

News Briefs

Noise Pollution

lution is a significant health hazard in the workplace, according to an article in the April 1989 issue of *AAOHN Journal*. The article states that the use of the louder, larger, and faster machines brought about by this technological boom, "approximately 10 million American workers are exposed to hazardous noise on the job." The author, R. Kay Harrison, Manager of Occupational Safety Services, USPS, Norman, Oklahoma, states that more than eight million U.S. workers are affected by some noise-induced hearing loss.

The article, "Hearing Conservation—Designing and Evaluating a Program," recommends that employers implement a workplace hearing conservation program not only because of rapidly increasing compensation costs but also as an incentive to improve employee productivity. The author states that "studies have shown that noise causes workers to experience fatigue, tire sooner, and have more accidents than workers in quieter environments. An effective program will yield fewer accidents, less mental and physical fatigue, and improved satisfaction within the working environment."

The Occupational Safety and Health Administration (OSHA) hearing standard requires that employers shall administer a continuous hearing conservation program if employee noise exposures exceed an eight-hour time-weighted average of 85 decibels. According to the author, an effective hearing conservation program includes annual exposure monitoring of the work area; testing of employees exposed to noise levels; the availability of hearing protectors; employee training; and accurate noise exposure and audiometric records.

Reduced hearing loss is a major preventable health problem," Harrison states. "Education of both management and labor is important because hearing loss is insidious. A gradual loss happens without pain over a long period of time and cannot be corrected by medical or surgical treatment."

OCCUPATIONAL SAFETY AND HEALTH JOURNAL is a professional peer-reviewed journal published monthly by the American Association of Occupational

Health Nurses (AAOHN). This professional association is for registered nurses who provide on-the-job health care for the nation's workers.

The Airborne Asbestos Handbook (Draft March 1989)

The U.S. Department of Commerce, National Institute of Standards and Technology (NIST) administers the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP's function is to accredit public and private testing laboratories based on evaluation of their technical qualifications and competence for conducting specific test methods in specified fields of testing. Accreditation is granted on the basis of conformance with criteria published in the *Code of Federal Regulations* as part of the NVLAP procedures (15 CFR 271).

Laboratory accreditation for airborne asbestos analysis was established by NIST in response to the requirements set forth in Public Law 99-519, the Asbestos Hazard Emergency Response Act of 1990. The purpose of accreditation is to identify and recognize laboratories that produce reliable test data for the services covered.

The *Airborne Asbestos Handbook* (Draft March 1989) presents the operational and technical requirements to be fulfilled in order for laboratories to gain accreditation under NVLAP to perform airborne asbestos testing using analytical transmission electron microscopy (ATEM). All steps leading to accreditation are discussed. Technical requirements are explained and the way NVLAP criteria are applied is described.

This document is intended for information and use by staff of accredited laboratories, those seeking accreditation, other laboratory accreditation systems, and others needing information on the requirements for the NVLAP accreditation under this program. This document is generally included in the Selection Lists and other materials needed to apply for or renew accreditation.

Test Method Covered: Environmental Protection Agency's (EPA) "Interim Transmission Electron Microscopy (TEM) Analytical Methods—Mandatory and Nonmandatory"—and "Mandatory Section to Determine Completion of Response Actions," Appendix A to Subpart E, 40 CFR 763, October 30, 1987, or the current EPA TEM methods for the determination of complete

tion of response actions for asbestos.

Period of accreditation: One year.

On-site assessment: Performed by NVLAP peer assessor to determine compliance with NVLAP criteria after initial application and every two years thereafter. Monitoring visits as required.

Assessors: Technical experts with experience in analysis of airborne asbestos by TEM.

Proficiency testing: Participation in proficiency testing is required. Testing of pre-characterized quality assurance materials sent to the laboratory by NIST or an authorized contractor. Data to be returned to NIST for evaluation. Proficiency testing schedule will be provided in advance.

Fees: Annual administrative/technical support fee; on-site assessment fee; proficiency testing fees.

Granting Accreditation: Based upon successful on-site assessment, proficiency testing, and technical evaluation of applicable laboratory information.

NVLAP Accreditation

Accreditation is granted only after thorough evaluation of the applicant has demonstrated that all NVLAP criteria have been met. The accreditation is formalized through issuance of a Certificate of Accreditation, Scope of Accreditation and publicized by announcement in various government and private media.

NVLAP accreditation is available to commercial laboratories, manufacturers, in-house laboratories, university laboratories, federal, state, and local government laboratories. Foreign-based laboratories may be accredited by NIST if they meet the same requirements as domestic laboratories and pay any additional fees required.

Why NVLAP Accreditation?

A laboratory may wish to be accredited for one or more of the following reasons: legal requirements (such as regulations or codes), contract specifications, or the desire to be recognized as demonstrably competent to meet the needs of its clients.

For accreditation to be meaningful, it must be granted by a clearly credible organization. NVLAP provides an unbiased third party evaluation and recognition of performance as well as expert technical assistance to upgrade laboratory performances when so needed.

NVLAP organizes and oversees the accreditation process. NVLAP provides a list of testing laboratories that are accredited. NVLAP also provides a list of testing laboratories that are not accredited. NVLAP also provides a list of testing laboratories that are not accredited.

For more information, please contact NIST at (301) 975-4016.

NIST Call

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This document is a description of the Assurance Program for the user to ensure that the user is aware of the

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NVLAP defines "testing laboratory" as an organization that provides services to mea-
sure, examine, test, calibrate, or otherwise
determine the characteristics or perfor-
mance of materials, products or systems.
NVLAP accreditation signifies recognition
of a testing laboratory's competence to per-
form specific test methods in specified fields
of testing. It means that the laboratory's
quality system, staff, facilities and equip-
ment, calibration procedures, test methods
and procedures, records, and test reports
have all been evaluated and found to meet
NVLAP criteria. NVLAP accreditation does
not mean a guarantee (certification) of labo-
ratory performance or of product test data.
It is solely a finding of laboratory compe-
tence.

For further information about NVLAP, or
for assistance in understanding and meet-
ing the NVLAP requirements and criteria,
please write or call: NVLAP, National Insti-
tute of Standards and Technology, ADMIN
A527, Gaithersburg, MD 20899, (301) 975-
4016.

NIST Calibration Services

The NIST Calibration Services Users Guide
provides detailed descriptions of the cur-
rently available NIST calibration services,
special-test services, and measurement as-
surance programs. This document is a re-
vised edition of NIST Special Publication
250. It describes the NIST services available
as of the third quarter of 1988 and reflects
a number of important changes since the
1986 edition was published. A detailed de-
scription is given of each measurement ser-
vice, and a large number of NIST technical
experts are cited (who may be contacted
for further information concerning ser-
vices or for measurement problems). Fu-
ture editions will be published periodically
as NIST services change.

This document also presents a detailed
description of a number of Measurement
Assurance Program (MAP) services. These
are carefully designed quality control pro-
grams for critical measurements that allow
the user to achieve a high level of confi-
dence that the measurements being made

in the user's laboratory are consistent with
national standards and adequate for in-
tended use. MAP services are available for
some basic measurement quantities (e.g.,
laser power and energy).

A Fee Schedule for the services de-
scribed in this Users Guide is published as
required. It lists current prices for the ser-
vices described here. NIST will notify users
of changes in services or proposed changes
in services by means of announcements in
the Fee Schedule. In addition, information
about upcoming NIST Measurement Sem-
inars is announced there. It is important to
refer to the current issue of the Fee Sched-
ule in order to have up-to-date information
with respect to NIST contacts.

A companion document to this guide is
NIST Special Publication 260, NIST Stan-
dard Reference Materials Catalog. This doc-
ument describes over 900 Standard Ref-
erence Materials (SRMs) certified by NIST
for use in industrial quality control, ma-
terials testing, environmental testing, and
clinical testing applications. A copy of SP 260
may be obtained by calling (301) 975-6776.

The office of Physical Measurement Ser-
vices welcomes suggestions on how this
publication can be made more useful to
those who rely on NIST physical measure-
ment services. Suggestions are also wel-
comed concerning needs for new calibra-
tion services, management assurance
programs, or other measurement services.

Erroneous Warning to Contact Lens Wearers

Recently, the Physical Agents TLV Commit-
tee of the American Conference of Gov-
ernmental Hygienists (ACGIH) was advised
by the Canadian Council of the Experi-
mental Aircraft Association regarding a
warning to the wearers of contact lenses
which apparently was issued in January 1989.
The ACGIH was also requested to provide
official comments on the alleged problem
for their members.

Some readers have undoubtedly heard
of this or a similar type of warning in recent
years as it spontaneously and periodically

seems to reoccur. In
two workers, one an
the other a welder, re-
sparking while wearing
alleged that the electric
arcs caused the eye
tissue and the contact
the corner of the eye.
the subsequent removal
also resulted in the
near of their eye and res-
ness.

While this type of
one's attention, it has
appears that this false
gan with a 1967 incident
working for the Bette
report claimed that when
in his welding unit, the
and created a flash of
that supposedly fused
lenses to his eyes. The
that segments of dried
his eyes when he rem-
ses, permanently bla-
quently, safety journals
seminal various ver-
these stories apparently
liferate. Fortunately for
was not true.

Similar incidents re-
ported incorrectly in
Electrical Company and
main headquarters in
Pennsylvania. Both claim
that the incidents occurred
the American Academy
the American Optometric
Canadian Ophthalmologic
Occupational Safety and
tion, and the National
Blindness have all issued
cating that the stories were

For more details, see
Hirschfelder, Director
grams for the National
Blindness, discusses this
1984 issue of *Occupational
Safety*. ♦