



# **Study on Air Quality Management Regulations in Indonesia**

## **Executive Summary**

**Prepare by:**

**PELANGI**

**Agustus 2003**

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Executing Agencies	: <ul style="list-style-type: none"> <li>• PELANGI</li> <li>• Indonesia Center for Environmental Law (ICEL)</li> </ul>
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Name of Program	: <i>"A 9-month project to draft and disseminate a policy paper on the Clean Air Law"</i> LoA FSN 418
Duration	: 15 September 2002 s.d. 31 Juli 2003
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Type of Report	: Executive Summary

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## A. Background

The right of the people for clean air in Indonesia is guaranteed under the Environmental Law (UU No. 23/1997). However, the air that we breathe is getting worse with time.

Continuous monitoring in ten cities in Indonesia in the year 2002 shows that at least ten days within that year that people in those cities were exposed to unhealthy air. Even worse, in Pontianak for almost three months the people were living in dangerous air<sup>1</sup>.

A survey conducted in 2001 by CESDA LP3ES on public perception in DKI Jakarta, Surabaya, Medan, Banjarmasin and Makasar, shows that 90% respondents conceive that the cities are polluted. 82% believed that the air pollution has a negative impact to their health<sup>2</sup>.

Yet, there are not less than 75 regulations related to air pollution either in the form of laws (UU), governmental decrees (PP), presidential decrees (Keppres), ministerial decrees (Kepmen) and local governmental decrees (Perda) are available. **Thus, are those regulations not effective and efficient to manage the air quality?**

To address the question, Pelangi initiated a review on regulations related to air quality management in Indonesia.

## B. Objectives

The objectives of the program are:

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<sup>1</sup> Amelia Rachmatunisa dan Endang Hidayat (Subid.Pemantauan Kualitas Udara Ambien, Asdep. Sarana Pengendalian Dampak Lingkungan, Kementerian Lingkungan Hidup). Pemantauan Kualitas Udara Ambien. Prepared for the stakeholders workshop in Hotel Ambhara, 23 Januari 2003.

<sup>2</sup> Sani, R.R., *New Ways to Combat Air Pollution from Mobile Sources: The Case Study of Mitra Emisi Bersih (MEB-the Indonesian Partnership on Clean Emissions Forum)*, presented at *Better Air Quality Workshop 2002* in Hongkong, 16-18 December 2002.

- (i) To raise awareness, increase knowledge and understanding among stakeholders, i.e. government (executives, legislatives and judicatives) and public (private sectors and civil society);
- (ii) To obtain buy-ins from the government, who will be responsible for making policies regarding the air quality management;
- (iii) To formulate policy paper as a reference in preparing the legal document for air pollution control regulation;
- (iv) To make the policy as a model for the community's participation in the process of regulation drafting process in the future.

### **C. Activities**

Pelangi conducted a policy research to improve air pollution control regulation in Indonesia by means of participatory process from September 2002 to July 2003. ICEL provided a special assistance to Pelangi especially in addressing the legal and institutional aspects from January to July 2003.

Pelangi expected the consultative process may raise awareness of the stakeholders, thereby contributing to a clearer sense of public ownership in the proposed legislation reform that flew from participatory input. The stakeholder includes national and local government, private sector and civil society. The consultation process conducted in form of interview, experts' panel, focuss group discussions, multi-stakeholders workshops and public dialogue.

In addition to the consultation process, Pelangi also conducted public outreach activities to increase awareness of the general public on air pollution issues as well as disseminate the policy research findings.

### **D. Outputs, Beneficiaries and Impacts**

There are several outputs of this program as follows.

- (i) Stakeholders consultation
  - 11 interviews with government officials
  - 12 interviews with civil society
  - an experts' panel
  - 2 focuss group discussion
  - 2 multi-stakeholders workshops
  - a public dialogue
- (ii) Public outreach
  - 3 radio talkshows
  - 2 series of radio public service advertisements
  - 8 radio interviews
  - 5 televisions interviews
  - 2 articles in printed newspaper
  - 2 articles in cyber media
  - 3 press releases
  - 1 booklet with title "Udara Bersih Hak Kita Bersama" (clean air is everyone's right)
- (iii) Network building
  - Participation in Better Air Quality in Asia and Pacific Rim 2002
  - Participation in Clean Air Asia Initiatives

- Participation in International Urban Forum
- Participation in Air and Waste Management Association Conference

(iv) A policy paper on Indonesia air pollution control regulations

If the government adopts and implements the policy paper, the betterment of related policies can be expected to better the air quality and ensure the right of everyone for clean air. In turn, million of Indonesia's population will be benefited of clean air. The impact can be quantitatively measured from the ambient air quality monitoring result.

From the perspective of process, the participatory approach developed in this program can be a model for policy formulation in Indonesia as well as other countries.

In addition, the specific impacts for certain activities are identified as follows.

### **1. Multistakeholders workshops**

The workshops gave a chance for stakeholders to give input and to discuss the issue. The inputs were gathered from different perspectives and were useful in enriching not only the team but also the participants. The workshops were also expected to increase the understanding among stakeholders on the issue and to minimize the sectoral ego. The presence of both central and local government officers were also expected to fill the communication gap between them.

The first workshop was conducted on January 23, 2003 and was attended by 50 participants representing 25 out of 27 invited institutions. In this workshop, participants were requested to submit a written input in advance. However, only four participants did not send their input prior to workshop. There were also representatives of 5 other institutions either as resource persons, notulists or observers. However, input from all of them have been able to give clearer direction of the study, i.e. a decision of making the study more focus on inventory of problems instead of writing a draft of regulation was made based on the workshop.

The second workshop was on July 23, 2003. Of 64 intivations being sent to 40 institutions, there were 27 participants representing 20 intitutions. It was expected that there will be representative of media; parliament (DPR) and industry association, even so they were not coming. The number of attendance was smaller than the first one. The input from invitees who were not able to attend is because the meeting was held on Monday when many institutions have their internal meetings.

From both workshops, participants found out that such events are useful for them both increase their knowledge as well as network. 80% participants gave back the evaluation form and mentioned their intention to take part in similar events in the future.

### **2. Public dialogue**

Pelangi held a public dialogue at the end of the study, i.e. on July 30, 2003. The dialogue was planned to be a forum to promote the result of the study as well as to gather input from general public.

The topic of the dialog was "Udara Bersih Hak Kita Bersama" (clean air is everyone's right). The topic was selected because in principle, right and responsibility are two unseparated things. However such topic was selected to increase the awareness of the public on an even right for clean air as most of the

campaign regarding clean air emphasizing on the responsibility of the people to mitigate air pollution.

We believe that one of efficient public participation in bettering the policy will be the demand for their right. Therefore, the series of campaign conducted by Pelangi was designed to empower the public by increasing their awareness. Furthermore, public support is the most valuable thing in the policy reform process.

Positive response from the public can be seen by the number of participants and the institutions they representing. Of 180 institutions being invited, 104 were represented. Of those, there were 4 political parties, 4 local governments coming from 7 institutions (Kab. Bogor, Kota Bogor, Jakarta Barat, Bekasi, BPLHD DKI Jakarta, Dinas Kesehatan DKI, Dinas Pertamanan DKI), 6 representatives of students unions, representatives from Ministry of Forestry, Ministry of Environment, Ministry of Internal Affairs and Regional Autonomy, Ministry of Energy and Mineral Resources as well as business associations, academicians and NGOs. Unfortunately there was no representative of the parliament eventhough he was invited to be one of the panelists. There were also participants from the media and general public. The discussion was interesting and some ideas have been able to be discussed.

The evaluation form was given back by 74 participants and the response was very positive. More than 90% felt that air quality problem is their concern and that the dialog was able to give them new information especially regarding related regulations. Most of the participants are willing to take part in a similar event in the future.

The response from the media, both printed and electronic (audio-visual) were immensely big. Articles regarding the dialog as well as the air quality problem were published on the next day (Kompas and Republika). It was also published on Kompas Cyber Media dan Gatra.com. There were two TV stations put the dialog in their news (Metro dan TransTV). Even after the dialog, Pelangi has been invited and interviewed regarding air pollution issue by several radios (Jakartanews FM, Star FM Tangerang, and the network of 68H) as well as other TV stations (Anteve, TransTV, and TV-7).

### **3. Radio campaign**

There were two types of radio campaign being conducted by Pelangi namely (i) radio talkshow and (ii) radio public service advertisement. Radio interview was not included in the radio campaign as it was a response from the radion in following-up other events such as press releases, workshops and public dialog.

There were three radio talkshows with duration of one hour each have been conducted. Two of them were with done with radio with national network. There were different segments of audience being targeted namely house wives and professionals both male and female.

The real impact was seen by the incoming call and messages during the sessions. It was also announced that Pelangi published a booklet and would disseminate it for free. Many requests for getting the booklet came to Pelangi and it has been followed-up.

### **4. Press releases**

Three press releases were sent by Pelangi to both printed and electronic media as well as environmental webpages. As the follow-up of the press releases, Pelangi received interview requests from Radio 68H (89.35 FM/ 603 AM) and Radio Jakarta News (91.74 FM).

The press releases were also published at Pelangi website. It was also published at Terranet website a sustainable development portal. The lack of coverage of the first and the second press releases in the media was due to a general and boring issue regarding air pollution. This was then become a reason for Pelangi to prepare a more interesting publication for public. The booklet was a result of this preparation.

## **5. Booklet**

The booklet title “Udara Bersih Hak Kita Bersama” (clean air is everyone’s right) was launched during the public dialogue. It is a more popular summary of the study. The booklet was freely given to the participants and was expected as a material for increasing the awareness and knowledge.

Some institutions have expressed their interest to use the booklet as their education material, for example Jaringan Pendidikan Lingkungan (the Network of Environmental Education) that requested for 200 exemplars for their teacher training program. Pelangi also disseminates the booklet to local governments all over Indonesia.

## **6. Policy paper**

The policy paper elaborates several important findings related to Indonesia air pollution control regulations as summarized in Table 1. The policy paper needs to be adopted and implemented in order to promote improved air pollution management practice.

## **E. Need for Continuing Program**

Along with the implementation of regional autonomy and decentralization in Indonesia, the local governments are expected to play a key role in managing the air quality. Therefore, air quality regulations ideally should accommodate the diversity of local characteristics in Indonesia. Unfortunately, the stakeholders engaged on the current program still limited to those reside in Jabodetabek and Bandung. The need for the second phase of the program which comprises series of consultations with several local governments and publics is pressing to ensure a more comprehensive problem identifications and recommendation. In order to select a case study, Pelangi is currently distributing the booklet to local governments all over Indonesia.

The second phase will be followed by the third phase that consist of (i) formulation of legal documents as a consensus between government and public; (ii) putting the draft of legal document in the agenda of related government agency; (iii) enactment of the draft legal document; and (iv) allocating the budget for its implementation and enforcement.

**Table 1: Summary of Policy Research Findings and Recommendations (1/3)**

Issues	Findings	Recommendations
<b>(i) Authorities and Institutional Set-up</b>		
Air pollution control framework of law	UU No. 23/1997 (Environmental Law), the environmental management framework law in Indonesia, does not specifically address air pollution.	UU No. 23/1997 should address the air quality management, i.e. authority, law enforcement and sanction, in a specific chapter.
Inter-sectoral coordination	PP No. 41/1999 (Air Pollution Control Decree) appoints the Ministry of Environment (KLH) as the responsible agency to coordinate the air pollution control. However, the decree does not specify the roles and responsibilities of other agencies to a larger extent. Therefore it is difficult for the Ministry of Environment (KLH) to proceed with coordination.	PP No. 41/1999 should prescribe in detail the roles and responsibilities of various agencies related to air quality management.
Regional autonomy era	The authority distribution in PP No. 41/1999 does not synchronize the Regional Autonomy Law.	Harmonize of the division of authority between local, provincial, and central government in PP No. 41/199 with the Regional Autonomy Law.
Enforcement approach	Both, UU No. 23/1997 and PP No. 41/1999 apply command and control approach, but the study reveals the approach has not been so effective in seeking compliance.	Command and control approach should be combined with economic approach to provide an equal importance to both economic and environment that ultimately can lead to voluntary compliance.
International obligations	Indonesia ratified convention and protocol of the ozone layer protection by the Presidential Decree. This regulation does not allow effective control for implementation stage.	International obligations should be ratified by national law (UU).
	The implementation is regulated by Kepmenperindag (Ministerial Decree) that only apply to the industrial and trade sector.	The implementing regulation should be drafted in government regulation (PP).
<b>(ii) Three Pillars of Environmental Democracy</b>		
Access to participation	No procedures regarding public engagement in air pollution policy formulation, nor implementation and evaluation are available.	The system and the procedure of public participation should be developed.
Access to information	No sanction for violating the right for information. Despite several regulations have mandated the government and private sector to provide information for publics.	A sanction for violating the right of the public for information should be determined.
Access to justice	No detail implementation procedures are available regarding i.e. class action, citizen law suit, and conflict resolution.	The system and the procedure to ensure access to justice should be developed.

**Table 1: Summary of Policy Research Findings and Recommendations (2/3)**

Issues	Findings	Recommendations
<b>(iii) Technical</b>		
Air pollution source	PP No. 41/1999 only regulates air pollution from motor vehicle and industrial sources.	
Air quality control program	The procedure prescribed to develop air pollution control program in PP No. 41/1999 still focuses in taking action once the air quality fails to meet the standard.	The procedure to develop a prevention program should be regulated in PP No. 41/1999.
National ambient air quality standard (NAAQS)	<p>The Indonesia NAAQS for criteria pollutant has been set in PP No. 41/1999.</p> <p>No clear statement in PP No. 41/1999 regarding the basis of the national AAQS setting.</p> <p>No written document is found regarding how the standard was set.</p> <p>The Indonesia NAAQS is relatively the same as the ambient air quality guidelines of WHO or the US NAAQS.</p> <p>Air pollution dose response study that is required to set NAAQS is still very scarce in Indonesia.</p>	<p>PP No. 41/1999 should explicitly state the bases of the NAAQS, which is to protect the human health.</p> <p>PP No. 41/1999 should regulate the importance of research on health impact of air pollution, especially dose response study, as a scientific base in determining the NAAQS and identifying new toxic pollutants.</p> <p>Every decision making process should be recorded in written documentation.</p>
	PP No. 41/1999 does not yet regulate toxic air pollutants .	PP No. 41/1999 should regulate the toxic air pollutants.
	The Indonesian national AAQS for hydrocarbon is not clear whether it is for total hydrocarbon (THC) or non-methane hydrocarbon (NMHC), and eventually causes the problem in enforcement.	PP No. 41/1999 should have the explanation for each regulated parameter.
Regional ambient air quality standard (RAAQS)	<p>The NAAQS should apply in all location of Indonesia as all Indonesian should have a same level of health standard.</p> <p>The stringent RAAQS may be necessary to protect (i) the air quality of region that is still clean or (ii) the uniqueness of a region, including flora, fauna and historical sites.</p> <p>The guideline to set the RAAQS is not yet available.</p>	<p>PP No. 41/1999 should explicitly determine the criteria of region that required to set its own RAAQS.</p> <p>Technical guidelines to formulate the RAAQS should be developed.</p>
Air quality, emission, meteorology, geographic and land use data inventory	PP No. 41/1999 has mandated the importance of data inventory, but the guideline is not yet available.	A guideline to conduct the data inventory should be developed.

**Table 1: Summary of Policy Research Findings and Recommendations (3/3)**

Issues	Findings	Recommendations
Regional ambient air quality status	<p>PP No. 41/1999 has mandated the provincial government to announce the regional ambient air quality status.</p> <p>Despite several region has exceed the national AQQS, no region has ever formally announced the region as polluted area.</p> <p>In addition, the gudeline to determine the status of regional ambient air quality is not yet available.</p>	<p>A guideline to determine the regional ambient air quality status should be prepared.</p>
Air pollution dispersion model	<p>Air pollution dispersion model, a tool that provides information in developing air pollution control program, is not available or even prescribed in PP No. 41/1999.</p>	<p>PP No. 41/1999 should recognize the importance and regulate the development of air pollution model.</p>
Emission standard	<p>The Indonesian emission standards are currently available for limited activities/pollutant source.</p> <p>The emission standard setting requires a strong inter-sectoral coordination since it determines base on fuel quality, raw material quality, and the available technology.</p> <p>No written documentation regarding the emission standard setting are available.</p>	<p>The emission standard for other activities that have not been regulated should be developed.</p> <p>The information from inter-sectoral that required for the standar setting should be managed.</p> <p>Every decision making process should be recorded in written documentation.</p>