WORK PLAN BY THE STOCKHOLM CONVENTION REGIONAL CENTRES

Name of the Regional Centre: CSIR-National Environmental Engineering Research

Institute (Stockholm Convention Regional Centre on

POPs for Asia Region)

Work plan submitted by:

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Job title: Director Date: 30 September 2011

This work plan covers the period from 1st January 2012 to 31st December 2013

1. The Introduction and Background

India is one of the fastest growing economies in the globe. As a result of rapid industrialization and globalization, large quantities of hazardous chemicals are intentionally or unintentionally getting added to the environment, thereby, posing serious threat to the human health and the environment. Therefore, the environmental quality control with respect to hazardous chemicals is an imperative need of time. India is a signatory party for Stockholm, Basel and Rotterdam conventions, which seeks for safer technologies for the protection of the ecosystem and the mankind. As per the Article 12 of the Stockholm Convention, the regional/sub-regional centre has to serve the concerned parties of the region with respect to the technical assistance and capacity building for fulfilling their obligations under the Stockholm Convention. The Regional centres should take into account existing or ongoing efforts taking place in the areas of relevance to the Stockholm Convention implementation, in the context of cooperation with other relevant organizations in the regions. This is an important movement to facilitate the exchange of information, experience and expertise among the countries in the region which will encourage the integration of various national actions and activities recommended by the Convention. Additionally, the priority areas of the region has to be

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studied and accordingly immediate action plans formulation are the imperative steps to be taken.

CSIR-NEERI was a part of the team for formulation of National Implementation Plan (NIP) on POPs of India as a first step to implement the Stockholm Convention. In September 2010, Ministry of Environment and Forests nominated CSIR- National Environmental Engineering Research Institute owing to their expertise in the area of environmental science and engineering as one of the regional centre to serve for Asia region under the Stockholm Convention which was endorsed in COP-5 meeting held at Geneva during April 25<sup>th</sup> – 29<sup>th</sup> 2011. Asia region includes a total of 43 countries which have ratified the Stockholm Convention. CSIR-NEERI will be serving 10 countries from the region besides India (viz. Bangladesh, Maldives, Mongolia, Myanmar, Nepal, Philippines Thailand, Sri Lanka, UAE and Vietnam) as an initiative to work for their capacity building and technology transfer in the field of POPs.

### 2. Goals and Objectives:

#### Goals:

The major goals of the center is to provide technical assistance to the parties in the region so as to enhance the capacity of the parties with respect to public awareness, environmental monitoring and sound management of POPs and POPs contaminated sites (PCBs, POPs pesticides, dioxins, furans and new POPs), to strengthen the legal and regulatory framework, health and environmental risk assessment for fulfilling their obligations of the Stockholm Convention.

## Objectives:

- To provide technical assistance to the parties including knowledge based services on POPs and new POPs.
- To build capacity of the policy makers, regulatory authorities public sector managers for environmentally sound management of POPs
- To train the parties for the environmental monitoring and analysis of POPs.
- Capacity building in the region for monitoring and assessment of POPs in various environmental matrices, including human health.
- To promote environmentally sound management of sites contaminated with POPs.
- To raise awareness on hazardous impacts of POPs on the environment.

#### 3: Constraints and Resources:

#### **Constraints**

- Difficulty in communicating with the Parties of the region.
- Lack of awareness on the need of the monitoring programme.
- Lack of awareness on the toxic UP-POPs like dioxins, furans and new POPs, their environmental monitoring and analysis.
- The situations in the region such as economic development, legal system, and language sometimes cause inconvenience and difficulties during consultation and activities undertaking.
- Most of the region suffers lack of data on concentrations of POPs in the environmental matrices. This absence of information is preventing the local authorities from taking adequate actions to protect people and environment. Therefore this activity needs attention in the region.
- A large amount of funding will be required to achieve the goals, so CSIR-NEERI centre needs to find financial agencies to support the work plan.

#### Resources

CSIR-NEERI has an extensive experience in waste management. The Institute has outstanding scientific and technical manpower and resources to consult and demonstrate hazardous waste management and disposal technologies. CSIR-NEERI has an adequate knowledge on BAT/BEP; waste management, POPs analysis and has also successfully carried out two major objectives (**Objective 4-** Measures in relation to unintentionally produced POPs and **Objective 5-** Measures in relation to waste and contaminated sites) in the formulation of NIP of the country.

The institute is well versed with instrumental facilities successfully performing the sampling and analysis of POPs. The institute has a basic infrastructure to perform all type of physico-chemical analyses, microbiological and parasitological tests, hydrobiological analyses, toxicity and mutagenicity bioassays, toxicological analyses, sampling and field analyses for all kind of environmental matrices. The Institute is playing a major in designing secured landfills for hazardous waste disposal in India. So far CSIR-NEERI has designed many secured landfills for hazardous waste disposal in India. At present various projects on POPs, both in-house and sponsored are undergoing in the Institute. CSIR-NEERI is involved in R&D and consultancy projects

and demonstrated competence in the management and safe disposal of hazardous waste including POPs. The centre will be taking full advantage of all the resources to carry out activities on management POPs to promote and support the implementation of the Stockholm Convention in the region. Along with that, the synergies of the three Conventions on the management of chemicals and wastes will also be strengthened thereby.

## 4: Strategy and Activities

- Enhance awareness on POPs including UP-POPs and newly added POPs among concerned stakeholders
- Enhance and continuously update and upgrade national inventory for POPs stockpiles and wastes
- To improve the communication and capacity of the officials and technical staffs on BAT/BEP for POPs
- Promote and develop regional capacities for POPs monitoring
- Strengthen analytical facilities for POPs in the centre
- Organizing laboratory practical training for POPs monitoring
- To enhance technical capacity for analysis of POPs on human tissue, blood, milk and meat, fish, live stocks and wildlife samples
- Organizing technical courses to support Stockholm Convention implementation
- Strengthening institutional capacities to undertake extensive coverage of preventive measures required for the management of releases from POPs stockpiles and wastes
- Identification and prioritization of potential contaminated sites
- Approach for the available funding resources including GEF, MoEF and other regional funding agencies
- Develop training and awareness raising booklets and materials
- Conduct desk studies on cost effective and environmentally sound degradation of POPs

## 5: Appendices including budget and schedule

The purpose of appendices is to provide further details such as budget and schedule of the projects.

Appendix I: Budget

Activities	Expenditure	Source of funding
Regional awareness workshops on POPs for capacity building of the stakeholders	\$3,00,000	MoEF
To develop booklets and materials for public awareness	\$2, 00,000	MoEF
Strengthening the analytical facilities of the centre	\$6,00,000	MoEF
Programmes for monitoring of POPs in different environmental matrices for identification of contaminated sites	\$3,00,000	GEF/ MoEF
To carry out inventory investigation on POPs use in the selected countries in the region	\$3,50,000	GEF/ MoEF
Desk studies on methodologies for cost effective and environmentally sound management of POPs	\$2,50,000	GEF/ MoEF
Total	\$20,00,000	

# Appendix II: Schedule

Activities	2012											2013												
	J	F	М	Α	М	J	J	Α	s	0	N	D	J	F	М	Α	M	J	J	Α	S	0	N	D
Regional awareness workshops on POPs for capacity building of the stakeholders								٧	٧	٧	٧									٧	٧	٧	٧	٧
To develop booklets and materials for public awareness									٧	٧	٧	٧	٧	٧	٧	٧								
Strengthening the analytical facilities of the centre	٧	٧	٧	٧	v	v	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧
Programmes for monitoring of POPs in different environmental matrices for identification of contaminated sites			٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	V	٧	٧	٧	٧	٧				
To carry out inventory investigation on POPs use in the selected countries in the region			٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧					
Desk studies on methodologies for cost effective and environmentally sound management of POPs	٧	٧	٧	٧	v	٧	٧	٧	٧	٧	٧	٧	V	V	V	٧	٧	٧	٧	٧	٧	٧	٧	v