Enhancing Local Enforcement by Central Government in Thailand

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Outline of Problem
Small Industry Pollution Control

Environmental Problem from Industry

- Large industries responsible by Ministry of Industry
  - Under Factory Act
  - Proper regulations and enforcement

- Small / Community based Industries responsible by Local Government
  - Under Public Health Act
    (authorized local gov to control if needed)
  - Ambiguous regulation and zero enforcement
Outline of Problem
Small Industry = High Pollution Load?

• Change in process and material all the time according to budget and raw material
• Located in residential area
• Zero pollution control
• No responsible party
• No database for enforcement
Outline of Problem
Small Industry = High Pollution Load!

- BOD Loading in 3 Major Rivers
  - Small Industry: 27%
  - Industry: 20%
  - Pig Farm: 18%
  - Aquaculture: 6%
  - Resident: 29%

Map showing pollution distribution.
Idea - Control Strategy?

Effluent Standard vs Process Standard

- Inspection must be done by trained officer with specific equipment
- Need laboratory for analysis

- Designate method on pollution control
- No need for effluent sampling
- Inspection on method of pollution control

Building a collection of pollution control and management method for small or local Industry

must be probable for local budget, manpower and material
Manual = BPT (Best Practical Control Technology) Guideline released by PCD on 2013

Part 1
Regulation related to local industry control and how to use regulation for control small industries in local area

Part 2
Pollution Control Method for Small Industry

Appendix
How Manual Guideline Work?

Working Like Dictionary

Looking for Word relating to small Industry you want to control

Table give you how should you manage pollution

Choices of wastewater treatment method
Implementation – training local governments

- During 2012 – 2013 PCD has cooperated with regional office on training on how to use BPT manual
- Manual is very popular as many local governments requested a paper version of manual (file can also be downloaded from PCD website)
For tryout, PCD asked local governments and regional offices near Bangkok to try the manual for helping communities based industry do environmental management.

After 6 months then go back and evaluate results ....
# Problem Found – Cause & Recommendation

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<tr>
<th>Problem Found</th>
<th>Possible Cause</th>
<th>Recommendation</th>
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| Local government officers did not follow through the program, after PCD left them by themselves. | ▪ Too many works to do  
▪ Pollution or Environment was not the main problem for local government  
(infrastructure is 1st Pri) | ▪ (future) Combining many local governments together will get benefit on economy of scale enough for assigning officer to specific task |
| Community based industries mostly lack of budget to improve their environmental management, especially to construct pollution control device such as wastewater treatment plant. | Income usually divided among members and no one usually control money management among members. (Need vote to invest for anything) | ▪ Required some a level of pollution control at beginning (small investment) and increase level of pollution control as site expand.  
▪ Set up some soft loan program or funding mechanism. |
**Final Words..**

- Although guideline made can not be used as tool for enforcement of small – community based industries, the handbook is now surely used by local government and regional bureau officers to recommended an easy way to control pollution for local processes.
- As decentralization process continue, local governments are increasingly more important in pollution control process. Capacity building is required, however, it will be long time before we see substantial result.
- PCD will use economical instrument in future control.
Thank You for Attention
Any Question ?