

Disposition of NADP/NTN and NADP/AIRMoN Archival Samples

Revised October 2008

Background

All National Atmospheric Deposition Program National Trends Network (NADP/NTN) and Atmospheric Integrated Research Monitoring Network (NADP/AIRMoN) samples are sent for analysis to the Central Analytical Laboratory (CAL). NTN samples are collected weekly on Tuesdays and are sent unpreserved to the CAL in 1-liter polyethylene bottles. On arrival at the CAL, NTN samples are poured from the 1-liter bottles and are filtered. The 1-liter bottles are washed and reused. As volume permits, two filtered portions are saved in 60-mL polyethylene bottles. The first portion is used for chemical analysis and the second portion is stored in a cooler at ~4°C. This second portion is sometimes analyzed to verify measurements of the first portion. The refrigerated portions of NTN samples are retained for five years after the end of the calendar year. At the end of these retention periods, the CAL discards the samples or sends them to an approved requester or requesters.

AIRMoN samples are collected daily when precipitation occurred since the last collection. AIRMoN samples are stored in new, triple-rinsed 250-mL bottles and are refrigerated at ~4°C. Each week the accumulated AIRMoN samples are packed in an insulated carton with chill packs and are sent to the CAL. On arrival at the CAL, AIRMoN samples are left in the 250-mL bottles, and stored in a cooler at ~4°C. They are removed from storage only long enough to pour out portions for chemical analysis. AIRMoN samples are kept refrigerated and are retained for two years after the end of the calendar year. At the end of these retention periods, the CAL discards the samples or sends them to an approved requester or requesters.

Objectives

This policy establishes a set of procedures for reviewing and approving requests for use of archival NTN and AIRMoN samples. This policy seeks to:

- leverage the substantial investments already made in network samples and enhance the scientific value of the network by making archival samples available for additional measurements not currently made by the NADP;
- ensure that the CAL retains a volume sufficient for all analyses and verification checks through the entire retention period (total disposition of archival samples is not permitted); and
- ensure that the NADP retains sole authority to decide on archival sample disposition (allowing no third-party dissemination).

Definitions

NADP/NTN: Archival NTN samples are filtered portions of samples retained in 60-mL polyethylene bottles in a cooler (~4°C) at the CAL. The volume of an archival sample depends on the volume that remains after the CAL has completed all analyses and verification checks of analytical measurements. Archival sample volumes may be up to 60 mL for samples with an initial volume of approximately 100 mL or greater. The **NTN retention period** is five years after the end of the calendar year (e.g., 2008 samples will be released in 2014).

NADP/AIRMoN: Archival AIRMoN samples are (unfiltered) portions of samples retained in 250-mL polyethylene bottles in a cooler (~4°C) at the CAL. The volume of an archival sample depends on the volume that remains after the CAL has completed all analyses and verification checks of analytical measurements. The **AIRMoN retention period** is two years after the end of the calendar year (e.g., 2008 samples will be released in 2010).

During the retention period, archival samples are termed **active archives**. At the end of the retention period, archival samples are termed **expired archives**.

Policies

- The NADP through its Executive Committee retains sole authority to decide on archival sample disposition. Third-party dissemination of archival samples is not allowed.
- Archival samples will be retained in entirety for CAL analyses and verification checks of analytical measurements for one year after the sample collection dates.
- After a year from the date of collection, portions of active archival samples may be sent to approved requesters, provided that no less than 30 mL is retained through the end of the retention period.
- Approved requesters will pay for all costs of materials, labor, and shipping charges associated with preparing and sending archival samples.
- Approval of requests for the disposition of archival samples will be contingent on satisfying all objectives stated above.

Procedures

- Requests for active or expired archival samples will be sent to the NADP Program Office. Requests should include the following information: (a) organization and individual requesting samples; (b) objectives of the investigation; (c) what will be measured and how the measurements will be used; (d) identifications of sites and dates of samples desired; (e) required minimum volume; and (f) specific instructions (“valid” samples only, specific packaging, compositing, etc.).
- Requests will be sent by the NADP Program Coordinator or his/her designee to the Chair of the NADP Executive Committee, the Chair of the Ecological Response and Outreach Subcommittee, and the CAL Director. These four people comprise an ad-hoc committee charged with evaluating the requests. The NADP Coordinator or his/her designee chairs this committee.
- As needed (approximately four times per year), a conference call or email will be initiated among the ad-hoc committee members and the requesters. During this conference, a plan will be developed for the disposition of expired archival samples or for providing portions or sub-samples of active archival samples older than one year from the date of collection. If mutual agreement on a plan cannot be reached, the ad-hoc committee will develop a plan following this call and defer the decision to the Executive Committee. The Executive Committee may vote on the plan, or defer the decision to their next regular meeting.
- During the semi-annual Executive Committee meetings, the NADP Program Coordinator or his/her designee will report on archive samples distributed within the last 12 months.
- Approved plans will be implemented by the CAL Director.
- An individual requester or the Executive Committee may annul the plan and terminate the delivery of samples at any time.
- Ongoing requests spanning two or more years must be reconsidered and approved each year. When conflicting requests are received, the decision will be based on how best to leverage network investments and enhance the scientific value of the network. Such decisions are worked out to the mutual agreement and compromise of the requestors and CAL Director, or deferred to the Executive Committee.
- Recipients of archival samples will pay the costs of materials, labor, and shipping charges associated with preparing and sending these samples. The per-sample cost recovery is prepared each year by the CAL Director. The current list of charges is available upon request.
- Recipients may not distribute NADP samples to anyone else without NADP approval.

- Recipients shall provide copies of presentations, papers, reports, and articles referencing samples to the NADP Program Office. Recipients are encouraged to report their findings at the annual NADP Scientific Symposium, typically held in the fall.
- Recipients of archival samples agree to credit the NADP in all presentations, papers, reports, and articles based on data obtained from these samples. It is suggested that the following acknowledgement be used:
“Archived precipitation samples were obtained from the National Atmospheric Deposition Program (NRSP-3); NADP Program Office, Illinois State Water Survey, Department of Natural Resource Sustainability, University of Illinois, 2204 Griffith Dr., Champaign, IL 61820.”

Approved by the NADP Executive Committee
October, 2008