|  |  |  |
| --- | --- | --- |
| E:\SPREP Files\Resources and Reference Materials\Logos\SPREP Logos\SPREP PROE logos JPG\SPREP-PROE-tall-colour.jpg | SPREP/JICADevelopment of a Pacific Integrated Wasteand Pollution Management StrategyQuestionnaire |  |

## Background

SPREP and JICA have embarked on the development of a new 10-year Pacific Regional Waste and Pollution Management Strategy to replace and integrate existing regional strategies that are coming to an end, including:

* + - * The Pacific Regional Solid Waste Management Strategy 2010-2015;
      * An Asbestos-Free Pacific: A Regional Strategy and Action Plan 2011;
      * Pacific E-waste: A Regional Strategy and Action Plan 2012;
      * Pacific Health Care Waste: A Regional Management Strategy and Action Plan 2013-2015; and
      * The Pacific Ocean Pollution Prevention Strategy 2015-2020.

The new integrated strategy is expected to lead to improved results in SPREP Members by improving integration, coordination, monitoring, and reporting across the thematic areas. The attached questionnaire aims to collect information on national priorities, and baseline waste management conditions, which will guide the preparation of the new strategy, as well as the preparation of country profiles by the consultant (Ms. Esther Richards) engaged by JICA in partnership with SPREP.

**Scope**

The new Pacific Regional Waste and Pollution Management Strategy aims to integrate waste, chemicals, and pollution issues including the following:

* + - * Municipal solid waste
      * Bulky waste (end-of-life vehicles, tyres, white goods)
      * Hazardous waste and chemicals
      * Liquid waste
      * Marine pollution (including marine debris)
      * Disaster waste

## Instructions

1. Please complete the questionnaire electronically (with Microsoft Word).
2. There are 28 questions on this questionnaire.
   1. Where there is no information available, please indicate “NO INFORMATION”.
   2. Where the question does not apply to your situation, please indicate “NOT APPLICABLE” or “N/A”.
3. Please consult with other relevant government departments as much as possible to ensure collection of accurate data.
4. Contact Esther Richards ([e.richards@evrenv.com.au](mailto:e.richards@evrenv.com.au)) if you have questions or difficulties.
5. Please return completed questionnaires by close of business on **Thursday 2nd April 2015** by email to: [e.richards@evrenv.com.au](mailto:e.richards@evrenv.com.au) with copies to: [bellag@sprep.org](mailto:bellag@sprep.org) and [tsukijimkt@gmail.com](mailto:tsukijimkt@gmail.com).

## Section A: Contact Details

|  |  |
| --- | --- |
| Country or Territory: | |
| Questionnaire completed by | |
| Name: | |
| Position: | |
| Organisation: | |
| Email address: | |
| Telephone: | |
| Signature: | |
| Completed questionnaire endorsed by | |
| Name: | Signature and official stamp |
| Position: |
| Organisation: |
| Email address: |
| Telephone: |
| List of agencies or persons (including position and email address) consulted to complete the questionnaire | |
|  | |

## SECTION B: Priority Waste and Pollution Issues

1. Please rank your nation’s top five (5) priorities from 1-5, with one (1) representing the highest priority.

| Issues | Priority (1-5) |
| --- | --- |
| 1. Implementation of user pays programmes (e.g. landfill fees, waste collection fees) |  |
| 1. Development of waste management legislation (acts, regulations, by-laws) |  |
| 1. Management of organic waste |  |
| 1. Expansion of waste collection services to cover additional households |  |
| 1. Expansion of waste management services to outer islands |  |
| 1. Reduction in open burning of wastes |  |
| 1. Implementation of self-funding bulky waste management programmes |  |
| 1. Management of hazardous substances and wastes |  |
| 1. Management of waste disposal sites (dumpsites, landfills) |  |
| 1. Implementation of self-funding recycling programmes |  |
| 1. Management of wastes generated by natural disasters |  |
| 1. Reduction and management of marine debris |  |
| 1. Environmental monitoring |  |
| 1. Management of liquid wastes and wastewaters |  |
| 1. Management of sewage effluent |  |
| 1. Development of waste-to-energy facilities |  |
| 1. Others (please list and rank): |  |

1. If you identified bulky waste (item (g)) as an overall priority, please indicate the sub-priority below:

|  |  |
| --- | --- |
| Bulky Waste Type | Sub-priority (1-5) |
| Construction and demolition waste |  |
| End-of-life vehicles |  |
| Tyres |  |
| White goods (appliances, air conditioning units) |  |
| Others (please list and rank): |  |

1. If you identified hazardous substances (item (h)) as a priority, prioritise the substances below.

| Hazardous Substances and Wastes | Sub-priority (1-13) |
| --- | --- |
| Asbestos |  |
| Electrical and electronic waste |  |
| Health care waste |  |
| Household hazardous waste (batteries, fluorescent light tubes, paint, etc.) |  |
| Mercury and mercury-containing devices |  |
| Mining waste |  |
| Ozone depleting substances (in air conditioners and refrigerators) |  |
| Pesticides |  |
| Used pesticide containers |  |
| Polychlorinated biphenyls (PCBs) |  |
| Used lead acid batteries |  |
| Used lubricants and oil |  |
| Others (please list and rank): |  |

1. If you identified recycling programmes (item (j)) as an overall priority, prioritise the recyclables below.

|  |  |
| --- | --- |
| Recyclables | Sub-priority (1-8) |
| Aluminium cans |  |
| E-waste |  |
| Metal cans |  |
| Paper/cardboard |  |
| Plastics |  |
| Scrap metal |  |
| Used lead acid batteries |  |
| Others (please list and rank): |  |

1. If you identified liquid waste (item (n)) as a priority, prioritise the substances below.

| Liquid Wastes | Sub-priority (1-5) |
| --- | --- |
| Agricultural runoff |  |
| Industrial wastewaters |  |
| Sewage and septic tank wastes |  |
| Storm water runoff |  |
| Others (please list and rank): |  |

1. How did you determine the priorities identified above? (tick all that apply and provide further details)

|  |  |  |
| --- | --- | --- |
| X | Identification of national priorities | Provide details |
|  | Through national policies and strategies |  |
|  | Through consultants’ reports/documents |  |
|  | Through stakeholder consultations |  |
|  | Through professional knowledge/experience |  |
|  | Other (please explain): |  |

## SECTION C: Current Waste and Pollution Management Initiatives

1. Please provide details of any current or recently completed activities and initiatives that address waste and pollution management in your country. Please copy/paste and complete a new table for each activity or initiative.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name of activity or initiative | | |  | | |
| Brief description of objective(s) | | |  | | |
| Donors or partners involved | | |  | | |
| Monetary value (with currency) | | |  | | |
| Location of activity or initiative | | |  | | |
| Start Date | | |  | | |
| Duration (in months) | | |  | | |
| Issues addressed (please tick all that apply and provide brief details where possible): | | | | | |
|  |  |  | |  |  |
|  | X | Issues | | Details |  |
|  |  | Training, capacity development | | *(e.g.: 10 persons to be trained in landfill management)* |  |
|  |  | Legislation development | |  |  |
|  |  | Public awareness | |  |  |
|  |  | Private sector development | |  |  |
|  |  | Institutional strengthening | |  |  |
|  |  | Financing mechanisms | |  |  |
|  |  | Pollution management (equipment, infrastructure) | |  |  |
|  |  | Reduce, Reuse, Recycling | |  |  |
|  |  | Waste disposal | |  |  |
|  |  | Waste collection | |  |  |
|  |  | Waste export | |  |  |
|  |  | Waste or chemical stockpile inventory | |  |  |
|  |  | Contaminated site assessment | |  |  |
|  |  | Feasibility study | |  |  |
|  |  | Other (please explain) | |  |  |
|  | | | | | |

## SECTION D: Waste Management System Information

### Policies, Strategies, and Plans

1. What endorsed national policies, strategies, plans are in place to deal with waste, chemicals and pollution? (If not endorsed, include draft policy, strategy or plan).

|  |  |  |  |
| --- | --- | --- | --- |
| Strategic Area | Names of policies, strategies, & plans (include year endorsed or “Draft” if not endorsed) | | |
| Policies | Strategies | Plans |
| Solid waste |  |  |  |
| Waste-to-energy |  |  |  |
| Hazardous waste |  |  |  |
| Chemicals |  |  |  |
| Pollution |  |  |  |
| Disaster waste |  |  |  |
| Other (please explain): |  |  |  |

1. What additional policies, strategies and/or action plans do you think are needed to improve national waste and pollution management?

|  |
| --- |
|  |

### Legislation and Enforcement

1. What legislation and regulations are in place, and which ones need to be developed?

|  |  |  |
| --- | --- | --- |
|  | Existing Legislation | Needed Legislation |
| Solid Waste |  |  |
| Waste-to-energy |  |  |
| Hazardous Waste |  |  |
| Liquid Waste |  |  |
| Chemicals Management |  |  |
| Pollution Prevention |  |  |
| Other (please explain) |  |  |

1. Please provide the following information related to offences and enforcement actions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | 2012 | 2013 | 2014 | Data source |
| No. of verified illegal dumping incidents |  |  |  |  |
| No. of verified marine pollution incidents |  |  |  |  |
| No. of enforcement actions taken against illegal dumping offenders |  |  |  |  |
| No. of enforcement actions taken against marine pollution offenders |  |  |  |  |
| No. of people who received training to enforce waste laws |  |  |  |  |
| No. of people who received training to enforce pollution laws |  |  |  |  |
| No. of permitted exports of hazardous wastes under the Basel or Waigani Conventions |  |  |  |  |

### Waste management budget

1. What is the waste and pollution management budget (in local currency) in each responsible agency/ department?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Name of the Department or Agency | Annual waste budget | Separate budget line for “waste/ pollution”? (YES/N0) |
| Solid waste |  |  |  |
|  |  |  |
|  |  |  |
| Health-care waste |  |  |  |
|  |  |  |
|  |  |  |
| E-waste |  |  |  |
|  |  |  |
|  |  |  |
| Hazardous waste (excluding e-waste) |  |  |  |
|  |  |  |
|  |  |  |
| Chemicals |  |  |  |
|  |  |  |
|  |  |  |
| Liquid waste |  |  |  |
|  |  |  |
|  |  |  |

1. What are the sources and amount of revenues for waste and pollution management in each responsible agency/ department?

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name of the Department or Agency | Annual revenues (in local currency) by source | | | | | | Total revenues |
| Env. levies (e.g. on imports) | User fees | Recycling activities | Penalties / fines | Rates & taxes | Subsidies/ external aid |
| SOLID WASTE MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| HEALTH-CARE WASTE MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| E-WASTE MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| HAZARDOUS WASTE MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| CHEMICALS MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| LIQUID WASTE MANAGEMENT | | | | | | | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

1. Please indicate the annual waste management budget and revenues (in local currency) for each municipality.

| Municipality  (insert additional rows as needed) | Annual Waste Management Budget | Separate budget line for “waste/ pollution”? (YES/N0) | Annual Revenues | Revenue sources \* |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*NOTES:  Examples of revenue sources include: user fees, penalties/fines, sale of recyclables. | | | | |

### Waste Generation

1. What quantities of waste are generated annually across the nation?

| Waste | Annual Quantity (include units) | Data source |
| --- | --- | --- |
| Municipal solid waste | Urban:  Rural: |  |
| Waste arriving at all dumps/landfills | Urban:  Rural: |  |
| Scrap metal |  |  |
| Health-care waste |  |  |
| Chemical wastes |  |  |
| Mining waste (tailings) |  |  |
| Sewage |  |  |
| Agricultural biomass ( |  |  |
| Agricultural wastewaters (e.g., sugar cane and palm oil processing, piggeries, canneries) |  |  |
| Industrial wastewaters (e.g. from bottling companies, manufacturing) |  |  |
| Others (please describe): |  |  |

### Waste Stockpiles

1. Are there any stockpiles of obsolete chemicals, medicines, health-care waste, POPs, mine tailings, other hazardous wastes, tyres, bulky waste, derelict vessels, shipwrecks, or other wastes of concern? (insert additional rows as necessary)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Waste or Chemical | Location | Quantity (include units) | Confirmed (C) or Suspected (S) | Source of information |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

### Waste Recycling and Return

1. How much waste is diverted annually from waste disposal sites (dumps, landfills)?

| Diversion Measures | Quantity (include the units) | Data source (e.g. recycling facility records, estimate) |
| --- | --- | --- |
| Composting, anaerobic digestion |  |  |
| Total exports of recyclable items (cans, plastics, paper, etc.) |  |  |
| Total bulky waste exports (end-of-life vehicles, white goods, ferrous and non-ferrous scrap metal) |  |  |
| Used lead acid battery exports |  |  |
| E-waste exports |  |  |
| Other hazardous waste exports |  |  |
| On-island recycling of waste (e.g. plastics-to-oil, paper recycling) |  |  |
| On-island waste-to-energy conversion |  |  |
| Other (please explain) |  |  |

1. List the private businesses, NGOs, community groups, etc., involved in solid and hazardous waste recycling activities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Location | Email or phone number | Items recycled | Total amount recycled or exported annually |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

### Waste Collection

1. What is the waste collection system coverage and frequency?

|  |  |  |
| --- | --- | --- |
|  | Urban Areas | Rural Areas |
| Household waste collection frequency (times per week) |  |  |
| Number of households receiving collection service |  |  |
| Bulky waste or special waste (such as green waste) collection frequency (include units) |  |  |
| Total number of households in each collection area (urban, rural) |  |  |
| Market waste collection frequency |  |  |
| List of places included in “urban” and “rural” collection areas |  |  |

### Waste Treatment and Disposal

1. Please provide the following information related to the final treatment and disposal of wastes.

|  |  |  |  |
| --- | --- | --- | --- |
| Disposal to land | Urban | Rural | Total |
| Number of temporary, unregulated dumps |  |  |  |
| Number of authorised dumps (official sites but lacking controls) |  |  |  |
| Number of controlled dumps (with restricted public access) |  |  |  |
| Number of sanitary landfills operational |  |  |  |
| Number of sanitary landfills under construction |  |  |  |
| Number of sanitary landfills planned (site secured and designs completed) |  |  |  |
| Number of controlled dumps with dedicated disaster waste facilities |  |  |  |
| Health-care waste facilities |  |  |  |
| Number of functional high-temperature incinerators for health-care waste (above 850°C and 2 seconds residence time) |  |  |  |
| Number of functional incinerators for health-care waste (below 850°C) |  |  |  |
| Number of functional health-care waste autoclaves with or without shredding |  |  |  |
| Number of functional drum or brick incinerators |  |  |  |
| Wastewater treatment | Total | | |
| Total number of primary wastewater treatment plantsA |  | | |
| Total number of secondary wastewater treatment plantsB |  | | |
| Total number of tertiary wastewater treatment plantsC |  | | |
| Capacity of primary wastewater treatment plants (include units)A |  | | |
| Capacity of secondary wastewater treatment plants (include units)B |  | | |
| Capacity of tertiary wastewater treatment plants (include units)C |  | | |
| ***\*NOTES:***  *A: Primary wastewater treatment includes sedimentation and screening to remove rubbish before discharge.*  *B: Secondary wastewater treatment includes biological treatment to reduce the organic matter content.*  *C: Tertiary wastewater treatment includes processes to remove nutrients (nitrogen and phosphorous).* | | | |

1. Please complete the table for as many health-care facilities as possible.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name and location of health-care facility | Number of beds | Amount (kg/year) of sharps and infectious waste generated | Amount (kg/year) of sharps and infectious waste treated: | | Total waste (kg/year) treated at this facility |
|  |  |  | Above 850°C with minimum residence time of 2s: |  |  |
| In drum or brick incinerator (below 850°C): |  |
| In autoclave with or without shredding: |  |
| By open-burning: |  |
| By burial at the dumpsite or landfill: |  |
|  |  |  | Above 850°C with minimum residence time of 2s: |  |  |
| In drum or brick incinerator (below 850°C): |  |
| In autoclave with or without shredding: |  |
| By open-burning: |  |
| By burial at the dumpsite or landfill: |  |
|  |  |  | Above 850°C with minimum residence time of 2s: |  |  |
| In drum or brick incinerator (below 850°C): |  |
| In autoclave with or without shredding: |  |
| By open-burning: |  |
| By burial at the dumpsite or landfill: |  |
|  |  |  | Above 850°C with minimum residence time of 2s: |  |  |
| In drum or brick incinerator (below 850°C): |  |
| In autoclave with or without shredding: |  |
| By open-burning: |  |
| By burial at the dumpsite or landfill: |  |

### Environmental Performance

1. Please provide the following information relating to all waste management facilities (controlled dumpsites, sanitary landfills, recycling facilities, incinerators, etc.).

|  |  |  |
| --- | --- | --- |
| Name of facility  (insert additional rows as needed) | Does an environmental monitoring plan exist for this facility? (Please attach) | Date (month/year) of the last environmental report produced for this facility |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### Human Resource Capacity

1. How many people (including employees of private contractors) are currently involved in waste and pollution management at the national level?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activity (insert additional items as necessary) | Number of people with bachelor’s degree or higher | | Number of people with secondary education | | Number of people with less than secondary education | | Total number of people | |
| Female | Male | Female | Male | Female | Male | Female | Male |
| Recycling activities |  |  |  |  |  |  |  |  |
| Solid waste collection |  |  |  |  |  |  |  |  |
| Landfill/dumpsite management |  |  |  |  |  |  |  |  |
| Waste-to-Energy |  |  |  |  |  |  |  |  |
| Healthcare waste management |  |  |  |  |  |  |  |  |
| Sewage treatment |  |  |  |  |  |  |  |  |
| Monitoring and control of ozone-depleting substances |  |  |  |  |  |  |  |  |
| Other hazardous waste management |  |  |  |  |  |  |  |  |
| Marine pollution |  |  |  |  |  |  |  |  |
| Waste/pollution education and awareness |  |  |  |  |  |  |  |  |

1. How many people (including employees of private contractors) are currently involved in waste and pollution management at the municipal level?

| Municipality (insert additional rows as necessary | Number of people with bachelor’s degree or higher | | Number of people with secondary education | | Number of people with less than secondary education | | Total number of people | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Female | Male | Female | Male | Female | Male | Female | Male |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

1. How many people involved in waste and pollution management have received formal waste management training/education in the last 5 years?

|  |  |  |
| --- | --- | --- |
| Activity (insert additional items as necessary) | Number of people who have received formal waste management training/education in the last 5 years | |
| Female | Male |
| Recycling activities |  |  |
| Solid waste collection |  |  |
| Landfill/dumpsite management |  |  |
| Waste-to-Energy |  |  |
| Healthcare waste management |  |  |
| Sewage treatment |  |  |
| Monitoring and control of ozone-depleting substances |  |  |
| Other hazardous waste management |  |  |
| Marine pollution |  |  |
| Waste/pollution education and awareness |  |  |
| Other (please specify): |  |  |
| Municipalities (insert additional rows as needed) | Female | Male |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### Private Sector and Informal Sector Involvement

1. Please answer the following questions related to the extent of private sector and informal sector (waste pickers) involvement in waste and pollution management.

|  | Urban (if known) | Rural (if known) | Total |
| --- | --- | --- | --- |
| Number of private companies contracted to operate/maintain waste disposal sites |  |  |  |
| Number of waste disposal sites operated by contracted private companies |  |  |  |
| Number of private companies contracted to provide waste collection services (of any kind – households, hazardous waste, port waste, *etc.*) |  |  |  |
| Number of households (or percentage of the population) that receive collection service from a contracted provider |  |  |  |
| Number of licensed/permitted recycling operators. Consider all recycling activities such as plastics, paper, metal, used oil, e-waste, *etc*.) |  |  |  |
| Number of waste disposal sites with regular waste pickers |  |  |  |
| Number of waste disposal sites with regulated waste pickers |  |  |  |
| Estimated number of waste pickers nationally |  |  |  |

1. Are there any public-private-partnerships (PPP) (e.g. concession contract with private sector to develop and manage waste facilities)? YES/NO (If YES, please provide more details)

|  |
| --- |
|  |

### Occupational Safety and Health

1. How many work-related injuries, illnesses or fatalities have occurred over the last 3 years related to waste, chemicals, and pollution management?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Numbers | | | Examples | Source of information |
| 2012 | 2013 | 2014 |
| Injuries |  |  |  |  |  |
| Illnesses |  |  |  |  |  |
| Fatalities |  |  |  |  |  |
| **Total** |  |  |  |  | |

### Thank You!

### ------- END OF QUESTIONNAIRE -------