

Questionnaire on QA/QC activities for Acid Deposition Monitoring in the Participating Countries of EANET.

[EXAMPLE]

Country: XXXXXX

Organization and Position: XXXXXX

XXXXXX

Name: XXXXXX

1. The national QA/QC programs

Q1. Has your country prepared the national QA/AC programs?

- a) For wet deposition monitoring Yes No
b) For dry deposition monitoring Yes No
(Automatic instruments for gas concentration monitoring)
c) For soil/vegetation monitoring Yes No
d) For monitoring of inland aquatic environment Yes No

Remarks

The national QA/QC programs for wet deposition and dry deposition were issued in 1998. We are now developing the programs for soil/vegetation monitoring and inland aquatic environment monitoring.

2. Standard operating procedures (SOPs)

Q2. Have SOPs for acid deposition monitoring been prepared for the relevant laboratories and sites?

- a) For wet deposition monitoring
 Yes(all of them) Yes(some of laboratories) Yes(some of sites) No
b) For dry deposition monitoring
 Yes(all of them) Yes(some of laboratories) Yes(some of sites) No
c) For soil/vegetation monitoring
 Yes(all of them) Yes(some of laboratories) Yes(some of sites) No
d) For inland aquatic environment
 Yes(all of them) Yes(some of laboratories) Yes(some of sites) No

Remarks

One laboratory for soil/vegetation and one for inland aquatic environment have not prepared the SOPs. Following the advice of National Center, they are now developing SOPs.

Q3. Especially do they have SOPs for the management of sampling instruments, laboratory, and the management of measurement/analysis instrument, materials (glassware and polyethylene), and reagents?

Yes(all of them) Yes(some of them) No

Remarks

The SOPs contain SOPs for the management of sampling instruments, laboratory, and the management of measurement/analysis instrument, materials (glassware and polyethylene). But the SOP for management of reagents has not been prepared yet.

3. Site performance audits

Q4. Does the National Center conduct a site performance audit at least once a year for each monitoring site in your country?

Yes No (Once in more than one year)

a) Does the National Center have the SOP for site performance audits?

Yes No

b) Are the results of each audit documented and stored at the National Center?

Yes No

No (The Network Center has never conducted site performance audits.)

Remarks

The National Center conducts a site performance audit every two years for each monitoring site, because the budget is not enough to do once a year.

4. Field blank tests in collection and handling of samples for wet deposition monitoring

Q5. Does each relevant laboratory carry out monthly field blank tests on the rainfall collectors based on the technical documents for wet deposition monitoring?

Yes(all of them) Yes(some of them) No

Remarks

The relevant laboratories analyze the field blank sample and report the results of the field blank tests to the National Center once a year when they submit the monitoring data. If the concentration of the chemical species in the field blank is obviously higher than the usual values, they clean the funnel and/or replace tubes.

5. Laboratory audits

Q6. Does the National Center conduct laboratory audit once a year for each relevant laboratory in your country?

- Yes No (Once in more than one year)
- a) During the audit do they check whether the laboratory has prepared the SOPs for the management of apparatus, materials and reagents?
 Yes(every time) Yes(sometimes) No
- b) During the audit do they check whether the laboratory uses standard samples, having guaranteed traceability?
 Yes(every time) Yes(sometimes) No
- c) During the audit do they check whether the laboratory uses water with conductivity less than 0.15 mS/m for analyses, dilution of precipitation samples, and cleaning?
 Yes(every time) Yes(sometimes) No
- d) Are the results of each audit documented and stored at the National Center?
 Yes No
- No (The Network Center has never conducted laboratory audits.)

Remarks

The traceability of guaranteed standard samples and the water are checked in round robin analysis survey as well.

6. Data control and reporting

Q7. Have personnel in charge of data management and reporting, and their supervisors been appointed in each relevant laboratory?

- Yes(all of lab.) Yes(some of lab.) No

Remarks

The relevant laboratories report the names of personnel and supervisors to the National Center when they submit the monitoring data.

Q8. Has each relevant laboratory established a system of data check and approval?

Yes(all of them) Yes(some of them) No

Remarks

In each laboratory the head of the laboratory appoints the personnel responsible for data check and approves the data.

Q9. Do you have data verification activities for EANET monitoring data in your country?

- a) For wet deposition monitoring Yes No
b) For dry deposition monitoring Yes No
c) For soil/vegetation monitoring Yes No
d) For monitoring of inland aquatic environment Yes No

Remarks

The National Center requires some experts to check the monitoring data from a scientific viewpoint.

7. Training

Q10. Has your country carried out national technical training specifically for the implementation of the monitoring activities or as a part of more general training in your country?

Yes No

Remarks

We have a national technical training program for the environment every year (two month duration). In the program there are classes for acid deposition monitoring for two weeks.