

[FRL-5156-3]

**Invitation for Submittal to the Vendor Field Analytical and Characterization Technologies System (Vendor FACTS)****AGENCY:** Environmental Protection Agency.**ACTION:** Notice of Invitation.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is announcing an invitation to vendors of innovative monitoring and measurement technologies for hazardous waste site characterization to participate in the Vendor FACTS database. Vendor FACTS is being developed by EPA's National Exposure Research Laboratory—Las Vegas (NERL-LV) of the Office of Research and Development and the Technology Innovation Office of the Office of Solid Waste and Emergency Response. The purpose of Vendor FACTS is to disseminate much needed information on innovative techniques for site characterization, and to promote the use of more cost effective methods for on-site monitoring and measurement. The system contains information provided by vendors of technologies that meet the eligibility criteria for inclusion in the database. These criteria are listed in the

**SUPPLEMENTARY INFORMATION** section below. Vendors will submit information about their technologies on a Vendor Information Form (VIF). Information contained in the database will enable users to screen technologies for consideration in the site remediation process and to identify vendors who provide monitoring and measurement services. Most Vendor FACTS users are expected to be professionals responsible for the assessment or cleanup of Superfund sites, RCRA corrective action sites, state-lead clean-ups, federal facilities, and leaking underground storage tank (UST) sites. To make Vendor FACTS accessible to all system users, EPA will provide the software free of charge to the public.

**DATES:** Completed VIFs submitted by April 30, 1995, will be considered for inclusion in Vendor FACTS version 1.0 scheduled to be released in the third quarter of 1995.

**ADDRESSES:** Vendors of innovative monitoring and measurement technologies who wish to participate in Vendor FACTS version 1.0 must complete a Vendor FACTS VIF 1.0 (EPA-542-R-94-007), which can be obtained by faxing requests to U.S. EPA/National Center for Environmental Publications and Information (NCEPI) at (513) 489-8695. Please include your name, company name, address, and fax

number, if available. After you have completed the VIF, send it to: Vendor FACTS System Operator, PRC Environmental Management, Inc., 1505 PRC Drive, Suite 220, McLean, VA 22101. The Vendor FACTS database can be ordered by fax at (513) 489-8695, and for verification, (513) 891-6561. Please include your name, company name, address, and phone number.

**FOR FURTHER INFORMATION CONTACT:** The Vendor FACTS Hotline at (800) 245-4505 or (703) 883-8448.

**SUPPLEMENTARY INFORMATION:** Technologies meeting the following criteria will be included in Vendor FACTS: (1) fieldable technologies: portable or transportable equipment for on-site monitoring, screening, and analysis of hazardous substances (equipment used for collecting samples for off-site analysis will not be considered); and (2) technologies to monitor and characterize contaminated sites, not industrial process waste streams; and (3) technologies that fall in one of the categories listed below.

**Air Measurement (NAAQS)—**This portable or transportable technology includes all means to determine whether air meets the National Ambient Air Quality Standards issued under the Clean Air Act and similar laws and regulations. Target analytes include carbon monoxide, nitrogen oxides, sulfur oxides, hydrocarbons, ozone, photochemical oxidants, and particulate matter. Some versions of the technology are designed for point readings, in time, space, or both, while others are intended to assess over a period of time (hours, days, weeks; as averages or as maxima) or an extent of space (a metropolitan area or neighborhood).

**Analytical Detector—**The analytical detector is the component of any analytical instrument which senses the analyte (target) and produces a signal, usually electrical. The rest of the instrument consists of (1) a translator which converts the signal from the detector into usable form, (2) the output for the translated signal (meter, digital display, strip chart), and (3) the power supply, controls, case, and other components which support the sensor, translator, and output.

**Analytical Traps—**This technology consists of means to concentrate a desired target chemical as the sample is being collected. At present, a few variations are in use, such as the charcoal, resins, and bubblers used in collecting air samples. In addition, similar techniques are used in the laboratory for the preparation of analytical samples, including ion-selective (ion-exchange) devices and

molecular sieves (working on molecular size). For analytical trap technologies that have been in existence for more than 10 years, the vendor must provide an explanation of why the technology is innovative.

**Biosensors—**(1) This portable technology includes devices which use derivatives of living organisms (such as enzymes, tissues, microbes, or antibodies) as a biological sensing element. The biological sensing agent is in intimate contact with a physical transducer (such as electrochemical, acoustic, or optical) which together relate the concentrations of an analyte to a measurable electrical signal. They are commonly used in the clinical chemistry laboratory, especially in the form of electrodes sensitive to a target enzyme or chemical.

**Chemical Reaction-Based Indicators—**This portable technology includes chemicals which convert an inapparent change in the chemical state of the target system to a visible color change or other easily noted indication. Many methods look at chemical species other than the hydrogen atom, such as ferric/ferrous, chromic/chromate, and oxidizing/reducing species. Some versions of the technology give a graded response, rather than a dichotomous response, similar to wide-range pH paper.

**Cone Penetrometer—**A technology which uses a cylindrical, cone-tipped instrument, forced into the ground by hydraulic pressure. Built-in load cells measure the forces impinging on the conical tip and along the cylindrical section (friction) just behind the tip. In most instruments, these data are translated into soil classifications so one obtains instantaneous information on the stratigraphy of the soil. The technology has been used in Europe for decades and is becoming popular "in the U.S." The innovations, some being tested by the SITE Program, include additional sensors added to the instrument to detect pollutants in the subsurface. Cone penetrometers themselves are *not* considered innovative for the purpose of Vendor FACTS.

**Downhole Sensors—Saturated Zone—**These portable or transportable sensors can be used to determine subsurface chemical or physical properties. These sensors must be capable of operation in the saturated zone, in either a dynamic or static mode. The dynamic mode would produce data in real time as the sensor was advanced through the subsurface. The static mode would involve a sensor that either could not provide data as it was advanced, or was not capable of being advanced through

the saturated zone. The static mode could be used in a borehole with a maximum diameter of six inches or less. Downhole sensors that can be used in a borehole with a diameter of two inches or less are preferred for the Vendor FACTS database. The Vendor FACTS database will not include common geophysical, gamma, spontaneous potential, gamma-gamma, caliper, and neutron logging tools. Vendor FACTS also will not include TV cameras that can be inserted down a borehole.

**Downhole Sensors—Vadose Zone—**These portable or transportable sensors can be used to determine subsurface chemical or physical properties. These sensors must be capable of operation in the vadose zone, in either a dynamic or static mode. The dynamic mode would produce data in real time as the sensor was advanced through the subsurface. The static mode would involve a sensor that either could not provide data as it was advanced, or was not capable of being advanced through the vadose zone. The static mode could be used in a borehole with a maximum diameter of six inches or less. Downhole sensors that can be used in a borehole with a diameter of two inches or less are preferred for the Vendor FACTS database. The Vendor FACTS database will not include common geophysical, gamma, spontaneous potential, gamma-gamma, caliper, and neutron logging tools. Vendor FACTS also will not include TV cameras that can be inserted down a borehole.

**Fiber Optic Chemical Sensors and Analyzers—**These field portable sensors employ fiber optics to transmit excitation energy to either a reaction chamber or directly onto a sample matrix. Fiber optics also are used to return the signal produced from either a fiber coating, a reaction chamber, or a sample matrix, directly into some type of detector. Generally colorimetric or spectroscopic detectors are used in this process. These sensors produce real time in situ data.

**Transportable Technologies—**These technologies require a vehicle or mobile lab to get on site, alternating current power source (although not in all cases), and are operated on site.

**Portable Technologies—**These technologies are manually portable (generally weighing 30 pounds or less), battery operated (can have alternating current power), self-contained, and used on site.

**Gas Chromatography (portable only)—**These field portable instruments cause a chromatographic separation of chemical constituents. These instruments employ isothermal or temperature programmable ovens, and megabore,

capillary, or packed chromatography columns to separate chemical constituents. These instruments use chemical detectors, and data acquisition and integration software to quantitate chemical constituent concentrations. Recent advances in gas chromatography that are considered innovative are portable, weather-proof units that have self-contained power supplies. High-speed gas chromatography is also a recent innovation.

**Ground Penetrating Radar—**This technology, in use for some years now, consists of emitting pulses of electromagnetic energy into the ground, and measuring its reflection/refraction by subsurface layers and other features (such as buried debris). It is analogous to seismic techniques, but with a pulse of electromagnetic energy, rather than sound (physical) energy.

**High Frequency Electromagnetic (EM) Sounding—**These technologies, used for nonintrusive geophysical exploration, project high frequency electromagnetic radiation into subsurface and detect the reflection/refraction of the radiation by varying soil layers. Unlike ground penetrating radar, it uses continuous waves, as opposed to pulses.

**High Resolution Seismic Reflection—**The classic technique of seismic reflection/refraction has been used for decades, primarily for examining relatively large features, such as the salt domes (often containing petroleum) of the Gulf Coast. This technology includes means to refine it to determine smaller scale features, such as debris or the lenses, buried channels, and other features found in till deposits. This technology must be able to measure features of interest within 100 feet of the ground surface to be considered innovative.

**Immunoassay—**These field portable test kits use immunochemistry to produce compound specific reactions (generally colorimetric) to individual compounds, or classes of compounds. These reactions are used to detect and quantify contaminants. The immunochemical reactions center around polyclonal antibodies. These antibodies are engineered to produce compound specific reactions. The methods used to bring the antibodies into contact with a water sample or soil sample extract are variable.

**Infrared (Long Path) Monitors—**Classic infrared techniques involve a path of one centimeter or less in a solid or liquid. This technology looks at gases in longer path lengths, from a few centimeters to hundreds of meters. In some cases, the path may be inside the instrument. Alternatively, the air being sampled is ambient, not confined to the

instrument. The air being sampled may represent a point source, such as a stack being monitored, or it may be an area. The newest variant involves remote reading of a source; this may involve checking the exhaust of a car driving on the road or the reflection from an approaching cloud.

**Mass Spectrometry (portable only)—**This field portable technology involves modifying a large, laboratory instrument so it can be taken into the field. Mass spectrometry breaks molecules into fragments and determines the concentrations and mass/charge ratios of the fragments. Each molecule generates a distinct pattern of fragments, so a sufficiently sensitive system can provide absolute identification of a contaminant. Less sensitive systems can readily determine class characteristics of molecules by identifying relevant radicals and other less than molecule size groups. Mass spectrometry units that are considered innovative are portable, weather-proof units that have self-contained power supplies.

**Nuclear Magnetic Resonance—**This field portable and transportable technology involves modifying a large, laboratory instrument so it can be taken into the field. Nuclear magnetic resonance measures the electronic environment (that is, adjacent and nearby chemical bonds) of the nuclei of a particular species of atom. The most common laboratory and clinical use is on protons, but it can be used for any atom with an odd number of protons (such as the alkali metals, aluminum, and phosphorus) or an odd number of neutrons (such as carbon-13, magnesium-25, silicon-29, and chromium-53, all significant fractions of the naturally occurring elements). Thus, it can determine the chemical composition, or variation in chemical composition, throughout the mass of a sample.

**Soil Gas Analyzer Systems—**These portable systems provide on site or remote monitoring of soil gas constituents. Their main components are a soil gas sampling system, soil gas analyzer, and data storage or transmission station. All of these components are microprocessor controlled and can be programmed to provide routine periodic sampling and monitoring, or on demand sampling and monitoring. These systems also use some type of standard to provide periodic checks of accuracy and precision.

**Supercritical Fluid Extraction—**These portable and transportable, self contained units use supercritical fluids such as carbon dioxide to extract

chemical constituents from environmental matrices.

**Thermal Desorption Devices**—These portable and transportable, self contained units use high temperatures to volatilize and extract volatile and semivolatile chemical constituents from environmental matrices.

**Transient Electromagnetic (EM) Geophysics**—These technologies are based on detecting changes in subsurface electromagnetic characteristics. Interpretation of this data provides information on the subsurface environment. This particular technology differs from ground penetrating radar in that it looks more at the shape of the pulse at the sensor, rather than at the pulse's time of arrival.

**Voltammetric Stripping**—These portable units use electrochemistry to detect and quantify metals in environmental samples. By changing the potential across an anode or cathode, these instruments cause metals in solution to plate-out or be released. By changing the anode and cathode material, specific metals can be targeted for detection and quantitation. This technology is generally applied to water samples, however, it may be possible to use this technology on extracts from soil samples.

**X-Ray Fluorescence Analyzers**—These self-contained, field portable instruments consist of an energy dispersive x-ray source, a detector, and a data processing system. The combination of a source and data processing system allow for the detection and quantitation of individual metals or groups of metals.

EPA may include additional categories of monitoring and measurement technologies in subsequent versions of Vendor FACTS depending on feedback from the users. Suggestions for additional technologies may be sent to: Vendor FACTS Project Manager, Technology Innovation Office (5102W), U.S. Environmental Protection Agency, 401 M Street, S.W. Washington, D.C. 20460.

**Walter W. Kovalick,**

*Director, Technology Innovation Office.*

[FR Doc. 95-4188 Filed 2-17-95; 8:45 am]

BILLING CODE 6560-50-P

## FEDERAL RESERVE SYSTEM

### Agency Forms Under Review

#### Background

Notice is hereby given of the submission of proposed information collection(s) to the Office of Management and Budget (OMB) for its

review and approval under the Paperwork Reduction Act (Title 44 U.S.C. Chapter 35) and under OMB regulations on Controlling Paperwork Burdens on the Public (5 CFR Part 1320). A copy of the proposed information collection(s) and supporting documents is available from the agency clearance officer listed in the notice. Any comments on the proposal should be sent to the agency clearance officer and to the OMB desk officer listed in the notice.

**DATES:** Comments are welcome and should be submitted on or before March 23, 1995.

#### FOR FURTHER INFORMATION CONTACT:

Federal Reserve Board Clearance Officer—Mary M. McLaughlin—Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551 (202-452-3829); for the hearing impaired only, telecommunications device for the deaf (TTD) (202-452-3544), Dorothea Thompson, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

OMB Desk Officer—Milo Sunderhauf—Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Room 3208, Washington, D.C. 20503 (202-395-7340) Request for OMB approval to extend, with revision, the following report:

1. *Report title:* Country Exposure Report.

*Agency form number:* FFIEC 009.

*OMB Docket number:* 7100-0035.

*Frequency:* Quarterly.

*Reporters:* State member banks and bank holding companies.

*Annual reporting hours:* 13,064.

*Estimated average hours per response:* 23.

*Number of respondents:* 142.

Small businesses are not affected.

*General description of report:* This information collection is mandatory to obtain or retain a benefit [(12 U.S.C. 248(a), 1844(c), and 3906)] and is given confidential treatment [(5 U.S.C. 552(b)(4) and (b)(8))].

**SUPPLEMENTARY INFORMATION:** This interagency report collects information on international claims of U.S. banks and bank holding companies that is used for supervisory and analytical purposes. The information is used to monitor country exposure of banks to determine the degree of risk in their portfolios and the possible impact on U.S. banks of adverse developments in particular countries. The proposed changes, which would be effective as of March 31, 1995, are as follows:

(1) A memorandum item, "Revaluation Gains on Off-Balance-

Sheet Items Reported in Column 4", would be added as Column 9. This item contains revaluation gains (i.e. assets) from the marking to market of interest rate, foreign exchange rate, and other commodity and equity contracts held for trading purposes.

(2) A memorandum item, "Amounts Reported in Column (4) after Adjustments in Columns 10-15 That Represent Securities Held in Trading Account," would be added as Column 16. The carrying value of any available-for-sale securities or of any loans or leases that are held for sale are not to be reported in this item.

(3) An existing item, "Amount of Claims that Represent Guarantees Issued by the U.S. Government and its Agencies" (Column 13), would be deleted.

(4) Three existing items collecting information on commitments, "Commercial Letters of Credit" (Column 20), "Standby Letters of Credit and Risk Participations Purchased" (Column 21), and "All Other Commitments" (Column 22), would be combined into one item, "All Commitments."

(5) An existing memorandum item, "Trade Financing" (Column 20), would be redefined to include "Commercial Letters of Credit" (Column 20), with the resulting item renumbered as Column 23.

(6) The country list would be updated to replace Belgium-Luxembourg with two countries, Belgium and Luxembourg and to replace Czechoslovakia with two countries, Czech Republic and Slovakia.

In addition, the instructions would be modified to state that all claims consisting of available-for-sale securities in Columns 1-4 are to be reported at amortized cost rather than at fair value. The instructions would also be clarified to state that the report must be completed in a manner consistent with the requirements of Financial Accounting Standards Board Interpretation No. 39, "Offsetting of Amounts Related to Certain Contracts." Finally, the definition of "Guaranteed Claims" in the instructions would be broadened to address the treatment of off-balance-sheet items.

Request for OMB approval to extend, without revision, the following report:

2. *Report title:* Country Exposure Information Report.

*Agency form number:* FFIEC 009a.

*OMB Docket number:* 7100-0035.

*Frequency:* Quarterly.

*Reporters:* State member banks and bank holding companies.

*Annual reporting hours:* 2,840.

*Estimated average hours per response:* 5.