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American National Standard for Electric Lamps— Procedures for Fluorescent Lamp Sample Preparation and the Toxicity Characteristic Leaching Procedure

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword (This foreword is not part of American National Standard/NEMA C78.LL1256-2003)

Suggestions for improvement of this standard should be submitted to:

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This standard was processed and approved by Accredited Standards Committee (ASC) on Electric Lamps, C78.

Committee approval of the standard does not necessarily imply that all committee members voted for that approval.

Much attention continues to be focused on the disposal of mercury containing lamps, particularly fluorescent lamps. The United States Environmental Protection Agency's Toxicity Characteristic Leaching Procedure is used at both the Federal level and by most states to determine whether or not spent fluorescent lamps should be classified as hazardous waste. This Standard was developed by technical experts in the lamp industry in order to establish a uniform method of sample preparation for fluorescent lamps in order to minimize the inherent variability associated with TCLP testing of such lamps. This document also specifies other important aspects related to the leaching process that are not specifically defined for lamps by SW-846, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," but that have been shown in practice to contribute to test variability, if not properly controlled.

CONTENTS

ANNEXES
(Normative)

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1 Scope

Procedures for preparation of fluorescent lamps for Toxicity Characteristic Leaching Procedure (TCLP) are presented below. These guidelines are intended to supplement the TCLP by supplying specific instructions for size reduction of lamps including integral electronic compact, pin-based compact, linear and U-shaped fluorescent lamps.

This standard specifically covers integral electronic compact, pin-based compact, linear and U-shaped fluorescent lamp types. Additional standards have been prepared and are in preparation for high intensity discharge lamps, and other lamp types that require specific sample preparation instructions because of their design or construction. It consolidates and supersedes the following four NEMA standards: NEMA LL 1-1997, *Procedures for Linear Fluorescent Lamp Sample Preparation and the TCLP;* NEMA LL 2-1997, *Procedures for Pin-Based Compact Fluorescent Lamp Sample Preparation and the TCLP;* NEMA LL 5-1999, *Procedures for U-shaped Fluorescent Lamp Sample Preparation and the TCLP;* and NEMA LL 6-1996, *Procedures for Integral Electronic Compact Fluorescent Lamp Sample Preparation and the TCLP.*

The protocol that follows is grouped to include general requirements, safety considerations, lamp preparation, leaching, filtration, storage, and leaching vessel reuse.