



SUB-REGIONAL FOLLOW UP SEMINARS IN SELECTED COUNTRIES ON INDUSTRIAL CHEMICALS UNDER THE ROTTERDAM CONVENTION

OCTOBER 2014 – FEBRUARY 2015

SUMMARY REPORT

BACKGROUND

Over the years, the Africa Institute (AI) and its partners including the Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS) have hosted and conducted trainings on assisting member countries in implementing the obligations to the convention. In this regard, the AI and the BRS signed a Small Scale Funding Agreement (SSFA) worth USD 98, 762.00 to implement a sub-regional project targeting eight (8) parties (Uganda, Kenya, Lesotho, Tanzania, Swaziland, Ethiopia, Mauritius and Botswana) to the Rotterdam convention. The SSFA project was aimed at improving their national coordination mechanisms and thus their reporting to the BRS. The project also included a component of awareness raising on the Globally Harmonised System of labeling (GHS) and classification programs being implemented by the World Health Organisation (WHO). The following constituted the project general objectives:

- To facilitate capacity-development of developing country Parties to assess and manage risks, prepare and communicate import responses, and take decisions on final regulatory actions for hazardous industrial chemicals listed under the Rotterdam Convention in accordance with the PIC procedure;
- To provide an opportunity for the promotion and coordination of integrated implementation of the Basel, Rotterdam and Stockholm Conventions;
- To generate on-the-ground results and experiences that will also be fed as case studies into the electronic toolbox of the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC) that assists countries at differing levels of economic, technical and institutional development to manage industrial chemicals.

In order to achieve these objectives, it had three (3) core activities:

- Holding of the ‘Introductory Workshop on Industrial Chemicals under the Rotterdam Convention for the Sub-Region’ for key stakeholders involved in industrial chemicals management in the eight (8) countries;

- Development of and disseminate of Information, Educational and Communication (IEC) materials on industrial chemicals hazards and improvements in their identification and communication, through the Globally Harmonized System of labelling and classification (GHS), at the national level, in the participating countries, targeting different levels of stakeholders;
- Facilitation of setting up or refine the coordination mechanisms and national frameworks for the management of industrial chemicals in five (5) pilot countries in the region.

This summary report details the follow up workshops that were held in Lesotho, Botswana, Swaziland, Uganda and Kenya. In these pilot countries, the project built upon the initial work that was done at the Sub-regional introductory workshop in October 2014 where participants discussed their national frameworks for the management of Industrial Chemicals under the Rotterdam convention.

FORMAT OF FOLLOW – UP SEMINARS

The seminars more or less followed the structure and content of the inception workshop and consisted of technical presentations and plenary discussions aimed developing or strengthening national cooperation and coordination mechanisms for the implementation of the Rotterdam convention. The focus though was on the setting up of national coordination committees or their strengthening.

The topics that were covered are the following:

- Overview of the Rotterdam Convention
- Hazard, Risk Assessment and Management
- Toolkit Demonstrations
- IHR 2005 and Chemicals Management
- Hazard Assessment and the role of GHS in sound management of chemicals.
- Poisons Centre and Chemical safety
- Roll out plan for the IEC materials produced under the project
- Public Health Management of chemical accidents
- Framework Development for the Sound Management of Industrial Chemicals
- Validation of Import Responses and their Implications

CHALLENGES

During the workshops the following were highlighted as challenges that needed to be addressed in the implementation of the convention:

- Lack of appointed Designated National Authority and Official Contact Point
- Overlapping of roles by different government agencies
- Lack of representation of senior officials capable of making decisions at meetings
- Conflicting policy directions among government ministries

- Tendency by meeting participants to require the payment of allowances for them to attend meetings
- Understanding of what constitutes a Poisons Centre
- Government scaling down on meetings and workshop related activities
- Lack of resources tools for making decisions

RECOMMENDATIONS

Botswana

- All committees dealing with management of industrial chemicals in Botswana should come together to discussions ways of working together
- A committee would be formulated to deal with industrial chemicals in Botswana
- Globally Harmonised System Committee would be incorporated in Chemicals committee.

Lesotho

- The OCP would initiate the process on appointing the Designated National Authority for Pesticides and on getting the country to report to the Rotterdam Convention Secretariat on the outstanding Import Responses.
- Incorporate GHS into the draft legislation under consideration by Government.

Uganda

- Ministry of Health would provide its premises to hold future meetings of the national coordination mechanism.
- National Environmental Management Agency should delegate functions or seek assistance from other ministries in those areas that it's lacking. E.g. Chemicals Database management to Ministry of Agriculture.
- Make use of the Africa Institute to source for funding to carry out national environmental activities.
- NEMA – Uganda to spearhead the development of project proposals for capacity building activities under the Rotterdam convention.
- Import responses to be finalized by NEMA – Uganda and submitted to BRS before the end of the year.

Swaziland

- As a way forwards, it was agreed, that the OCP would initiate the process on appointing the Designated National Authority for Pesticides and on getting the country to report to the Rotterdam Convention Secretariat in the form of Import Responses.

Kenya

- A follow up stakeholder meeting would be convened by NEMA to make decisions on the outstanding interim responses
- The Attorney General's office would be involved closely to ensure the enactment of all outstanding draft laws, including one on chemicals management.

- It was agreed that the OCP and Ministry of Environment would initiate the process on appointing the Designated National Authority for Pesticides and on getting the country to report to the Rotterdam Convention Secretariat in the form of Import Responses.

CONCLUSION

The overall project, including the national follow up seminars in the five (5) countries, highlighted challenges of coordination implementing the obligations under the Rotterdam Convention that has resulted in low or non-reporting on import responses to the BRS. In total one hundred and seventy one (171) participants attended the workshops representing diverse sectors in the countries. The project resulted in the setting up or strengthening of national coordination committees in all the participating countries and discussions on how to develop sustainable work plans were explored and in a number of cases these were done and implementation is expected. It is now expected that import responses on outstanding industrial chemicals from the participating countries will be submitted to the BRS.

Low level awareness on the Rotterdam convention and general environmental management among various stakeholders in the countries continues to be a challenge and thus the development and dissemination of four (4) types of posters totaling Five Thousand Two hundred (5,200) and two (2) types of flyers totaling Seven Thousand Eight Hundred (7,800) as IEC materials under this project was gladly received and all the participating countries pledged their full support to have these distributed to various stakeholders in the countries. This project thus achieved its stated objectives and appreciation goes to the BRS and WHO for the financial and technical support in the implementation of the project.



SUB-REGIONAL WORKSHOP ON INDUSTRIAL CHEMICALS UNDER THE ROTTERDAM CONVENTION

Organized by the Secretariat of the Basel, Rotterdam and Stockholm Conventions and the Africa Institute with support from the World Health Organisation

ANNEX 1: IEC MATERIALS PRODUCED UNDER THE PROJECT



GHS - HEALTH HAZARDS

Danger symbols and indication of danger – old CHIP

Health Hazards according to GHS

Label Elements according to GHS



Acute Toxicity
Fatal if inhaled, in contact with skin and if swallowed



Acute Toxicity
Fatal if inhaled, in contact with skin and if swallowed



Specific target organ Toxicity
Single or repeated exposure
Carcinogenicity
Germ cell mutagenicity
Reproductive toxicity



Respiratory sensitization
Aspiration hazard



Specific target organ Toxicity
Single or repeated exposure
Carcinogenicity
Germ cell mutagenicity
Reproductive toxicity

Acute Toxicity
Fatal if inhaled, in contact with skin and if swallowed



Skin corrosion



Causes serious eye damage



Causes serious eye irritation
Specific target organ toxicity, single exposure (May cause respiratory irritation)
Skin irritation
Skin sensitization



Specific target organ toxicity, single exposure
(May cause drowsiness and dizziness)

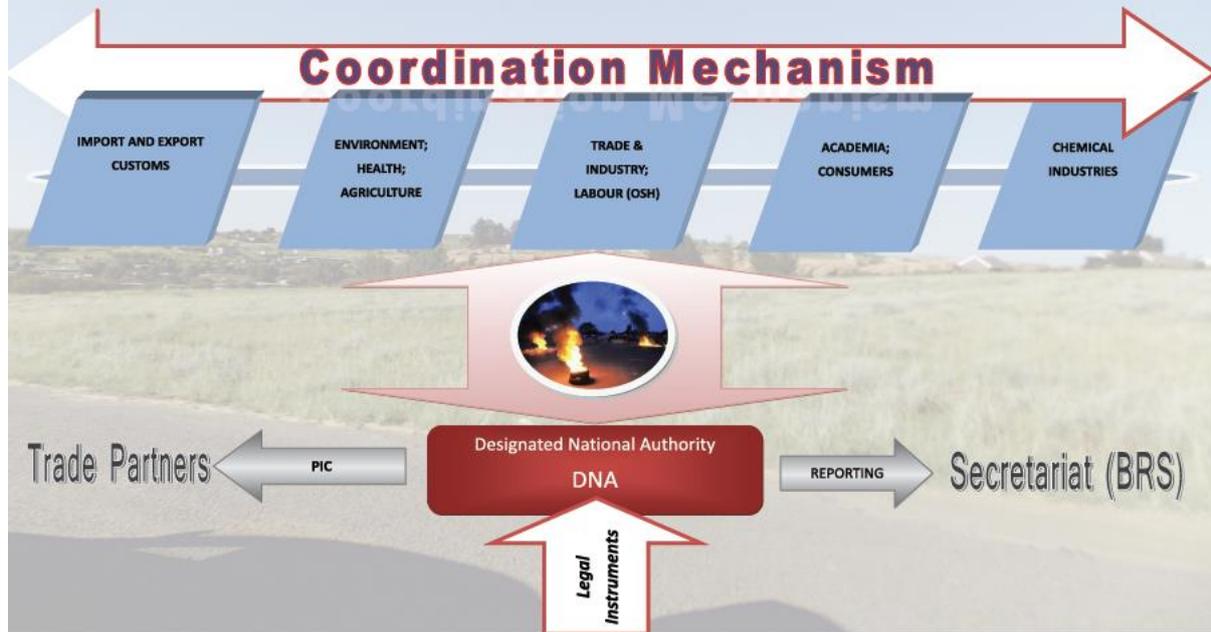


The Africa Institute for the Environmentally Sound Management of Hazardous and other Waste
www.africainstitute.info Tel: +27 72 349 9823



Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

Administrative Procedures



The Africa Institute for the Environmentally Sound Management of Hazardous and other Waste
www.africaninstitute.info Tel: +27 12 369 9862 / 3



HOW TO READ A CHEMICAL SAFETY LABEL

A GHS GUIDE

Chemicals labels and their accompanying data sheets are going through significant changes; they are being "harmonised" with new international system called the Globally Harmonised System of classification and labelling. [GHS]

GHS benefits !

- Promoting regulatory efficiency.
- Facilitating trade.
- Easing compliance.
- Reducing costs.
- Providing improved consistent hazard information.
- Encouraging the safe transport, handling and use of chemicals.
- Promoting better emergency response to chemical incidents.
- Reducing the need for animal testing

GHS PICTOGRAMS & HAZARD CLASSES

- Explosives
- Self -Reactive
- Organic Peroxide



Gas under pressure

- Flammables
- Self-Reactive
- Pyrophoric
- Self-Heating
- Emits Flammable Gas
- Organic Peroxides



Corrosive

- Oxidisers



Acute toxicity

- Environmental toxicity



- Irritant
- Dermal Sensitizer
- Acute toxicity (harmful)
- Narcotic Effects
- Respiratory Tract
- Irritation

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Target Organ Toxicity
- Mutagenicity
- Aspiration Toxicity



The two major elements of GHS are:

1. Classification of the hazards of chemicals according to the GHS rules:

GHS provides guidance on classifying pure chemicals and mixtures according to its criteria or rules.

2. Communication of the hazards and precautionary information using Safety Data Sheets and labels:

Labels - With the GHS system, certain information will appear on the label. For example, the chemical identity may be required. Standardized hazard statements, signal words and symbols will appear on the label according to the classification of that chemical or mixture. Precautionary statements may also be required, if adopted by your regulatory authority.

Safety Data Sheets (SDS) - The GHS SDS has 16 sections in a set order, and minimum information is prescribed.



The Africa Institute for the Environmentally Sound Management of Hazardous and other Waste
www.africaninstitute.info Tel: +27 12 389 9862/3



What are the classes within the Health hazard group?

Criteria for classifying chemicals have been developed for the following health hazard classes:

- Acute toxicity.
- Skin corrosion/irritation.
- Serious eye damage/eye irritation.
- Respiratory or skin sensitization.
- Germ cell mutagenicity.
- Carcinogenicity.
- Reproductive toxicity.
- Specific target organ toxicity - single exposure.
- Specific target organ toxicity - repeated exposure.
- Aspiration hazard.

What are the classes within the Environmental hazard group?

Criteria for classifying chemicals have been developed for the following environmental hazard class:

- Hazardous to the aquatic environment (acute and chronic).
- Hazardous to the ozone layer.

What are the classes within the Physical hazard group?

Criteria for classifying chemicals have been developed for the following physical hazard classes:

- Explosives.
- Flammable gases.
- Aerosols.
- Oxidizing gases.
- Gases under pressure.
- Flammable liquids.
- Flammable solids.
- Self-reactive substances and mixtures.
- Pyrophoric liquids.
- Pyrophoric solids.
- Self-heating substances and mixtures.
- Substances and mixtures which, in contact with water, emit flammable gases.
- Oxidizing liquids.
- Oxidizing solids.
- Organic peroxides.
- Corrosive to metals.

SECRETARIAT OF THE ROTTERDAM CONVENTION



**Globally Harmonized System
of Labeling and
Classification of
Chemicals**



The Africa Institute for the Environmentally Sound
Management of Hazardous and other Waste
www.africanstitute.info
+27 12 399 9862/3



A Tool for National Frameworks

Key elements

Decision Guidance Documents (DGD)

Import response

PIC Circular

Responsibilities of importing and exporting Parties

PIC Circular – summaries of notifications of national regulatory actions, import responses, contact details of DNAs

Export notification – an indication of the hazardous chemicals that are entering the country

Information to accompany export – improved labeling and accompanying information in line with GHS, while HS Codes linked to work of the WCO will facilitate tracking of PIC chemicals

PIC Circular Includes the following Appendices:

Appendix I: Synopsis of final regulatory actions

Appendix II: Proposals for inclusion of Severely Hazardous Pesticide Formulations

Appendix III: Chemicals subject to the interim PIC Procedure

Appendix IV: List of all import responses received from Parties

Appendix V: Compilation of notifications received



IMPORTING COUNTRY RESPONSIBILITIES –DNA

ensure that importers, relevant authorities and where possible users are informed of national import decisions

ensure that import decisions apply uniformly to imports from all exporting countries and

to any domestic manufacturing of the chemical for domestic use

EXPORTING COUNTRY RESPONSIBILITIES - DNA

implement legislative and administrative measures to communicate import decisions within its jurisdiction

take appropriate measures to ensure that its exporters comply with import decisions

ensure appropriate labeling (GHS) and information accompanies exports

Advise and assist importing Parties

to obtain further information to help them make import decisions

to strengthen their capacities and capabilities to manage chemicals safely

WHEN?

For each chemical in Annex III, DNA must submit an import response no later than the date of entry into force of the Convention for that country

For each new chemical added to Annex III, DNA has to submit an import response no later than 9 months after the date of dispatch of the DGD

If a Party modifies its import decision, the DNA must submit a revised response to the Secretariat



The Africa Institute for the Environmentally Sound Management of Hazardous and other Waste
www.africaninstitute.info
+27 12 399 9862/3

SECRETARIAT OF THE BASEL, STOCKHOLM & ROTTERDAM CONVENTIONS



IMPLEMENTING ROTTERDAM CONVENTION

Pesticides & Industrial Chemicals



ANNEX 2: NATIONAL FOLLOW UP SEMINARS - LIST OF PARTICIPANTS

SWAZILAND

PARTICIPANT	ORGANIZATION
1. James Mulolo	Africa Institute
2. Angus McLeod	Swaziland Agriculture Supplies
3. Stephen Zuke	Swaziland Environment Authority
4. Ishmael Ndwandwe	Swaziland Environment Authority
5. Londiwe Msibi	Linthas Pest Control
6. Monday Ntshalintshali	Linthas Pest Control
7. Justice Mahlalela	Usutu Forest Products Company
8. Mzila Nxumalo	Ministry of Justice and Constitutional Affairs
9. Thobile Dlamini	Ministry of Natural Resources and Energy
10.Caleb Motsa	Ministry of Commerce Industry and Trade
11.Blessing Dladla	Ministry of Information Communication and Technology
12. Daniel Sithole	Ministry of Health
13.Boniface Makhubu	Ministry of Agriculture
14.Stephen Khumalo	Ministry of Housing and Urban Development
15.Mdumtzeni Bhembe	Ministry of Economic Planning and Development
16.Musa Shongwe	Swaziland Water Service Cooperation
17.Happy Dlamini	Municipal Council of Manzini
18.Jabu Myeni	Royal Swaziland Sugar Cooperation
19. Patience Mamba	Montigny Investments
20.Mandla Bhembe	Unitrans Swaziland
21.Edward Mswane	Department of Water Affairs
22.Meshack Dlamini	Department of Water Affairs
23.Lemohang Mtshali	Matsapha Town Council
24.Futhi Damini	Ezulwini Town Board
25.John Dzamu	The Specialist Pest Control
26.Daniel Khumalo	Swaziland Cotton Board
27.Silombo Mathan	National Maize Corporation
28.Errol Dicks	Farm Chemicals
29.Mancoba Zwane	Swaziland Electricity Company
30.John Msimango	Swaziland Revenue Authority
31.Hlelisizwe Magongo	Umbutfo Swaziland Defence Force

32.Mandla Ntshakala	Swaziland Consumer Forum
33.Bianca Dlamini	Swaziland Environment Authority
34.Mkhululi Mamba	Ministry of Public Works and Transport
35.Thamsanqa Nkambule	Ministry of Tinkhundla Administration and Development
36.Menzi Mbingo	Ministry of Public Works and Transport
37.Bongani Nkabindze	Swaziland Environment Authority
38.Ncobile Tsela	Swaziland Environment Authority
39.Sihle Nxumalo	Swaziland Environment Authority
40.Ncamiso Ngcamphalala	Swaziland Environment Authority
41.Simanga Lukhele	Swaziland Environment Authority
42.Melusi Mbuli	Swaziland Environment Authority
43.Andile Zwane	Swaziland Standards Authority
44.Calsile Mhlanga	Swaziland Environment Authority
45.Sipho Matsebula	Swaziland Environment Authority
46.Victoria Dlamini	Department of Water Affairs
47.Vusi Malinga	Department of Water Affairs
48.Mzwandile Mthethwa	Ministry of Labour and Social Security
49.Phindile Dlamini	Ministry of Agriculture
50.Dumile Sithole	Swaziland Environment Authority
51.Mabandla Shongwe	Swazican
52.Martha Shongwe	Ministry of Education and Training
53.Muzikayise Dube	Swaziland Investment Promotion Authority
54.Mduduzi Dlamini	Swaziland Environment Authority
55.Sifiso Simelane	Swaziland Environment Authority
56.Mthayiphi Dlamini	Ministry of Commerce, Industry and Trade
57.Vumani Tshabalala	Ministry of Labour and Social Security
58.Meshack Bulunga	Swaziland Fruit Canners
59.Patience Vilane	Swaziland Environment Authority
60.Quinton Dlamini	Ministry of Health (National Malaria Control Programme)
61.Delisa Mamba	Swaziland Environment Authority

LESOTHO

	PARTICIPANT	ORGANIZATION
1	Mathato Rammoko	Ministry of Environment
2	Tumisang Masoabi	Ministry of Environment
3	Moipone Makoboshane	Ministry of Education - School Supply Unit
4	Tlalane Green	Ministry of Land Survey and Physical Planning
5	Rorisang Mantutle	Ministry of Agriculture – Crops
6	Ntemohi Maja	Ministry of Environment
7	Masebedu Makhobole	Law office
8	Ntiea Letsapo	Ministry of Water Affairs
9	Khoabane Khalema	Consumer Protection Association
10	Mokitimi Thekiso	Ministry of Health - Environmental Health Department
11	Moleboheng Petlane	Ministry of Environment
12	Thabo Tsasanyane	Ministry of Environment
13	Teboho Mafooa	Ministry of Labour
14	Qenehelo Lenka	Ministry of Trade
15	Kapari Possa	Ministry of Environment
16	Makhiba Tjela	Ministry of Environment
17	James Mulolo	Africa Institute

BOTSWANA

	NAME	SURNAME	ORGANIZATION
1	Gomotsang	Bojase	University of Botswana – Chemistry Department
2	Moabi	Mmolawa	Department of Waste Management and Pollution Control
3	Vickers	Ntonya	Botswana Defence Force
4	Baemedi	Letsholo	University of Botswana
5	Mpho	Leposo	Department of Road Transport and Safety
6	Kesego	Chika	Ministry of Health
7	Ditso	Motsewabeng	Ministry of Health
8	Yvonne	Mpofu	Ministry of Health
9	Boitumelo	Sakhu	Botswana Unified Revenue Service
10	Tshepo Jimmy	Mmolawa	Botswana Defence Force
11	Phillip	Gaborone	Department of Occupational Health and Safety
12	Amar	Amar	Ministry of Mines
13	Saidy	Motladiile	Department of Waste Management and Pollution Control
14	Tshepo	Mosedame	Ministry of Agriculture
15	Gomolemo	Maseelane	Ministry of Health
16	Mopati	Kgosimotho	Ministry of Health
17	James	Mulolo	Africa Institute

UGANDA

	NAME	ORGANISATION
1	Angella Rwabitomize Matsiko	Ministry of Finance, Planning & Economic Development, Plot 2/12 Apollo Kaggwa Road, P.O.Box 8147, KAMPALA.
2	Dr. John Wasswa	Department of Chemistry, College of Natural Sciences, Makerere University Main Campus, JICA Building (Opp. Main Library), University Road. P.O Box 7062, KAMPALA.
3	Emmanuel Kaye	Directorate Government Analytical Laboratories, Ministry of Internal Affairs, Plot 2 Lourdel Road, P.O Box 2174, KAMPALA
4	Fauza Namukuve	Department of Environment Affairs, Ministry of Water and Environment, P.O.Box 20026 Luzira, KAMPALA.
5	John Mwanja	Crop Protection Department, Ministry of Agriculture, Animal Industry and Fisheries. P.O. Box 102. ENTEBBE
6	Kassim Semanda	Ministry of Trade, Industry and Cooperatives, Farmers' House, Parliamentary avenue, P.O. Box 7103, KAMPALA
7	Mubaraka Kirunda Nkuutu	Membership Services, Uganda Manufacturers Association, Lugogo Show Grounds, P.O box 6966, KAMPALA
8	Christine Akello	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.

9	Robert Tumwesigye	Pro Biodiversity Conservationists in Uganda, Plot 181, Bombo Road, Crown House, Building (Ku-Biiri), P.O.Box 21294, KAMPALA.
10	Silver Ssebagala	Uganda Cleaner Production Center. Plot 42A Mukabya Road. P.O. Box 34644, KAMPALA
11	Wilbur Nsiyona Bukosa	Compliance Unit C&BA Division/Customs Department, Uganda Revenue Authority, 9th Floor Plot 17, Crested Towers, Hannington Road KAMPALA
12	Susan Okodi	Department of Multilateral Organizations and Treaties, Ministry of Foreign Affairs, 2A/B Apollo Kaggwa Road, P.O.Box 7048, KAMPALA.
13	Aziz Mukota	Uganda National Bureau of Standards, Plot M217 Nakawa Industrial Area, P.O.Box 6329 KAMPALA
14	Dr. Agaba Edson Friday	National Drugs Authority, Ministry of Health Plot 46/48 Lumuba avenue, P. O. Box 23096 KAMPALA,
15	Dr. Nsubuga Fred Mangasi	Ministry of Gender, Labour and Social Development, Plot 2, Simbamanyo House, P.O. Box 7136 George St, KAMPALA
16	Innocent Ejolu	Office of the Prime Minister, Plot 9-11 Apollo Kaggwa Road, P.O. Box 341, KAMPALA.
17	Mr. Steven Byantwale	Crop Protection Department, Ministry of Agriculture, Animal Industry and Fisheries. P.O. Box 102. ENTEbbe

18	Egitat Geoffrey	Vector Control Division Ministry of Health KAMPALA
19	Mr. Grace Birikadde	Rural Electrification Agency/Expert, Basel Convention KAMPALA
20	Dr. Sekimpi D.K	Uganda National Association of Community and Occupational Health
21	Mr. Ellady Muyambi	Uganda National A(UNETMAC)
22	Mr. Andrew Othieno	Uganda National Bureau of Standards, Plot M217 Nakawa Industrial Area, P.O. Box 6329 KAMPALA
23	Stephen Mugabi	Department of Environment Affairs, Ministry of Water and Environment, P.O. Box 20026 Luzira, KAMPALA.
24	Dr. Joseph Kobusheshe	Petroleum Exploration and Production Department Ministry of Energy and Mineral Development Entebbe
25	Ms. Jascinta Nalwoga	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
26	Mr. Richard Nyenje	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
27	Mr. Arnold Waiswa Ayazika	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
28	Ms. Christine Kasedde	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
29	Dr. Tom Okurut / Dr. Gerald Sawula Musoke	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
30	Ms. Turyahikayo Enid	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.

31	Mr. Alex Winyi Kizza	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
32	Mr. Isaac Ntujju	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
33	Ms. Nancy Alimadi	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
34	Ms. Margaret Aanyu	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
35	Mr. Dick Lufafa	National Environment Management Authority, Nema House Plot 17/19/21 Jinja Road, P.O Box 22255, KAMPALA.
36	James Mulolo	Africa Institute

KENYA

No.	Name	Institution	Email
1.	Fredrick Nambisia	NEMA - Machakos	fnambisia@nema.go.ke
2.	Nyandoro Josiah	NEMA	jnyandoro@nema.go.ke
3.	Kahindi Yeri	NEMA	kyeri@nema.go.ke
4.	Ali Mwanzei	NEMA	amwanzei@nema.go.ke
5.	Anita Owiti	NEMA	delianita3@gmail.com
6.	Doreen Alwala	NEMA	alwala.doreen@gmail
7.	Jobbins Njilimani	NEMA	njobbins@yahoo.com
8.	Wilfred Koech	Kenya Power and Lightening Company - Stima Plaza	wkoech@kplc.co.ke
9.	James Mulolo	Africa Institute	jmulolo@environment.gov.za
10.	Immaculate Simiyu	NEMA	isimiyu@nema.go.ke
11.	Marcela Ojiambo	NEMA	mojiambo@nema.go.ke
12.	Boniface Mamboleo	NEMA	blengisho@nema.go.ke
13.	Persila Okuna	Kenya Bureau of Standards	okunap@kebs.org
14.	Dickson Njora	NEMA	dnjora@nema.go.ke
15.	Lilian Kerio	Kenya Agricultural Research Livestock Organization	chebetkerio@yahoo.co.uk
16.	Eric Ngondi	NEMA	Eric.ngondi@gmail.com
17.	Simon Kimote	NEMA	symokassim@gmail.com
18.	Jane Nyandika	NEMA	jnyandika@nema.go.ke
19.	Mercy W. Kimani	Ministry of Environment and Natural Resources	Wambuimercy08@gmail.com
20.	Francis Kihumba	Ministry of Environment and Natural Resources	kihumbafn@yahoo.com
21.	Joyce Imende	NEMA	jimende@nema.go.ke
22.	Gideon Rotich	NEMA	grotich@nema.go.ke
23.	Barasa Wanyonyi	Pest Control Products Board	md@pcpb.or.ke
24.	James Siaji	NEMA - Nakuru	jsiaji@nema.go.ke
25.	Maureen Njeri	NEMA	mnjeri@nema.go.ke
26.	Salome Kiseve	NEMA	skiseve@nema.go.ke
27.	Ann Murungi	NEMA - Kajiado	kaburumuruungi@nema.go.ke
28.	Marrian Kioko	NEMA – Regional office	marrian@nema.go.ke
29.	Dr. Farida H. Were	Kenya Industrial Research Development Institute	faridares@yahoo.com
30.	Elijah Ruttoh	Anti Counterfeit Authority	eruttoh@aca.go.ke
31.	Faith Taabu Pesa	Ministry of Environment and Natural Resources	pesashida@gmail.com
32.	Benjamin Kwatemala	NEMA	bencchio3@gmail.com
33.	Shem Oino	NEMA	shemoino@gmail.com
34.	Lulu Hayanga	State Law Office	Tenshilaw07@gmail.com