

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 258, 260, 261, 264, 265, 266, 270, and 279

[FRL-6908-4]

**Waste Management System; Testing and Monitoring Activities;
Notice of availability of Draft Update IVB of SW-846**

AGENCY: Environmental Protection Agency.

ACTION: Notice of availability of Draft Update IVB of SW-846
and request for comment.

SUMMARY: The Environmental Protection Agency (EPA or Agency) is providing notice of the availability of, and requests comment on, "Draft Update IVB" to the Third Edition of the methods manual, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA publication SW-846. SW-846 contains EPA-approved sampling and analysis methods for use under the Resource Conservation and Recovery Act (RCRA) Program. Draft Update IVB contains new and revised SW-846 methods. As part of Draft Update IVB, we are also providing references in SW-846 to four air methods that are, or may be in the future, used in the RCRA regulations.

DATES: We are opening a comment period for the limited purpose of obtaining information and views on the methods and chapters of Draft Update IVB. Send your comments to reach us on or before [insert first date of 90 days from publication].

ADDRESSES: If you wish to comment on this notice, submit an original and two copies of your comments referencing docket number F-2000-4BTA-FFFFF to: The RCRA Docket Information Center, Office of Solid Waste (5305G), U.S. Environmental Protection Agency Headquarters (EPA, HQ), 1200 Pennsylvania Avenue, N.W., Washington, DC 20460. You may also hand deliver comments to the Arlington, VA, address listed below. You may also submit comments electronically by sending electronic mail through the Internet to: rcra-docket@epamail.epa.gov. You should identify comments in electronic format with the docket number F-2000-4BTA-FFFFF. Submit electronic comments as an ASCII (text) file and avoid the use of special characters and any form of encryption. If you do not submit comments electronically, we ask prospective commenters to voluntarily submit one additional copy of their comments on labeled personal computer diskettes in ASCII (text) format or a word processing format that can be converted to ASCII (text). It is essential that you specify on the disk label the word

processing software and version/edition as well as your name. This will allow EPA to convert the comments into one of the word processing formats utilized by the Agency. Please use mailing envelopes designed to physically protect the submitted diskettes. We emphasize that submission of comments on diskettes is not mandatory, nor will it result in any advantage or disadvantage to any commenter.

You should not submit electronically any confidential business information (CBI). You should instead submit an original and two copies of the CBI under separate cover to: RCRA CBI Document Control Officer, Office of Solid Waste (5305W), U.S. EPA, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460.

You may view the official record of public comments and supporting materials in the RCRA Information Center (RIC), located at Crystal Gateway I, First Floor, 1235 Jefferson Davis Highway, Arlington, VA. The RIC is open from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding federal holidays. To review docket materials, you should make an appointment by calling (703) 603-9230. You may copy a maximum of 100 pages from any regulatory docket at no charge.

Additional copies cost \$0.15 per page. You may also view an electronic copy of the docket index and notice. See the "Supplementary Information" section of this notice for information on accessing it.

You can download a complete copy of Draft Update IVB (pdf format) from the Internet at <http://www.epa.gov/SW-846>. A paper copy of Draft Update IVB is also located in the docket for this notice (see "Addresses" above). The table below provides sources for both paper and electronic copies of the Third Edition of SW-846 and all of its updates.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline, Monday through Friday between 9:00 a.m. and 6:00 p.m. EST, at (800) 424-9346 or TDD (800) 553-7672 (hearing impaired). In the Washington, DC, metropolitan area, call (703) 412-9810.

For information on specific aspects of this notice or the Draft Update IVB methods, contact the Methods Information Communication Exchange (MICE) Service at (703) 676-4690, e-mail address: mice@cpmx.saic.com; or contact Barry Lesnik, Office of Solid Waste (5307W), U.S. Environmental Protection

Agency, Ariel Rios Building, 1200 Pennsylvania Avenue,
Washington, DC 20460, (703) 308-8855, e-mail address:

[lesnik.barry@epamail.epa.gov.](mailto:lesnik.barry@epamail.epa.gov)

SUPPLEMENTARY INFORMATION:

Sources for SW-846, Third Edition, and its Updates

Source	Available Portions of SW-846
<p>Superintendent of Documents, U.S. Government Printing Office (GPO), Washington DC 20402, (202) 512-1800</p>	<p>-Paper copies of the SW-846, Third Edition, basic manual and of certain updates, including Final Updates I, II, IIA, IIB, and III, and Draft Update IVA. Subscriber must integrate the updates.</p>
<p>National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847.</p>	<p>- Paper copy of an integrated version of SW-846, Third Edition, as amended by Final Updates I, II, IIA, IIB, and III. -Individual paper copies of the SW-846, Third Edition, basic manual and of certain updates, including Updates I, II, IIA, IIB, III, IIIA, and Draft Update IVA. -CD-ROM of integrated version of SW-846, Third Edition, as amended by Final Updates I, II, IIA, IIB, and III (pdf and WordPerfect electronic copies). -CD-ROM of Draft Update IVA (pdf and WordPerfect electronic copies)</p>
<p>Internet http://www.epa.gov/SW-846</p>	<p>-Integrated version of SW-846, Third Edition, as amended by Final Updates I, II, IIA, IIB, III, and IIIA (pdf electronic copy) -Draft Update IVA (pdf electronic copy) -Draft Update IVB (pdf electronic copy)</p>

How Do I Obtain Electronic Access to this Notice

The docket index and the notice are available on the Internet at:

WWW: <http://www.epa.gov/epaoswer/hazwaste/test/up4ba.htm>

How is this Notice Organized?

We list below the order of the major sections of this notice.

- I. What Is the Subject and Purpose of this Notice?
- II. How Does This Notice Relate to EPA's Future Methods Development Efforts?
- III. How Can I Use the Methods of Draft Update IVB?
- IV. What Does Draft Update IVB Contain?

I. WHAT IS THE SUBJECT AND PURPOSE OF THIS NOTICE?

We are announcing the availability of, and requesting public comment on, Draft Update IVB to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846. SW-846 contains the analytical and test methods that we have evaluated and found to be among those acceptable for monitoring

conducted in support of subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended.

We change the content of SW-846 over time as new information and data are developed. We continually review advances in analytical instrumentation and techniques and periodically incorporate such advances into SW-846 as method updates. These updates support changes in the regulatory program and improve method performance and cost effectiveness. We add new SW-846 methods to the manual, and replace existing methods with revised versions of the same methods to reflect the advances and new techniques. To date, we have finalized Updates I, II, IIA, IIB, III, and IIIA to the SW-846 manual. We proposed and finalized these updates as part of a rulemaking.

We are now developing the next update to SW-846. On May 8, 1998, we published a notice of availability for Draft Update IVA in the Federal Register (see 63 FR 25430-25438). We then began developing Draft Update IVB to the manual. As we finished the methods, we posted them on our Internet site at <http://www.epa.gov/SW-846>. Today, with this notice, and as requested in the Senate Committee Report No. 106-410 regarding EPA's 2001 appropriations bill, we are publishing and

requesting comment on Draft Update IVB, as published on the Internet and found in the docket to this notice.

II. HOW DOES THIS NOTICE RELATE TO EPA'S FUTURE METHODS DEVELOPMENT EFFORTS?

We are releasing Draft Update IVB in a notice of availability for informational purposes. We are making these EPA-reviewed methods and revised chapters available to the public early, for guidance purposes. The methods can be used in all applications for which the use of SW-846 methods is not mandatory and for which they are effective. We believe that Draft Update IVB will be valuable to the public as guidance because it makes new analytical technologies and improved procedures available for use. This approach will allow the regulated community and others an opportunity to participate early in the method review process with the submittal of comments on the draft methods. As we also explained regarding the release of Draft Update IVA in its notice of availability, we are not at this time formally proposing to revise SW-846 by adding Update IVB, or to incorporate the update in the RCRA regulations for required uses.

In addition, we expect to change our approach to releasing most SW-846 updates in the future. The notice for Draft Update IVA (see 63 FR 25430-25438) explains in detail the reasons for this change. To summarize, we continue to implement a performance-based measurement system (PBMS) in the RCRA program. As part of this effort, we are developing a proposed rule to remove unnecessary required uses of SW-846 methods from the RCRA regulations. If this rule is finalized, we will generally only require the use of a particular method when it is referenced specifically in a regulation. Examples of such a requirement include the SW-846 methods specified in the RCRA regulations to determine whether a waste exhibits a hazardous waste characteristic (see 40 CFR part 261, subpart C). Several other RCRA regulations generally require the use of only SW-846 methods, but do not define regulatory parameters. In these cases, we plan to propose revisions to those regulations whereby another acceptable method may be used, provided it uses reliable techniques that are accepted as such by the scientific community and provided that it can be demonstrated to be appropriate for its intended use, i.e., it meets the data quality objectives (DQOs) or measurement quality objectives (MQOs) of the specific project.

If the future proposed rule to remove unnecessary required uses is finalized, we will use rulemaking for only those updates to SW-846 which include methods that are specifically required by our regulations. Rulemaking to revise or add required methods will remain necessary because the required use of those specific methods will continue. We will publish all other future SW-846 updates as guidance. In this manner, we will make most new and revised methods for RCRA-related monitoring available to the public in a faster and more efficient manner. We will still follow Agency guidelines to ensure that SW-846 methods are scientifically sound, including the peer review of method documents as necessary. We will also continue to request public comment on methods through Federal Register notices prior to their incorporation into SW-846.

III. HOW CAN I USE THE METHODS OF DRAFT UPDATE IVB?

Although the Draft Update IVB methods passed our Technical Workgroup review, you cannot use the methods of Draft Update IVB for compliance with the regulations that require the use of SW-846 methods. However, there are other sampling and analysis requirements in 40 CFR parts 260 through

270 that do not specify the use of SW-846 methods and in those cases you may use any reliable analytical method, including the methods found in Draft Updates IVA and IVB. We recommend that you consult with the appropriate regulating entity before using these methods to comply with a regulation.

IV. WHAT DOES DRAFT UPDATE IVB CONTAIN?

Draft Update IVB contains revised and new documents for SW-846, each of which is dated "November 2000" in its footer. Tables 1 through 3 list the documents found in Draft Update IVB.

Table 1 provides a listing of the fifteen revised SW-846 methods and seven revised chapters or other SW-846 documents found in Draft Update IVB. We request public comment on all revised sections identified by Table 1. We are interested in comments from the public on the identified sections and chapters because some or all of their text represents significant revisions from the promulgated version of the document currently in the Third Edition of SW-846, as amended by Updates I through IIIA. (Note: Unless otherwise indicated as former sections, the section numbers in Table 1 refer to

the section numbers in the Draft Update IVB version of the method.) Significant revisions include text deletions, additions, or other revisions that change a method's procedure or the intent or meaning of the text. Significant revisions do not include typographical or grammatical corrections, table reformatting (where the information is not changed), logical outgrowths of other revisions (e.g., the renumbering of sections to account for the addition of a new section), or other edits that are not substantive changes to text intent or the analytical procedure (e.g., the replacement of "Teflon®" with "PTFE"). Nonsignificant revisions also include the movement of otherwise unchanged information to another appropriate location in the method. We will, however, consider comments on the reordering of otherwise unchanged information in future revisions of Draft Update IVB.

As indicated in Table 1, some of the revised methods were also in Draft Update IVA (documents dated January 1998). Based on further review, we revised those documents and are releasing them again as part of Draft Update IVB. You should replace your Draft Update IVA versions with the Draft Update IVB versions. These documents include the Table of Contents, Chapters Two through Five, and Methods 3535A, 3545A, 8081B,

8082A, 8141B, and 8321B (see Table 1 for the titles of these methods).

Table 2 provides a listing of the twelve new SW-846 methods found in Draft Update IVB. EPA is interested in comments on the content of all sections or parts of the new methods. Finally, Table 3 identifies the four air methods for which we are providing references in SW-846 as part of Draft Update IVB. These one-page references for each method indicate how one may obtain a copy of the method. We want to provide this information in SW-846, for the convenience of the user, because the methods are referred to by the RCRA regulations.

Table 1. Revised Methods and Chapters of SW-846 Draft Update

IVB

(Note: The documents with an asterisk (*) were also in Draft Update IVA, dated January 1998, and are being released again as part of Draft Update IVB, with some revisions and a new date of November 2000.)

Method No.	Method or Chapter Title	Sections or Parts Open for Comment
--	*Table of Contents	All parts
--	*Chapter Two	All parts
--	*Chapter Three	All parts

Method No.	Method or Chapter Title	Sections or Parts Open for Comment
--	*Chapter Four	All parts
--	*Chapter Five	All parts
--	Chapter Six	All parts
--	Chapter Ten	All parts
3500C	Organic Extraction and Sample Preparation	1.2; 5.4.1; 5.5; 5.6; 7.1; 7.9; 7.10; 7.11; 8.2.4.7; 8.3.1; 9.2; Table 1.
*3535A	Solid-Phase Extraction (SPE)	1.1; 1.5; 4.3.2; 4.3.3; 4.4; 4.17; 5.5.7; 5.5.8; 7.0-7.11 (including all subsections); 8.1-8.5; 10.0 Refs. 3-7; Table 1.
*3545A	Pressurized Fluid Extraction (PFE)	1.3; 1.5; 2.1; 2.2; 2.3; 3.3; 3.4; 5.3.4; 5.4; 5.5; 5.6.2; 5.6.3; 5.7; 5.7.4; 5.7.6; 5.7.7; 7.1; 7.1.3; 7.1.5; 7.1.6; 7.2; 7.2.1-7.2.3; 7.3; 7.5; 7.6; 7.9.1-7.9.3; 7.12.1; 7.12.2; 8.4; 8.5; 9.4; 9.5; 10.0 Refs 3 and 4.
3550C	Ultrasonic Extraction	1.4; 1.5; 1.6; 1.7; 5.4; 7.0; 7.3; 7.3.6; 7.4.2; 7.4.3; 7.4.5; 7.4.9; 7.5; 7.5.1-7.5.5; 7.6; 7.6.1-7.6.2.2; 8.3; Table 2.
3620C	Florisil Cleanup	1.5; 5.6.3.7; 5.10; 5.11; 5.12.
6010C	Inductively Coupled Plasma-Atomic Emission Spectrometry	All parts

Method No.	Method or Chapter Title	Sections or Parts Open for Comment
8015C	Nonhalogenated Organics by GC/FID	1.2; 1.2.1; 1.2.3; 1.4; 2.2; 2.6; 2.7; 2.9; 2.10; 4.2; 4.2.5; 5.8.8; 7.1; 7.1.1.2; 7.1.3; 7.2.6; 9.1; 9.2; 9.4; 9.5; 10.0 Refs. 7 and 8; Table 8; Table 9.
8041A	Phenols by Gas Chromatography	1.4; 1.6; 3.2; 3.5; 3.6; 4.1; 4.2.3; 5.6; 7.0; 7.1.1.2; 7.1.3.2; 7.5; 7.5.1-7.5.3; 7.8; 8.5; 9.5; 10.0 Ref. 4; Tables 4 and 5.
*8081B	Organochlorine Pesticides by Gas Chromatography	1.8; 4.2; 5.3; 5.3.1; 5.3.2; 7.1; 7.3.1; 7.3.2; 7.4.6; 7.5.4; 7.5.9; 7.6.2; 9.1; 9.5-9.10; 10.0 Refs. 11-15; Tables 12-21; removal of former sec. 7.7.6.
*8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	1.3; 1.9; 4.2; 4.2.3.3; 5.2; 5.6.3; 5.9.3; 5.10; 6.2; 7.1.1; 7.1.3; 7.5; 7.6.2.3; 7.6.2.4; 7.6.3; 7.6.6; 7.6.8; 7.7; 7.8.3; 8.2.1; 8.2.2; 8.3; 8.3.1-8.3.3; 8.5; 9.4; 9.4.1-9.4.3; 9.5; 9.6; 9.7; 10.0 Refs. 11-14; Tables 11-22; Figures 1-6; removal of former secs. 7.10.4, 7.10.5, 8.3.1.1, and 8.3.1.2.

Method No.	Method or Chapter Title	Sections or Parts Open for Comment
*8141B	Organophosphorus Compounds by Gas Chromatography	1.1; 1.6; 1.7; 2.1.1; 2.1.2; 2.2; 4.2; 5.4.2; 5.4.3; 6.2; 7.1; 7.2; 7.2.1-7.2.5; 7.3; 7.3.1-7.3.3; 7.4; 7.5; 7.5.1-7.5.2; 7.7; 7.7.1-7.7.3; 7.8; 7.8.1-7.8.3; 7.9; 7.9.1-7.9.4; 8.3; 8.3.1-8.3.3; 8.4; 8.4.1-8.4.6; 8.5; 8.6; 9.1-9.6; 10.0 Refs. 15 and 16; Tables 11-15; removal of former secs. 8.3.3.1, 8.3.3.1.1-8.3.3.1.5, 8.3.3.2, 8.7, 8.7.1-8.1.7.5.
8318A	N-Methyl Carbamates by High Performance Liquid Chromatography (HPLC)	1.1; 1.2; 1.3; 1.4; 2.1.1-2.1.3; 2.2; 2.3; 4.1; 4.1.4-4.1.7; 4.2-4.8.4; 7.1-7.9 (and all subsections); 8.1-8.4 (and all subsections); 9.1; 9.3; 10.0 Ref. 7; Tables 5 and 6.
*8321B	Solvent-Extractable Nonvolatile Compounds by High Performance Liquid Chromatography/Thermospray/Mass Spectrometry (HPLC/TS/MS) or Ultraviolet (UV) Detection	1.1; 1.5-1.9; 2.2.2; 3.11; 4.2; 4.3; 4.3.1; 4.3.2; 4.19; 5.9; 5.15; 5.16; 7.1; 7.1.3; 7.3.1; 7.3.1.7; 7.4; 7.4.1-7.4.5; 7.5; 7.5.1-7.5.4; 7.6.1; 7.8.1.1; 7.8.1.2; 7.8.2.2; 7.8.3; 7.9.4; 7.9.5; 7.10.3; 9.3-9.5; 10.0 Refs. 10 and 11; Table 2; Tables 18-20; removal of former secs. 7.5.2.8, 8.2.4, 9.2, 9.2.1, and 9.2.2; removal of former Tables 3, 10, 13, 14, 17, 18, and 19.
9056A	Determination of Inorganic Anions by Ion Chromatography	All parts

Method No.	Method or Chapter Title	Sections or Parts Open for Comment
9210A	Potentiometric Determination of Nitrate in Aqueous Samples with Ion-Selective Electrode	All parts

Table 2. New Methods of SW-846 Draft Update IVB

Method No.	Method Title
1040	Test Method for Oxidizing Solids
1050	Test Methods to Determine Substances Likely to Spontaneously Combust
3546	Microwave Extraction
3815	Screening Solid Samples for Volatile Organics
4425	Screening Extracts of Environmental Samples for Planar Organic Compounds (PAHs, PCBs, Dioxins/Furans) by a Reporter Gene on a Human Cell Line
8085	Compound-Independent Elemental Quantitation of Pesticides by Gas Chromatography with Atomic Emission Detection (GC/AED)
8095	Explosives by Gas Chromatography
8261	Volatile Organic Compounds by Vacuum Distillation in Combination with Gas Chromatography/Mass Spectrometry (VD/GC/MS)
8510	Colorimetric Screening Procedure for RDX and HMX in Soil
8535	Screening Procedure for Total Volatile Organic Halides in Water
8540	Pentachlorophenol (PCP) by UV-Induced Colorimetry
9058	Determination of Perchlorate Using Ion Chromatography with Chemical Suppression Conductivity Detection

Table 3. Method References Provided by SW-846 Draft Update

IVB

Method No.	Method Title
25D	Determination of the Volatile Organic Content of Waste Samples
25E	Determination of Vapor Phase Organic Concentration in Waste Samples
207-1	Sampling Method for Isocyanates
207-2	Analysis for Isocyanates by High Performance Liquid Chromatography (HPLC)

Dated: November 17, 2000.

Matthew Hale, Acting Director, Office of Solid Waste.