottles for liquid wax, washer fluid, cooking oil, sauce, shampoo/conditioner, or cosmetics)  |   |
|  | Empty and wash bottles and tubes before discarding. |
| Others (caps for tubes, detergent, plastic bottles, or bathwater additives, glue containers, nets for onions or green soybeans, or pots for seedlings) |   |

<sup>\*</sup> Make sure to wash them before discarding.

2. Waste Paper (excluding black carbon paper, photo paper, vinyl-coated paper, and thermal paper)

| Details    | Precautions                | Garbage dump |
|------------|----------------------------|--------------|
| Cardboard  | Sort according to type and | (5)          |
| Magazines  | bind with a string or the  |              |
| Newspapers | like.                      |              |
| Cartons    |                            |              |
| Copy paper |                            |              |

### 3. Industrial Waste (\*excluding that used in experiments)

Sort industrial waste according to the type as described below, and put it in individual transparent plastic bags. Make sure to attach an 'Industrial Waste Disposal Sheet' to each plastic bag and put them in the specified garbage dump.

| Type of waste | Details   | Precautions | Garbage dump |
|---------------|---|-------------|--------------|
| Glass waste   | Broken sheet glass, cosmetics<br>bottles, cups, heat-resistant<br>glassware, agricultural chemical<br>bottles, glass dishes, etc. |             | (4)          |

| Crockery          | Bowls   | (4) |
|-------------------|---|-----|
| Waste plastic     | Buckets, plastic containers, video tape, CDs, clothes hangers, toothbrushes, leather products, synthetic resin instruments, polyvinyl chloride tubes, ballpoint pens, film, or other synthetic resin products | (4) |
| Rubber waste      | Rubber gloves or rubber hoses   | (4) |
| Styrofoam         |   | (2) |
| Metal waste       | Trays, frying pans, electrical cables or cords, kettles, spray cans (after punching a hole in them outdoors and away from any source of ignition), or cans (25 cm or more in length)                          | (4) |
| Batteries         | <u> </u>  | (4) |
| Fluorescent lamps |   | (4) |

# 4. Industrial Waste (that has been detoxified and emptied after being used in experiments or the like)

If any toxic substance adheres to an article to be discarded, make sure to wash it and put it in a plastic bag. Make sure to attach an 'Industrial Waste Disposal Sheet' to each plastic bag and put them in the specified garbage dump.

\* If even the smallest quantity of toxic or colored substance adheres to an item, it may be rejected from collection.

In such a case, the laboratory that discarded the waste will be notified and must pick it up and resort it.

| Type of waste     | Details                            | Precautions                 | Garbage |
|-------------------|------------------------------------|-----------------------------|---------|
|                   |                                    |                             | dump    |
| Glass wast        | Beakers, flasks, medicine bottles, | If any toxic substance      | (4)     |
| from              | etc.                               | adheres to an article to be |         |
| experiments       |                                    | discarded, make sure to     |         |
| 1                 |                                    | wash it before discarding.  |         |
| Waste plasti      | Disposable plastic products, petri | If any toxic substance      | (4)     |
| from dishes, etc. |                                    | adheres to an article to be | ` '     |
| experiments       |                                    | discarded, make sure to     |         |
|                   |                                    | wash it before discarding.  |         |
| Metal wast        | Metal spatulas, aluminum foil,     | If any toxic substance      | (4)     |
| from              | etc.                               | adheres to an article to be |         |

| experiments | discarded, make sure to    |  |
|-------------|----------------------------|--|
|             | wash it before discarding. |  |

#### 5. Infectious Industrial Waste

Make sure to put infectious or suspected infectious substances in Mippail (containers dedicated for infectious waste) and seal the containers. Attach an Industrial Waste Disposal Sheet (for infectious waste or for culture medium waste) to each Mippail container.

| Details  | Precautions                 | Garbage |
|--|-----------------------------|---------|
|  |                             | dump    |
| Infectious or suspected infectious waste (waste        | Always use Mippail          | (4)     |
| containing infectious pathogens or to which            | containers for all waste    |         |
| infectious pathogens adhere)                           | that has been sterilized    |         |
| Sharps such as hypodermic needles or scalpels          | with an autoclave (high-    |         |
| Liquid or muddy waste (such as blood, X-ray liquid,    | pressure steam sterilizer)  |         |
| oil, and chemicals)                                    | or the like and stored in a |         |
| Waste to which unsolidified blood adheres or           | sterilized packaging bag.   |         |
| remains  | * Even when sterilized and  |         |
| Waste that was sterilized with an autoclave (high-     | proven safe, such waste     |         |
| pressure steam sterilizer) or the like and stored in a | will not be collected by    |         |
| sterilized packaging bag                               | waste disposal companies    |         |
| Paper and cloth for experiments: Inflammable and       | unless stored in Mippail    |         |
| toxic substances including paper such as Kimwipes      | containers. This is because |         |
| or cloth such as dustcloth used during experiments     | such waste is categorized   |         |
| Other substances that are difficult to be disposed of  | as 'specially-controlled    |         |
| in an ordinary way                                     | industrial waste.'          |         |



XX Laboratory (Enter the name of the laboratory.)

#### 6. Others

| Details                          | Precautions               | Garbage |
|----------------------------------|---------------------------|---------|
|                                  |                           | dump    |
| Equipment or large-sized garbage | Store unused equipment    | Article |
| Iron scraps, etc.                | or large-sized garbage in | storage |
| Soil, waste concrete, or stone   | the article storage.      |         |
|                                  | Since the storage is      |         |
|                                  | usually locked, please    |         |
|                                  | contact the Accounting    |         |

| Subsection of the       |  |
|-------------------------|--|
| Pharmaceutical and      |  |
| Cancer Research Support |  |
| Section.                |  |

#### Autoclave Sterilization Method

 Put noninfectious media (including petri dishes to which noninfectious media adhere) in an autoclave bag or the like.



2) Start the autoclave sterilization process.



Operate the autoclave using wet heat at 120°C or higher for 20 minutes or more. Ensure sufficient space between containers to maximize the effect of wet heat on microbes.



State after the sterilization process



3) Put noninfectious media sterilized in step 2) in a plastic bag and tightly seal it.



4) Fill in a specified Industrial Waste Disposal Sheet to clearly indicate what microbes were used, attach it to the bag, and put it in the specified garbage dump.

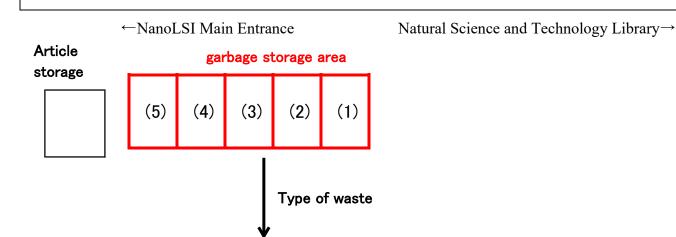


| Industrial Waste Disposal Sheet (for noninfectious culture media) |                 |  |
|---|-----------------|--|
|   |                 |  |
| Culture media   | (noninfectious) |  |
| Autoc   | claved          |  |
| Major contents  |                 |  |
| (If different materials such as glass                             |                 |  |
| and plastic petri dishes are included,                            |                 |  |
| specify them.)  |                 |  |
| Names of noninfectious microbes                                   |                 |  |
| used  |                 |  |
|   |                 |  |
| Date of discharge   | MMM DD, YYYY    |  |
| Department name   |                 |  |
| (College name, School name, Center                                |                 |  |
| name, etc.)   |                 |  |
| Laboratory name   |                 |  |
| Manager name  |                 |  |

## Cancer Research Institute Garbage storage area

# ↑ Kagaku no Oka

#### Cancer Research Institute



| (5)         | (4)                                  | (3)            | (2)                           | (1)                 |
|-------------|--------------------------------------|----------------|-------------------------------|---------------------|
| Cardboard   | Industrial Waste                     | Cans , bottles | Styrofoam,<br>Plastic bottles | General Waste       |
| Waste Paper | (Batteries,<br>Fluorescent<br>Iamps) |                |                               | (Burnable<br>waste) |