Department of Science, Technology and Environment (DOSTE)
Ho Chi Minh City

NORAD
DIREKTORAT FOR UTVIKLINGSSAMARBEID
NORWEGIAN AGENCY FOR DEVELOPMENT COOPERATION

Ho Chi Minh City Environmental Improvement Project
Air Quality Monitoring Component

Presentations at the Kick-off Seminar at DOSTE, HCMC, 15-16 April 2002

NILU
Norwegian Institute for Air Research

HCMC
Ho Chi Minh City
Environmental Improvement Project
Air Quality Monitoring Component

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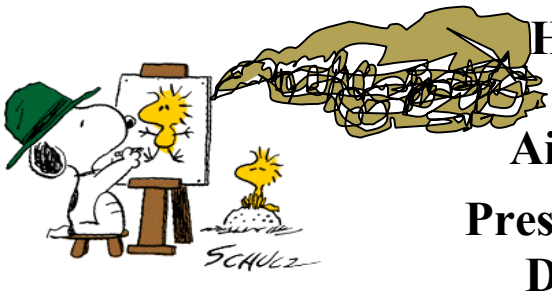

Ho Chi Minh City Environmental Improvement Project
Air Quality Monitoring Component
Presentations at the Kick-off Seminar at DOSTE, HCMC, 15-16 April 2002

1 Introduction

The seminar will represent an introduction to the air quality monitoring and management programme that will be established for DOSTE in HoChiMinhCity. The presentations will be based on a modern air quality monitoring and management system, which will form the basis for the developments, prepared by NILU and funded by NORAD. The basic platform to be used for air quality assessment and planning will be based on the Norwegian developed AirQUIS system.

The continuation of the development of an on-line monitoring programme for the most important air pollutants (Indicators) will be added to a model based air quality planning system.

The key features of the system is the integrated approach that enables the user in a user friendly way to not only access measured data quickly, but also use the data directly in the assessment and in the planning of actions. The demand of the integrated system to enable monitoring, forecasting and warning of pollution situations has been and will be increasing in the future. NILU has an extensive experience in the application of AirQUIS in several large urban areas worldwide.

Environmental data collected through the automatic monitoring and telemetric network will be quality controlled and transferred for storage in the integrated relational databases. Statistical programmes for control of quality and representativeness will be used, and the first results can within one hour after field collection be presented using user-friendly graphical tools.

Air pollution dispersion models will be added to the system in HCMC to enable concentration estimates, evaluation of different source's relative importance to the total exposure, impact assessment and to perform optimal abatement planning.

2 Contents of the seminar

Below please find a list of some of the topics that will be presented during the seminar.

About NILU

AQMS Introduction

Monitoring Programme design

- Objectives
- Design the programme
- Site selection
- Indicators
- Selected Air Quality Indicators (AQI)
- Different instruments different prices

The Management platform

- AirQUIS system
- Introduction
- Demonstrations

Monitoring operations

- Data retrieval and QA/QC
- Data Quality Objectives
- Data retrieval and storage
- Data retrieval via telephone lines

Dispersion and meteorology

- Wind
- Turbulence
- Atmospheric stability

Dispersion models

- Different types of models
- Gaussian type models
- The EPISODE model
- Model applications

AirQUIS applications

- Presenting data
- Data dissemination
- Impacts assessment
- Abatement strategy planning

3 Schedule

Day 1

0900 Welcome address and opening of the seminar
0915 Presentation of NILU
0930 Introduction to the Air Quality Management System (AQMS)
1000 -Coffee break
1020 The complete air pollution management system
The platform-monitoring- models – exposure – databases – presentations
1130 Lunch
1330 Monitoring Programme Design
Objectives - Site studies – Indicators – Site characteristics - instruments
1430 The Air Quality Management platform
AirQUIS system - Demonstrations
1600 Comments and questions
End of day one

Day 2

0900 Monitoring operations
Data retrieval - QA/QC requirements
0945 Dispersion and meteorology
Wind – Turbulence –Stability
1000 Coffee break
1020 Dispersion models
Different- Gaussian models – EPISODE model – model applications
1130 Lunch
1330 AirQUIS applications
Presenting data – Impact assessment – Abatement planning - Forecasts
1530 Comments and questions
1600 Summary and end of seminar

The seminar has been designed for a maximum of 20 participants.

Appendix A

Overheads presented

The following overheads are not a part of the data file for this presentation, but are filed separately as PowerPoint files called F-13-Append-A to F-13-Append-G in the "foredrag" folder at NILU adm.