



DIRECTIVE NUMBER: 9443.00-2A

TITLE: Determination of Regulatory Status-Light Bulbs.

APPROVAL DATE: 4/30/86

EFFECTIVE DATE: 4/30/86

ORIGINATING OFFICE: OSW/SMP

☒ **FINAL**

☐ **DRAFT**

STATUS:

REFERENCE (other documents):

OSWER OSWER OSWER
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United States
Environmental Protection
Agency

Office of
Solid Waste and
Emergency Response



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United States Environmental Protection Agency
Washington, DC 20460

OSWER Directive Initiation Request

Interim Directive Number

9443.00-2A

Originator Information

Name of Contact Person David Friedman	Mail Code - Branch WH-562B SMB	Telephone Number 382-4770
Lead Office <input type="checkbox"/> OERR <input checked="" type="checkbox"/> OSW <input type="checkbox"/> OUST <input type="checkbox"/> OWPE <input type="checkbox"/> AA-OSWER	Approved for Review Signature of Office Director Date	

Title

Determination of Regulatory Status. Light Bulbs Letter to Ritchey Vaughn/Quicksilver Products, Inc.

Summary of Directive

Opinion on whether flourescent and mercury vapor light bulbs are or are not hazardous waste when discarded.

Key Words:

Mercury, Light Bulbs, Hazardous Waste

Type of Directive (Manual, Policy Directive, Announcement, etc.)

Letter of clarification

Status

<input type="checkbox"/> Draft	<input checked="" type="checkbox"/> New
<input checked="" type="checkbox"/> Final	<input type="checkbox"/> Revision

Does this Directive Supersede Previous Directive(s)? ☐ Yes ☒ No Does It Supplement Previous Directive(s)? ☒ Yes ☐ No

If "Yes" to Either Question, What Directive (number, title)

Review Plan

<input type="checkbox"/> AA-OSWER	<input type="checkbox"/> OUST	<input type="checkbox"/> OECM	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> OERR	<input type="checkbox"/> OWPE	<input type="checkbox"/> OGC	
<input checked="" type="checkbox"/> OSW	<input type="checkbox"/> Regions	<input type="checkbox"/> OPPE	

This Request Meets OSWER Directives System Format

Signature of Lead Office Directives Officer

Joan Kwan

Date

5-29-86

Signature of OSWER Directives Officer

Date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 30 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

CSWER Policy Directives # 9443.00-21

Mr. Ritchey Vaughn
Quicksilver Products, Inc.
200 Valley Drive, Suite 1
Brisbane, California 94005

Dear Mr. Vaughn:

I am writing in response to your request for a definitive opinion on whether discarded fluorescent and mercury vapor lamps would be classified as a hazardous waste under Section 261.24 of the Resource Conservation and Recovery Act (RCRA) regulations.

With only the data you submitted, it is not possible for me to give you a definitive answer to your question. For example, using the data presented on the GE MVR1000/VBU lamp as a worst case, the amount of mercury that is potentially available is 223 mg/kg of waste. If all the mercury was extracted into the Extraction Procedure (EP) extract during the test, this would yield an extract concentration of 11.3 mg/l. However, mercury is a relatively inert metal, with respect to reactivity toward nonoxidizing acids such as the acetic acid used as the extraction medium in the EP. In addition, while mercury has a relatively high solubility in water (as compared to most metals), its solubility is only .02 mg/l which is substantially below the regulatory threshold of 0.2 mg/l.

While I do not believe that either fluorescent or mercury vapor lamps would be hazardous waste under the RCRA regulations, actual EP testing would have to be conducted before any definite conclusion could be drawn. You should keep in mind, however, that RCRA is a State administered program in those States that have applied for and received authorization. In such States it is the State program which must be adhered to. Some States have more stringent regulations than those of the Federal program. Thus, it is possible that a State may elect to regulate a waste as a hazardous waste based on its total mercury content and not on leachable mercury. California may be one such State. I recommend you contact the California Department of Health Services for State-specified regulations.

If you have any further questions, please feel free to call me at (202) 382-4770 or you may call the RCRA/Superfund Hotline at (800) 424-9346.

Sincerely yours, :

A handwritten signature in cursive script that reads "David Friedman". The signature is written in dark ink and is positioned above the printed name.

David Friedman
Manager
Methods Program