

## TCLP Testing of Spent Lamps

In 1990, the Environmental Protection Agency made changes to the method by which waste is classified as hazardous. The new method, the Toxic Characteristic Leaching Procedure (“TCLP”), was intended to replicate the leaching process that takes place over time in a landfill.

In 1991, the Lamp Section of the National Electrical Manufacturers Association (NEMA) drew EPA’s attention to the extreme variability of the TCLP test when applied to lamps. Through NEMA, the lamp industry has developed TCLP sample preparation standards specifically tailored to lamps. The standards have been reviewed by EPA and some State environmental officials, and are now published by NEMA (see below). If the procedures in these standards are followed, testing variability should be minimized.

Pursuant to EPA regulations, it is the generator’s (user’s) responsibility to determine if their lamp waste is hazardous. This can be determined by:

- (i) Testing a representative sample of lamps being disposed
- (ii) Prior knowledge of the waste (e.g. using OSI’s ECOLOGIC® TCLP test data) but only in those states that follow EPA’s TCLP rule.
- (iii) Assuming that the waste is hazardous, and disposing of it accordingly.

**It is always the end user’s responsibility to ensure that lamps are disposed of in accordance with local, state and federal regulations. Some states and localities have different criteria than the Federal Government TCLP standard, and have different statutes and regulations regarding lamp disposal. Consult your local and state authorities for current lamp disposal requirements**

NEMA Standards:

- LL-1-1997 - Procedures for Linear Fluorescent Lamp Sample Preparation and the TCLP
- LL-2-1997 - Procedures for Pin-Based Compact Fluorescent Lamp Sample Preparation and the TCLP
- LL-3-1999 - Procedures for High-intensity discharge Lamp Sample Preparation and the TCLP
- LL-4-1999 - Procedures for Incandescent Lamp Sample Preparation and the TCLP
- LL-5-1999 - Procedures for U-shaped Fluorescent Lamp Sample Preparation and the TCLP
- LL-6-1999 - Procedures for Integral Electronic Compact Fluorescent Lamp Sample Preparation and the TCLP

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