# National Seminar on Co-Processing Chennai 16<sup>th</sup> October 2014

# Panel Discussion: Policy Reforms & Infrastructure Requirements to accelerate Co-Processing







#### **Benefits of AFR Co-Processing**

- Sustainable and environmentally sound solution for waste management problem in the country
  - > Annually 60-65 mMT of Waste generation including MSW, Hazardous wastes
- ❖ Current utilization through Co-Processing is 1-2%, whereas the potential estimated is by 25 -30%
- ❖ Replacing conventional fuel with AF by 30% could reduce emissions by 10.32 mMT CO₂/yr.
- Reduces dependence on Natural resources
  - ➤ 10% TSR reduces emissions by 22 kg CO<sub>2</sub>/MT of Cement







## **Expert Group Created**

S No	Name of PCB Representative	Designation	Pollution Control Board
1	Mr A Ramchand	Chief Environmental Engineer	Andhra Pradesh Pollution Control Board
2	Mr R P Tiwari,	Superintendent Engineer	Chhattisgarh Pollution Control Board
3	Mr M G Kagzi	Deputy Environmental Engineer	Gujarat Pollution Control Board
4	Mr Venkatesh Shekar	Senior Environmental Engineer	Karnataka State Pollution Board
5	Mr PS Bundela	Regional Officer, Bhopal	Madhya Pradesh Pollution Control Board
6	Mr V M Motghare	Joint Director – Air Pollution Control	Maharashtra Pollution Control Board
7	Dr Vijai kumar Singhal	Senior Environmental Engineer	Rajasthan Pollution Control Board
8	Dr K Karthikeyan	Member Secretary	Tamil Nadu Pollution Control Board







## **Summary of activities Phase 1**

1	Release of Best Practices Manual	May 2011
2	Launch of Co processing Mission (10	October 2011 Visit to
	member team of CII and PCB officials)	1. Ultratech, Reddipalayam, TN
		2. ACC Madukkarai, TN
2	Workshop on Co-processing in Cement	November 2011 , Visit to
	plants cum mission	1.ACC Ltd, Lakheri Cement
	(8 members including PCB officials)	2.UltraTech Cement Ltd, Jaipur
3	International Mission	December 2011 -Visit to Switzerland,
	(12 members including PCB officials)	France and Germany Cement plants
4	National Mission	May 2012 to ACC Ltd, Wadi cement works
5	White paper on increasing Co-	Aug 10, 2012 submitted to MOEF
	processing in Indian cement plants	
6	Workshop on Co-processing in Cement	On Oct 11 2012, visit to Lafarge,
	plants cum mission	Sonadih Cement works







### **Summary of activities Phase 2**

1	Capacity building activities	Green cementech 2013
	> Meeting with PCB representatives	16 <sup>th</sup> May 2013
	<ul> <li>Special interactive session with Pollution Control Board Officials on Alternate fuel utilization</li> <li>Technical Session on latest developments &amp; increase use of AFR in Cement Industries</li> </ul>	15 <sup>th</sup> May 2013
2	National AFR mission	Vasavadatta Cement, Karnataka
3	Expert group meeting and stake holders meeting	11 July 2013, New Delhi
4	Workshop on Waste to AFR &	28 <sup>th</sup> November 2013, Waste management summit 2013, Bangalore
	Co – Processing in Cement plants	







### **Summary of activities Phase 2....**

5	Round table discussions among stake Holders in 8 states	December 2013 – March 2014
6	Incorporating experts comments on Round table discussion outcome and submitting to MOEF	On going
7	Special interactive session with Pollution Control Board Officials on Alternate fuel utilization	16 <sup>th</sup> May 2014: Green Cementech 2014
	Technical Session on latest developments & increase use of AFR in Cement Industries	
8	Technical Bulletins on combustion air requirement for biomass & MSW	Aug 2014
9	Inventory of Hazardous waste & CII Waste Exchange website	October 2014







#### **Further steps**

- Develop Waste Exchange website with support & involvement from all stake holders as "One stop solution for waste management and utilization"
  - Data Availability & Updation
  - Sharing of info: Waste, Case studies, Queries, Procedures
- Involve Municipalities for accelerating MSW Co-Processing –
   Synergies with PM's latest mission "Clean India Campaign"
- Work with CPCB and state PCBs towards adding a new category in the waste hierarchy - "Co-processing Waste"
- Further awareness creation through workshops & technical publications







# **Expectations from Waste Generators**







#### Support needed for Waste Generators

- 1. Waste Disposal Concerns
- 2. Alignment with on going sustainability initiatives
- 3. Policy Facilitation required
  - Flexibility for selecting pre processing / co processing units
  - 2. Approval procedure and time interval
  - 3. Extending consent duration







# **Expectations from Cement Plants**







#### **Support needed for Cement Plants**

- 1. Waste availability concerns
- 2. Policy Facilitation Requirements
  - 1. Approval procedure and time interval
  - 2. Minimizing trials
  - 3. Extending consent duration
- 3. Preference / support for plants with adequate infrastructure for pre processing & Co-Processing







#### Points for discussions

- Implementation of the coprocessing solution on large scale in the country especially for management of Industrial Solid Wastes and Municipal Solid Wastes.
- 2. Infrastructure to be made ready at the cement plants
- 3. Required policy level changes
- 4. Pre processing of wastes is a key for large scale use of wastes as AFR. How to promote preprocessing.
- 5. Challenges in transportation and other segments of waste management and how to overcome them









## Thank you





