
Environmental News

A compilation of news releases, advisories to the press and other timely information

Weeks of ~~October 12,~~ October 19, October 26, November 1

For further details, contact 202/382-4355.

EPA PROPOSES FILTRATION STANDARDS TO PROTECT DRINKING WATER FROM DISEASE

The U.S. Environmental Protection Agency today proposed new standards to further improve the nation's drinking-water safety.

EPA is proposing these health-protective rules directing local water-supply operators to filter their water under certain conditions and to disinfect it to protect against Giardia, coliform bacteria, viruses, heterotrophic bacteria, turbidity and Legionella.

"While drinking water in the United States is among the safest in the world, implementing these proposals will further reduce the risk to the American public from waterborne illnesses," said Lawrence J. Jensen, EPA's Assistant Administrator for Water. "It is a major step forward in our effort to provide maximum protection for the nation's drinking-water supplies. We estimate that these standards, when implemented, will eliminate thousands of cases of waterborne illness each year."

EPA has had microbiological standards in effect since 1977 for coliform bacteria and turbidity. Today's regulations consist of two separate proposals that expand the regulatory control of microbiological contaminants: the surface-water-treatment requirements and the coliform-bacteria standards. The surface-water treatment requirements apply only to public water systems that draw water from surface-water sources. The proposed coliform-bacteria standards apply to all public water systems, regardless of whether they draw water from surface or groundwater (underground) sources.

The surface-water-treatment proposal requires all public water systems using any surface water to provide disinfection. Systems will also be required to filter the water unless they meet specific conditions relating to the availability of source water.

Disinfection and filtration are significant public-health measures. In the late 1800's, filtration of drinking water was proven to greatly reduce outbreaks of waterborne disease. In the 1900's, disinfection and filtration's ability to remove bacteria and viruses from drinking water was demonstrated by the virtual elimination of waterborne typhoid fever and cholera in the United States. In addition, by disinfecting and filtering, other debilitating illnesses such as amoebic dysentery, shigellosis and salmonellosis have been controlled. Many states and systems already require or use filtration and/or disinfection.

"Throughout this century, remarkable strides have been made in protecting people from dangerous waterborne bacteria," Jensen said, "but we still see outbreaks of giardiasis and virus-caused illnesses. These cases occur in situations where inadequate treatment is in place or a problem has occurred in the distribution system. Today's proposed rules require installation of additional treatment technology in water systems that need it to assure that their drinking water is safe from microbiological contamination."

Giardia are protozoa that originate in human and animal waste and cause giardiasis. Giardiasis has flu-like symptoms, but is usually more severe, causing diarrhea, nausea and dehydration that can last for months in some cases.

Viruses are sub-microscopic organisms that cause infection. Common waterborne diseases caused by viruses include hepatitis A, diarrhea and gastroenteritis.

Turbidity is a measure of the cloudiness or clarity of the water, and turbid water can indicate the presence of harmful microorganisms. Heterotrophic bacteria are indicators of water quality and can include disease-causing bacteria. Legionella bacteria cause Legionnaires' Disease.

Coliform bacteria come from human and animal waste. While common in the environment and generally not harmful themselves, their presence indicates that the water may be contaminated with disease-causing organisms. Under the proposed rule for coliforms, identification of contamination will be more rapid than under current regulations, allowing operators to act more quickly to prevent waterborne disease outbreaks.

Of the 9,800 drinking-water systems in the United States using surface water, 3,000 systems currently do not filter. Some of these systems are currently providing biologically safe water and will not need to make any changes; some will require minor modifications, including disinfection; and some will need to install filtration. Over 21 million people are served by these unfiltered systems. The regulations require the states to evaluate these 3,000 systems to see if they need to install filtration.

Today's announced proposal also requires all water systems to be operated by qualified operators, to be determined by the state; local water-system operators to report to their state governments monthly on

their progress in meeting the federal rules and within 48 hours on water-borne disease outbreaks; and operators of both filtered and unfiltered water systems to meet federal requirements within four years after the final rule is issued.

Nationally, the cost of meeting the surface-water-treatment requirements for public water systems without filtration is estimated at \$1.6 billion in capital costs and \$225 million in annual costs. The cost for systems which would need to upgrade existing filtration is estimated at \$333 million in capital costs and \$95 million in annual costs. A number of small systems may be able to switch to other sources of water instead of installing treatment.

The Safe Drinking Water Act Amendments of 1986 require EPA to set drinking-water standards for 83 specified contaminants by June 19, 1989. Nine were regulated by June 19, 1987. EPA must issue 40 additional standards by June 19, 1988. The rules announced today propose six of these standards; the remaining 34, including standards for inorganic and synthetic organic chemicals, will be proposed later in 1987.

Public hearings on the standards proposed today will be conducted in Washington, D.C., on Nov. 23-24 and in Denver, Colo., on Dec. 2-3.

The Safe Drinking Water Hotline is available to the public to answer questions on these proposed rules or on other concerns about drinking water. The toll-free number is 800-426-4791; in Washington, D.C. call 382-5533.

Today's proposal will appear soon in the Federal Register.



Note to Correspondents

WEDNESDAY, NOVEMBER 4, 1987

Copies of the attached letter outlining the U.S. Environmental Protection Agency's Endangered Species Pesticides Labeling Program were sent to the House and Senate Agriculture Committees on Monday, Nov. 2. Similar copies also will be sent to the State Commissioners of Agriculture this week.

For further details, please contact Al Heier at 202-382-4374.

Dave Cohen
Press Services Division
202-382-5589



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

NOV - 2 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Honorable E. (Kika) de la Garza
House of Representatives
Washington, D.C. 20515

Dear Mr. de la Garza:

I am writing to you on the Environmental Protection Agency (EPA) efforts to design and implement an Endangered Species Pesticides Labeling Program. As you know, this is an effort to ensure that registered uses of pesticides do not jeopardize endangered species.

The Endangered Species Act (Act) is the responsibility of the Fish and Wildlife Service (FWS), U.S. Department of Interior. Under the terms of the Act the FWS informs EPA when exposure to specific pesticides will be harmful to specific endangered species. This determination is referred to as a jeopardy opinion. The opinion further indicates where the endangered species occur and measures that would acceptably mitigate the jeopardy call. To date we are in receipt from the Fish and Wildlife Service jeopardy opinions on about 250 species that occur in approximately 900 counties throughout the country. Through its pesticide statute (FIFRA) EPA seeks to develop a national program of pesticide label directions which directs pesticide users to a series of county maps depicting where in the county an endangered species occurs. The basic concept behind our program is to prohibit or limit the use of certain pesticides only in the areas currently occupied by endangered species. Thus we are seeking to both protect endangered species and minimize the amount of land that would be affected. This EPA program is only considering formal jeopardy opinions for endangered and threatened species.

A second basic feature of the EPA plan is to use groupings or "clusters" of pesticides registered for similar uses. In the initial effort four (4) clusters were prepared: Forest, Mosquito Larvacides, Range and Pasture Lands, and Crops (which contains pesticides registered for uses on corn, cotton, soybeans, sorghum, rye, barley, oats, and wheat). These four (4) clusters were selected because the majority of endangered species jeopardy

opinions received by EPA are for pesticides associated with these uses. Based on the experiences gained through implementation of these four (4) clusters EPA will consider the utility of this approach for the remaining endangered species jeopardy opinions for other sites and crops.

In May of this year EPA published a Pesticide Registration Notice informing pesticide manufacturers that all products released for shipment after February 1, 1988 must bear labels that direct potential users to consult the county maps (or information bulletins) prior to use of that pesticide in specific counties. Manufacturers are complying with this request. Thus we will have a transition period where products shipped pre- and post- February 1, 1988 will be sold with differing label requirements. This is a common practice to permit the orderly depletion of existing stocks of pesticides in the marketplace. Inasmuch as the success of the EPA program relies heavily upon voluntary compliance by users based on correct information about the subject, the transition phase of existing stocks is not of significant enforcement concern. It was the EPA plan to distribute the maps and educational materials to all State Lead Agencies, Regional Offices of both EPA and FWS, and USDA Cooperative Extension Service Staff in the winter months of 1987. It was our hope that the program could be fully implemented in 1988. In anticipation of the February 1, 1988 date EPA sent all draft county maps to the states for review. The USDA and FWS were also asked to comment.

The responses from the States, other Federal agencies and our own review of the draft county maps depicting the location of endangered species clearly indicates that major work is required to correct deficiencies. The diversity of issues to be addressed is broad, including accuracy of range, potential versus current habitat, need for greater specificity, inconsistencies across counties and states, and "corrections" of the size of buffer zones in which pesticides use may be restricted. It is also clear that adequate time must be allocated for describing the endangered species plan, its objectives and its impact to affected ranchers and farmers. Resource personnel such as extension, wildlife and agriculture department personnel and other interested people also need sufficient opportunity to review and become familiar with the plan. Each of these tasks is doable but cannot be generally accomplished in a professional and thorough manner between now and the original February 1, 1988 target date. I am therefore modifying the plan to provide that period of time which is needed for proper planning, comment and orderly implementation.

Following early discussions with California and Florida, and several pesticide user groups, I became convinced that in a number of cases states could create a specific plan that would better meet the dual goals of protection of endangered species

and avoidance of unnecessary disruption of routine pesticidal uses within the state. State Departments of Agriculture and the State Natural Resource Agencies are frequently in possession of local and specific information on pesticide use practices and the occurrence of endangered species that is more accurate than what we may have ready access to at the federal level. Recognizing this, I wrote to all State Commissioners of the Departments of Agriculture and invited them to consider developing state plans if they felt the EPA plan was not best suited for the unique needs of the state.

To date, California, Florida, Georgia, and New Mexico have committed to developing a plan. I anticipate that Texas and several other states also will decide to craft a custom plan. In my letter of invitation to the States I asked that the states inform me by late November which draft county maps are accurate and if the state planned on developing a state-specific plan for some or all of the endangered species and counties that are affected by the EPA national program.

I now believe that for some states the November date may be unrealistic in that it would preclude the careful screening and correcting of maps. Accuracy of maps is absolutely essential. I am also convinced that additional opportunities for public input via the states and other avenues is a preferred requisite and would significantly improve any EPA or state effort to protect endangered species from pesticides. Accordingly I am communicating to all the states that they can and should take the necessary time to fully evaluate their own unique situations and the accuracy and utility of use of county maps.

For those states indicating they will not be ready for implementation in February 1, 1988 I am asking they inform me of their specific schedule by February 1, 1988. In submitting this written schedule I expect that it will include the nature of tasks to be addressed (e.g., which counties and which species); the intended approach to solve the problems; the various organizations that will be included in the state effort (e.g., U.S. Fish and Wildlife Service, USDA Cooperative Extension Service, the State Natural Resource Agency); a timeline for the completion of each of the outlined tasks; and when each or all aspects of the plan will be implemented in the field.

The review of maps and consideration of the logistics required to make this program a success convinces me that all four (4) clusters for all states will not be ready for full implementation in 1988. On the other hand, I am in possession of formal jeopardy biological opinions and am obligated, under the Endangered Species Act, to take action consistent with these opinions. At the same time I recognize the absolute need for an orderly and sensible program to both protect endangered species and minimize disruption of agricultural or other land use practices. Some have suggested that I not seek to implement any portion of the EPA program until all four clusters, in all

States, are ready. I personally believe that to fail to move forward and implement plans in those locations where information is accurate and the mitigation measures understood and consistent with common sense would be illogical, illegal and indefensible.

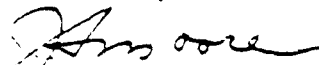
For many states use of accurate county maps will prove to be an effective and reasonable approach. It is my hope that the states promptly identify the accurate maps (or the technical modifications needed to make the maps accurate). Once EPA, FWS and the State agree upon a map I hope that we can move towards issuance and use of that map as the vehicle for compliance with the legal mandates of the Endangered Species Act.

One of the original four (4) clusters, Forests, probably can be implemented, in a majority of cases, in 1988. I base this upon the discrete user group that treats forest sites with pesticides: principally, the U.S. Forest Service and the large paper and timber companies. These pesticide users are accustomed to the management of endangered species in forests and in many cases have long-practiced methods that effectively avoid damage to endangered species in both public and private forest lands. The remaining challenge is to package and market these successful approaches to other users of forest pesticides. My staff is working with the Forest Service and FWS to identify and describe these specific methods to locate forest-dwelling endangered species. It is our intent to then make these methods known to potential pesticide users who can then comply with the necessary precautions to protect the species. Again I emphasize that the states and the public also will be partners in the selection of techniques and methods to avoid jeopardy to these species.

As you well know any national plan that changes the status quo is subject to both legitimate and unfounded opposition and apprehension. The EPA is committed to protect endangered species via a program that reflects to the fullest extent possible a consensus among all interested parties. We can find that balance of legitimate environmental concerns and the continuation of effective agricultural practices. I am committed to discharging EPA responsibility under the Endangered Species Act, but in such a way as to create a spirit of understanding and support among the farm, pesticide, commodity and public interest groups.

I look forward to your comments on this program and to briefing you and other members of Congress in the near future.

Sincerely,



John A. Moore
Assistant Administrator
for Pesticides
and Toxic Substances



Environmental News

FOR RELEASE: WEDNESDAY, NOVEMBER 4, 1987

Priscilla Flattery 202-382-4387

SITE PROGRAM SELECTIONS ANNOUNCED

The U.S. Environmental Protection Agency has announced 10 new technologies selected for demonstration under the Superfund Innovative Technology Evaluation (SITE) Program. The agency also is soliciting proposals for a new SITE component, the Emerging Technologies Program.

The SITE program helps EPA demonstrate, evaluate and promote the use of new technologies that significantly decrease the toxicity, mobility or volume of Superfund hazardous substances. The program provides private, public or private non-profit entities an opportunity to test alternative technologies at selected Superfund sites with on-site evaluation. The developer pays for the demonstration and EPA finances the evaluation.

J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response, said, "The SITE program is a very important piece of the research underway on Superfund cleanup methodologies. These innovative and emerging technologies are critical to the work that must be done over the next few years on finding and putting into place new and effective cleanup remedies."

Ten developers and technologies were selected from the second annual solicitation of the SITE demonstration program. Selected for solidification/stabilization processes were Soliditech Inc. of Houston, Texas; Chemfix Technologies Inc. of Metairie, La; Waste Chem Corp. of Paramus, N.J.; and Battelle Pacific Northwest Laboratory of Richland, Wash. Chosen for biological technologies were Air Products and Chemicals Inc. of Allentown, Pa.; Zimpro Environ-

(more)

mental Control Systems of Rothschild, Wis.; and MoTec Inc. of Mt. Juliet, Tenn. Retech Inc. of Ukiah, Calif., was selected for a thermal technology; C.F. Systems Corp. of Cambridge, Mass., for an extraction process; and Sanitech Inc. of Twinsburgh, Ohio, for an ion-exchange technology.

One technology from the first SITE solicitation was demonstrated at the Peak Oil Superfund site in Brandon, Fla. During this removal operation, an EPA Region IV contractor, Haztech Inc., operated its mobile infrared incineration system developed by Shirco Infrared Systems Inc. on PCB and lead contaminated soil. The SITE demonstration occurred from July 31 - Aug. 6. A second demonstration, involving a pilot scale Shirco unit, is planned for Rose Township, Mich., in November.

A second demonstration has been completed at the Douglassville Superfund site near Reading, Pa. A solidification/stabilization process developed by Hazcon Inc., was demonstrated from Oct. 13 - 16 at a site contaminated with high levels of oil and grease and low levels of PCBs and volatile organics. Soil and sludge from six different site areas were treated to evaluate the process capability on diverse feedstocks.

Two additional demonstrations are planned during the next two months. The Terra Vac in-situ vacuum extraction process will be demonstrated at the Groveland Wells Superfund site, in Groveland, Mass. This site is contaminated with volatile organics, principally trichloroethylene. This six- to eight-week demonstration will occur at a manufacturing facility which is contributing to the contamination of drinking water.

An enhanced oxygen burner developed by American Combustion Inc., which can be fitted on a conventional combustion unit, will be demonstrated at EPA's Combustion Research Facility in Jefferson, Ark. Contaminated soil from the Stringfellow Superfund site in California will be burned during the five-week demonstration.

EPA issued its third annual solicitation for SITE demonstrations in the "Commerce Business Daily" in mid-October. The Request for Proposal will be available from EPA on Jan. 15. with a closing date of March 1. For a copy of the RFP, contact William Frietsch, USEPA/HWERL, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268.

The Emerging Technologies Program, a new component under the SITE program, will provide funding to developers for technologies which are not yet ready for full-scale demonstration. The program will deal with innovative emerging technologies for recycling, separation, detoxification, destruction, stabilization and handling of hazardous chemical wastes. The program will provide up to \$300,000 (\$150,000 per year) funding to an individual developer for taking a promising technology from the bench to the pilot stage. If the pilot technology is successful, then it could be eligible for evaluation under the SITE demonstration program. In order to obtain second-year funding, significant progress must be made during the first year.

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EPA is soliciting pre-proposals at the present time for this program. Please refer to the Sept. 17 issue of "Commerce Business Daily" for more information or contact William Frietsch, USEPA/HWERL, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268.

For more information on the SITE program, contact John Kingscott at 202-382-4506 or Greg Ondich at 202-382-5747.

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Note to Correspondents

TUESDAY, OCTOBER 20, 1987

Jack Moore, EPA Assistant Administrator for Pesticides and Toxic Substances, yesterday approved the first field test of a recombinant-DNA microorganism under the Toxic Substances Control Act. In early November, the Monsanto Agricultural Co. plans to begin its field test of Pseudomonas aureofaciens, a genetically engineered fluorescent pseudomonad which will be used to track engineered organisms in the environment. The field test, executed in conjunction with Clemson University, will be located at Clemson's Edisto Research and Education Center in Blackville, S.C.

For further press questions call Alicia Tenuta at 382-4132.

Dave Cohen, Director
Press Services Division
202-382-5589

First Approval Under the Toxic Substances Control Act
for Field Test of a Recombinant-DNA Microorganism

FACT SHEET

Background

On June 18, 1987, Monsanto Agricultural Company submitted a premanufacture notification (PMN) to the Environmental Protection Agency (EPA). The submission described the company's intent to field test a fluorescent pseudomonad, Pseudomonas aureofaciens, genetically engineered to contain the lacZY genes from Escherichia coli.

The objectives of the field test are (1) to verify that the inserted lacZY genes will be an adequate marker to monitor the survival and location of the engineered strain under field conditions and (2) to evaluate the performance and survival of a well-characterized soil bacterium representative of a type that could be used for delivery of plant beneficial substances. The field trial is to be conducted, in cooperation with Clemson University, at the University's Edisto Research and Education Center, Blackville, South Carolina.

This microorganism is subject to the Toxic Substances Control Act (TSCA) as explained in the June 26, 1986 FEDERAL REGISTER notice describing EPA's biotechnology policy. Under TSCA, EPA had 90 days, extendable to 180 days, to evaluate the risks and benefits of the microorganism and determine whether regulatory action was required.

The Agency specifically convened a Subcommittee of the EPA Biotechnology Science Advisory Committee (BSAC) to assist in its risk assessment. Eight academic scientists--experts in Pseudomonas genetics and metabolism, soil microbiology, microbial ecology, community ecology, water quality testing, and plant pathology--served on the panel. The Subcommittee unanimously agreed that the field test posed little risk and should be conducted and that large-scale releases should await evaluation of the field test data.

Announcements in the FEDERAL REGISTER informed the public of the receipt of the PMN and the meeting of the BSAC Subcommittee. Public comment on the PMN and participation in the BSAC meeting were invited.

What Is EPA's Final Decision?

In mid-September, the Agency announced its preliminary conclusions: (1) the field test should be conducted because it posed little risk and offered substantial benefit; (2) there was insufficient information to evaluate the risks of larger-scale

applications, and (3) information from the field test would contribute significantly to future evaluations for expanded uses. Given these conclusions, the Agency's preliminary decision was to allow the field test provided that it be designed to obtain certain data and conducted under certain restrictions.

To ensure development of data and to impose restrictions on the test, the Agency, during a 35-day extension of the review period, negotiated a TSCA Section 5(e) Consent Order with Monsanto. Since this is one of the first notifications for a genetically engineered product under TSCA, the Agency provided a two-week period for public comment on the draft Consent Order.

The final Consent Order was signed by Monsanto and the EPA Assistant Administrator for Pesticides and Toxic Substances this week. Consequently, Monsanto has the first approval under TSCA to conduct a field test of a recombinant-DNA organism.

When Will the Test Be Conducted?

Monsanto plans to begin the field test in early November. The Consent Order requires the Company to notify the Agency ten days in advance of the application of the microorganisms in the field. As soon as the Agency receives the ten-day notification from Monsanto, the public will be informed of the date for initiating the field test.

What Will the Test Involve?

Monitoring microorganisms in their natural environments is essential to research in microbial ecology and to the development of genetically engineered organisms for agricultural or environmental uses.

In the past, bacteria were genetically "marked" or "labelled" so that they could be traced in the environment. Typically, bacteria could be marked or differentiated from other bacteria due to their resistance to certain antibiotics. This practice suffers from two major drawbacks. The "marked" bacteria often do not survive in the environment. In addition, the background levels of naturally occurring antibiotic-resistant bacteria may be high thereby making it difficult to discern the marked bacteria from background.

Monsanto has developed a sensitive tracking method that may bypass some of these problems and is particularly effective for the fluorescent pseudomonads. The Company has genetically engineered a fluorescent pseudomonad, Pseudomonas aureofaciens, to contain two lactose genes (lacZ and lacY) from Escherichia

coli K-12. These genes were inserted into the bacterial chromosome and allow the engineered strain to grow on lactose-containing medium and to produce blue rather than yellow-white colored colonies.

The Company's earlier tests in contained facilities (laboratory, growth chamber and greenhouse) indicate that the presence of this color-producing marker greatly facilitates the distinction of the engineered strain from nonengineered strains. To continue its research and development activities, the Company intends to field test the microorganism and determine whether the engineered strain can be adequately monitored under field conditions.

Does this Test Pose a High Risk?

No. The PMN microorganism presents very little risk to humans and the environment for the following reasons:

- ° Pseudomonas aureofaciens and Escherichia coli K-12 have been well-studied and are nonpathogenic and nontoxic to animals (including humans) and plants.
- ° The inserted lacZY genes have been well-characterized in their normal host and their expression does not produce harmful products.
- ° Expression of the added genes in P. aureofaciens is not expected to cause deleterious environmental effects or to provide a competitive advantage to the engineered P. aureofaciens.
- ° Little transport of the microorganisms from the test site and consequent low exposures are expected because of plans to contain the microorganism within the field test site. The test plot will be surrounded by three buffer zones (wheat, plant-free, and grass), a containment terrace, and an electrified fence. In addition, Monsanto is requiring workers applying the microorganisms to wear clothing and gear that can be destroyed or decontaminated at the site immediately after the application. Monitoring will provide data on dissemination and effects of the microorganism in the environment.
- ° Human exposures to the microorganism should be very low because of containment procedures and worker operating procedures.

The Agency does not believe that extensive worker-protection gear is necessary for such a low-risk organism. Monsanto, in an abundance of caution, submitted a protocol in which workers applying the microorganisms will wear splash goggles, disposable coveralls, rubber boots, and rubber gloves. EPA incorporated the protocol into the Consent Order.

Agency representatives will be present to observe the activities initiating the field test. Additional inspections, as appropriate, will be scheduled as the test proceeds to verify compliance with record-keeping and other 5(e)-provision requirements.

Is EPA Requiring Any Other Tests?

In its review of the engineered microorganism, the Agency identified two specific areas to be evaluated before a determination could be made concerning wide-scale use: 1) potential interference with water-quality testing and 2) potential reduction in the shelf life of dairy products. First, it was suggested that the genetically engineered microorganism, because it contained the lacZY genes from E. coli, may cause false positive results in tests determining water quality. Preliminary tests indicate no interference. Additional tests will provide a definitive answer.

Second, microorganisms closely related to the Monsanto genetically engineered bacteria cause post-pasteurization spoilage and hence reduce the shelf life of dairy products. Since the Monsanto organism also contains genes for metabolizing lactose (milk sugar), it was suggested that the presence of these genes may facilitate the growth of the engineered bacteria in milk. If this were so and if milk products were exposed to these bacteria, the shelf life of such products may be reduced. The Agency and Monsanto, with advice of experts, developed milk-testing protocols designed to indicate the potential for reduced shelf life of dairy products due to the genetically engineered microorganism.

These issues are potential economic problems and do not pose a health hazard. Resolution of these issues was not necessary prior to this small-scale field test because of the limited exposure of the microorganism. Monsanto, however, will conduct the laboratory tests, outlined in the Consent Order, to provide data on these two issues before evaluation of large-scale use of the microorganism.

Why Did Monsanto Notify EPA?

The microorganism is subject to the Agency's biotechnology policy governing "new", i.e., intergeneric microorganisms under TSCA. Under TSCA such new products are subject to EPA review before they can be used commercially. Monsanto is voluntarily complying with EPA's request that companies involved in research and development testing of "new" microorganisms in the environment submit a notification prior to conducting such tests.

The U.S. Department of Agriculture Animal and Plant Health Inspection Service determined that the microorganism was not

subject to the Plant Pest Act. EPA coordinated its review with two South Carolina agencies, the Department of Agriculture and the Department of Health and Environmental Control.

What Are the Benefits of this Test?

The successful completion of this test will allow EPA and the Company to determine whether the new microorganism performs as predicted and will provide a basis for the Company to proceed with developing this marker system. Fluorescent pseudomonads are prime candidates for the delivery of such beneficial materials to plants due to the bacteria's ability to grow around the roots of a variety of crop species. Beneficial materials can be genetically engineered into these bacteria. Evaluation of the performance of such modified bacteria requires a rapid and accurate means of monitoring them in the environment. The Company expects this genetically engineered microorganism to serve as a more stable, specific and sensitive marker system than the antibiotic resistance marker systems currently used to monitor microorganisms.

In addition, the field test will provide data on the fate and effects of genetically engineered microorganisms in the environment. Such data on products predicted to be low risk are necessary for developing a body of knowledge from which to make additional predictions concerning other products.

Why Is EPA Imposing Restrictions and Data Requirements?

Although EPA is confident that this test presents little risk, the Agency is imposing certain restrictions and data requirements. The intent of the EPA Order is to assure (1) the field test will pose a very low risk by containing the microorganisms as much as is reasonable; (2) EPA will be able to monitor the test and evaluate the results; and (3) EPA will have useful information to evaluate future requests for field testing or possible commercial use of this or microorganism.

The Agency believes that it is important to evaluate the data from this limited field test and from the water-quality and dairy-product tests before proceeding with large-scale uses of this microorganism. This conclusion is based primarily on the limited experience with recombinant-DNA derived organisms in the environment. The Agency acknowledges that this determination could be overly cautious but believes it is appropriate for the first release of an engineered organism under TSCA.



Environmental News

FOR RELEASE: TUESDAY, OCTOBER 20, 1987

Alicia Tenuta 382-4132

EPA ISSUES SCHOOL ASBESTOS INSPECTION FINAL RULES

The U.S. Environmental Protection Agency today issued final rules under the Asbestos Hazard Emergency Response Act (AHERA) of 1986 that require all public and private elementary and secondary schools to inspect for friable and non-friable asbestos, implement response actions and submit asbestos management plans to state governors.

Public school districts and private schools, known as local education agencies (LEAs), are required to submit management plans to the governors of their states by Oct. 12, 1988. States have 90 days to approve or disapprove these plans. Implementation of these management plans must begin by July 9, 1989, and they must be completed in a timely fashion. LEAs must use accredited persons to conduct inspections, develop management plans and design or conduct response actions in the areas of operations and maintenance, repair, encapsulation, enclosure and removal. AHERA describes the appropriate circumstances for selecting each response action as well as steps to be taken to properly conduct and complete these actions.

John A. Moore, EPA's Assistant Administrator for Pesticides and Toxic Substances, said, "These rules will effectively reduce exposure to asbestos in our schools. Schools will have to start scheduling inspections now in order to meet the requirements of the deadline next October. If schools wait until next summer to begin their inspections, they will miss the October deadline."

The rules require periodic surveillance and re-inspection to monitor asbestos-containing material left in place in schools. Periodic surveillance requires checking asbestos-containing material every six months to determine if its condition has changed since the last inspection or surveillance. Re-inspection to assess any remaining asbestos-containing material is required every three years and must be conducted by an accredited inspector.

Schools that fail to conduct inspections, knowingly submit false information to their governors or fail to develop a management plan in accordance with the regulations can be assessed a civil penalty under the Toxic Substances Control Act of up to \$5,000 for each day the school is in violation. AHERA also provides that civil penalties assessed will be used by schools to comply with AHERA requirements. Unspent portions of the assessed civil penalties will be deposited in a federal Asbestos Trust Fund, and added to repaid loans under the Asbestos Schools Hazard Abatement Act (ASHAA). These monies will be made available for further asbestos abatement activities.

LEAs that previously have conducted inspections in a manner consistent with this final rule and determined that no asbestos-containing material is present in the schools will be excluded from the new inspection requirements. A school also will be exempt from the new rules if its inspection and abatement records indicate that all asbestos-containing material has been removed. In addition, a school will be exempt if it is built after Oct. 12, 1988, and an architect or project engineer or accredited inspector signs a statement indicating that no asbestos-containing material had been specified for use in construction documents. States may receive a waiver from some or all of the requirements of the proposed rule if they have established and are implementing or intend to implement a program of asbestos inspection and management at least as stringent as the requirements of the final rule.

With funds from the ASHAA technical assistance program, EPA recently awarded 12 states a total of \$5 million in grants to help LEAs carry out inspections and establish management plans.

The final rule will be published in the Federal Register within two weeks.



Press Advisory

For the week of: OCTOBER 26, 1987

Following are some agency developments which may interest you. If you need more information on any of these subjects, call the appropriate contact:

TOPIC

CONTACT

EPA DENIES PETITION FROM DOW CHEMICAL

The Assistant Administrator for Pesticides and Toxic Substances has denied the petition submitted to the EPA by Dow Chemical Co. to delete ortho-phenylphenol (OPP) from the emissions inventory list of toxic chemicals under section 313 of the Superfund Amendments Reauthorization Act (SARA). Dow Chemical based its petition on the contention that OPP does not meet the health or environmental toxicity criteria mandated in section 313. Given the available data on OPP, the agency believes that there is enough evidence on potential carcinogenicity, developmental toxicity and environmental toxicity/persistence to maintain OPP on the emissions inventory list. Dow Chemical is currently the sole producer of OPP in the United States. Section 313 of SARA requires owners and operators of certain facilities that manufacture, process or otherwise use one of the listed 329 toxic chemicals and chemical categories to report annually their environmental releases of such chemicals. The purpose of the emissions reporting provision in section 313 is to make information available to the public about total annual releases of toxic chemicals from nearby industrial facilities. The public may petition the agency to add or delete from the emissions inventory list and the agency has 180 days to respond. The EPA Administrator has delegated authority of denial for all section 313 petitions to the Assistant Administrator. For further information, docket materials are available for inspection in the Office of Toxic Substances' Reading Room, NE-G004, 401 M St. S.W., Washington, D.C. 20460. The OPP notice of denial appeared in the Federal Register on Oct.29.

Alicia Tenuta
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EPA RELEASES COMMERCIAL HAZARDOUS-WASTE-FACILITY DIRECTORY

EPA has published a directory of commercial hazardous-waste-management facilities which store, treat or dispose of hazardous wastes. The report provides information on the types of services offered and the types of waste managed. The report can be obtained from the National Technical Information Service (NTIS) at 703-487-4650 for \$24.95, or \$6.50 for microfiche. The order no. is PB88-109-699/AS.

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Press Advisory

For the week of: October 12, 1987

Following are some agency developments which may interest you. If you need more information on any of these subjects, call the appropriate contact:

TOPIC

CONTACT

FORD RECALLS SOME 1982 LYNX AND ESCORT CARS

The U. S. Environmental Protection Agency today said Ford Motor Co. began recalling 85,053 1982 model year Ford Escort and Mercury Lynx cars with manual transmissions on Oct. 12 to repair an excessive hydrocarbon emissions problem. Ford is revising the air injection system to increase the duration of air supply upstream of the catalytic converter to allow more complete oxidation of the pollutants. They also will change the spark timing and check the operation of the exhaust gas recirculation valve, replacing it if necessary, free of charge. EPA discovered the problem during routine surveillance testing. Ford agreed to recall the vehicles after conducting similar tests of its own.

Martha Casey
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EPA PROPOSES STANDARDS FOR PURCHASE OF RE-REFINED OIL FOR U.S. GOVERNMENT VEHICLES

EPA is proposing guidelines which require federal agencies to purchase certain lubricating oils containing re-refined oil for use in government vehicles. The guidelines would affect primarily the Department of Defense, which purchases petroleum products on behalf of all federal agencies, including the General Services Administration and the Postal Service. The Defense Department has already moved to allow the purchase of re-refined oil, by setting new specifications for the oil (referred to as "military specifications.") EPA's proposed requirement also would affect government contractors. Under the Resource Conservation and Recovery Act, federal agencies must purchase certain items containing recovered materials to the maximum extent possible, provided technical performance is maintained and costs and availability are reasonable. EPA must designate suitable items containing recovered materials, including recommendations for procurement practices and information on availability, relative price, and performance. EPA's new proposal would apply speci-

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fically to the purchase of vehicular lubricating oils, gear oil and hydraulic fluids. The requirement is expected to encourage the re-refining of oil by creating additional markets. The federal government annually purchases a combined total of nearly 9 million gallons of the three oils, less than two percent of annual domestic purchases. However, since many state and local procuring agencies, as well as private organizations purchase only oil meeting military specifications, the new specifications for the purchase of re-refined oil are expected to create additional markets outside of the federal government. Used lubricating oils contain contaminants picked up during their use; re-refining removes the contaminants and additives to produce a new basestock, allowing the oil to be used repeatedly. Approximately 70 percent of the 1.2 billion gallons of used oil produced each year are recycled; the remaining 30 percent dumped into sewers or on land, sometimes creating public health and environmental problems. With the creation of the new markets, EPA expects much of the non-recycled oil to be diverted for recovery. The proposal will be published in the Federal Register within the next two weeks.

EPA ISSUES FIRST ADMINISTRATIVE PENALTIES UNDER
CLEAN WATER ACT

EPA's Region VI Office in Dallas has handed out the first administrative penalties in the U.S. ever issued under the federal Clean Water Act. Administrative penalties, enabling EPA to bypass the court system and fine a company or government entity directly, were first authorized by Congress in their February 1987 amendments to the 1972 Clean Water Act. On September 23, EPA issued direct administrative fines totaling \$136,000 to ten companies and municipalities. Those cited: BASF Corporation, Freeport, Texas, \$9,000 for allowing contaminated stormwater discharge into a canal; H. Mulhstein and Co., Inc., Houston, Texas, \$20,000 for discharging pollution exceeding their permit into a bayou; ANR Production Company, Houston, Texas, \$9,000 for failing to submit monitoring reports on discharges from their offshore oil platform in the Gulf of Mexico; City of Westlake, Louisiana, \$13,000 for discharging sewage sludge and sludge runoff into a bayou; Shepherd Oil, Inc., Jennings, Louisiana, \$25,000 for failure to submit discharge monitoring reports; Georgia Pacific Chemicals, Lufkin, Texas, \$25,000 for discharge of

Dave Ryan
202-382-2981

contaminated stormwater from three unauthorized outlets into a creek; City of Orange, Texas, \$10,000 for failing to submit water pollution discharge monitoring reports according to requirements of EPA permit; A. Schulman, Inc., Orange, Texas, \$10,000 for violations of maximum allowable discharge of pollutants and failing to submit discharge monitoring and noncompliance reports; Ethanol Management Group, Vidalia, Louisiana, \$12,000 for allowing unauthorized pollution discharge and failing to report it; and Nueces County Water Control and Improvement District #5, Banquete, Texas, \$3,000 for submitting inadequate discharge monitoring reports.

REGULATIONS SIGNED TO REIMBURSE LOCAL GOVERNMENTS
FOR EMERGENCY ACTIONS

EPA Administrator Lee M. Thomas signed an interim final regulation for reimbursements to local governments for emergency response activities under Section 123 of the Comprehensive Environmental Response, Compensation and Liability Act. Local governments may apply for reimbursement of costs incurred in conducting emergency response activities at sites that pose a threat to human health or the environment. Temporary emergency measures may include such activities as erecting security fencing to limit access, responding to fires and explosions and other environmental threats that require immediate response at the local level. The intent of the regulation is to alleviate significant financial burden on local governments that conduct temporary measures. Therefore, reimbursement funds will be distributed to those local governments that demonstrate the most significant financial burden. The reimbursement funding is limited to \$25,000 per single response and cannot supplant local funds normally provided for emergency response activities. This interim final regulation will appear in the Federal Register in the next two weeks.

Priscilla Flatte
202-382-4387

NOTICE OF AVAILABILITY OF TOXICOLOGICAL PROFILES

The Agency for Toxic Substances and Disease Registry (ATSDR) will announce the availability of 10 draft toxicological profiles. Section 110 of the Superfund Amendments and Reauthorization Act mandates ATSDR to prepare toxicological profiles for the 100 hazardous chemicals most commonly found at Superfund sites. EPA worked in conjunction with ATSDR to prepare the

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list of 100 chemicals. The draft toxicological profiles will be publicly available by Oct. 17. Written comments on the draft profiles should be submitted by Jan. 17, 1988. The profiles available are: Benz (a) anthracene, Benz (a) pyrene, Chrysene, Dibenz (a,h) anthracene, Heptachlor, Arsenic, Chloroform, Chromium, Nickel and N-nitrosodiphenylamine. For copies of the draft profiles contact: Georgi Jones, Director, Office of External Affairs, ATSDR, Chamblee 28 South, 1600 Clifton Rd., Atlanta, Ga. 30333; 404-236-4620. Fifteen more profiles will be made available as expeditiously as possible and a full 90-day public comment period will be provided.

CHESAPEAKE BAY WATER QUALITY REPORT AVAILABLE

"Habitat Requirements for Chesapeake Bay Living Resources," a compilation of information available on water quality and habitat conditions necessary to sustain life in the Bay, is now available from EPA's Chesapeake Bay Program. The report, developed over the past two years by the Bay Program's Living Resources Task Force, will be used by the newly formed Living Resources Subcommittee to recommend changes needed to enhance conditions for shellfish, finfish and vegetation in the Chesapeake and to help fulfill a key commitment proposed in a new Chesapeake Bay Agreement. The new agreement, approved in draft form in August by Maryland, Pennsylvania, Virginia, the District of Columbia and EPA, calls upon participants to "develop and adopt, by January 1988, criteria for the protection of water quality and habitat conditions necessary to support the living resources found in the Chesapeake Bay." The Task Force report is available from: EPA Chesapeake Bay Program, 410 Severn Ave., Annapolis, Md. 21403; 301-266-6873.

Pat Bonner
301-266-6873

EPA TO HOLD HOUSEHOLD HAZARDOUS WASTE CONFERENCE IN SAN DIEGO

EPA, in conjunction with Tufts University and the American Public Works Association, will hold a conference on household hazardous waste management in San Diego on November 2,3 & 4, 1987. Household hazardous wastes, such as pesticides, paints, cleaning agents and batteries, currently are exempt by law from federal hazardous waste controls. The safe disposal of household hazardous wastes is becoming an issue of increasing interest: since 1981, 550 local collection programs have been

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undertaken in 32 states. EPA is sponsoring the conference to demonstrate support for local collection programs. The conference is designed to provide communities with information on how to set up local collection programs, and on how to improve currently existing programs. The conference will also explore special issues concerning household-generated wastes. There is no registration fee. Persons interested in agenda topics should call Dana Duxbury, at 617-381-3486. Those interested in registration information should call Dan Hansen, at 312-667-2200.

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Environmental News

FOR RELEASE: MONDAY, OCTOBER 26, 1987

Priscilla Flattery 202-382-4387

LOVE CANAL RECORD
OF DECISION
SIGNED

The final Superfund cleanup decision for the Love Canal creeks and sewers in Niagara Falls, N.Y., was signed today by Dr. J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response.

The remedy will utilize on-site thermal destruction to clean up the dioxin-contaminated creek and sewer sediments. The residuals from the thermal treatment will be disposed of on site. The cost is estimated to be between \$26 and \$31 million.

"This remedy provides a realistic plan to deal with the dioxin contamination and is protective of human health and the environment," says Dr. Porter, manager of the Superfund program. "This is a very important step towards the cleanup of the Love Canal area."

Dr. Porter further noted that the Love Canal cleanup is indicative of the increasing pace of the national Superfund program. He indicated that work is underway at over 500 Superfund sites, with site work to be completed at approximately 25 sites this fiscal year.

A transportable thermal-destruction unit will be sited at Love Canal to treat all creek and sewer sediments as well as other contaminated materials that have resulted from the remediation process. The process will be capable of successfully destroying dioxin-contaminated materials. The remaining non-hazardous residues will be disposed of on site.

A dewatering/containment facility will be constructed to store and dewater dioxin-contaminated material before thermal destruction. Upon completion of thermal treatment, this facility will be substantially reduced in size to accommodate construction/demolition debris only.

Love Canal, a neighborhood in the southeast corner of the city and approximately one-quarter mile north of the Niagara River, first came into national prominence in the late 1970's when it was discovered that contaminated leachate had migrated to the surface of the canal and to nearby residential basements. Contaminants also migrated through area sewers to nearby creeks.

In October 1978, containment measures were undertaken at the site that included the construction of a tile drain and leachate collection system; placement of a clay cap over 16 acres of the canal; the erection of an on-site leachate treatment facility; and the installation of a fence around the area.

Approximately 1000 families have been relocated from the area and the homes adjoining the canal have been demolished.

In the fall of 1982, sewers leaving the canal were severed. In 1984, the installation of an expanded 40-acre cap was completed. A long-term monitoring/perimeter study was implemented to evaluate the effectiveness of the leachate collection system and to assess the contaminant migration in the soil and groundwater at the site. Preliminary results indicate that pollutants have been confined to the site, and the amount of contaminated groundwater treated at the leachate treatment facility has decreased since the cap was extended.

This past summer, \$2.5 million was made available for the buyout of additional properties at Love Canal. Funds for maintaining the remaining homes were also made available.

Copies of the Record of Decision for the Love Canal sewer and creek cleanup are available at the U.S. EPA Public Information Office, Carborondum Center, Suite 530, 345 Third St. Niagara Falls, and the Public Information Office of the NY-DEC, Love Canal, Colvin Blvd., Niagara Falls.



Press Advisory

For the week of: November 2, 1987

Following are some agency developments which may interest you. If you need more information on any of these subjects, call the appropriate contact:

TOPIC

CONTACT

FISHER NOMINATED TO BE ASSISTANT ADMINISTRATOR FOR OPPE

Linda J. Fisher has been nominated by the President to be EPA Assistant Administrator for the Office of Policy, Planning and Evaluation (OPPE). In that position, she will oversee the agency's development of policy and manage the agency's regulatory process. Fisher, who is Executive Assistant to the EPA Administrator, served as the agency's chief expert on Superfund reauthorization. She also has served on the staff of the House Appropriations Committee and as a legislative assistant to two congressmen. A native of Columbus, Ohio, Fisher is a graduate of the Ohio State University College of Law and Miami University in Oxford, Ohio. When confirmed by the Senate, she will succeed Milton Russell, who resigned in March, as Assistant Administrator for OPPE.

John Kasper
202-382-4355

ACID RAIN EMISSIONS INVENTORY AVAILABLE

EPA has released a report documenting the development of the National Acid Precipitation Assessment Program Emissions Inventory. The report represents the best emissions data available for 1980 for the 48 contiguous states and 10 Canadian provinces. It provides detailed point-source data for over 14,000 plants and area-source information by source category for 3,070 U.S. counties and the Canadian provinces. The emissions included in the report are: sulfur dioxide, primary sulfate, oxides of nitrogen, lead, carbon monoxide, hydrogen chloride, hydrogen fluoride, ammonia, total suspended particulates, volatile organic compounds and total hydrocarbons. The purpose of the research effort was to locate and quantify emissions that may contribute to acid deposition. The report is intended to serve as a reference baseline year for other research efforts and legislative bills. Most congressional efforts dealing with acid deposition use 1980 as the baseline year. Published by EPA's Air and Energy Engineering Research Laboratory, the report will serve as a forerunner to a 1985 emissions

Christian Rice
202-382-3324

inventory expected to be published in late 1988. Copies can be obtained from David Mobley, the project officer, at 919-541-2612.

EPA'S RADIATION MONITORING FACILITY BEGINS
CONSTRUCTION ON NEW SITE IN MONTGOMERY, ALA.

EPA will hold groundbreaking ceremonies on Monday, Nov. 9, at 1:00 p.m., for the Office of Air and Radiation's new Eastern Environmental Radiation Facility (EERF) to be built on Gunter Air Force Station in Montgomery, Ala. EERF maintains EPA's principal nuclear accident response team and was responsible for monitoring after the Chernobyl accident. It also conducts radiochemical analyses for Superfund projects and is EPA's main radon testing facility. The national Environmental Radiation Ambient Monitoring System, which is based at the facility, measures for the presence of radionuclides in air, water and milk on a continuing basis. The new 40,000-square-foot building, which is expected to take 12-18 months to construct, will cost approximately \$7 million. The facility is being built to EPA specifications by W. M. Marable Inc. of Tuskegee, Ala., on land under a long-term lease agreement with the Department of Defense.

Elly Seng
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EPA PROPOSES PENALTIES FOR FALSE CLAIMS AND STATEMENTS

EPA today proposed regulations for assessing penalties of up to \$5000 for false claims of less than \$150,000 and for false written statements submitted to the agency for the purpose of obtaining money, property or services. The penalty authority could apply, for example, in cases where false claims are made for work performed under EPA contracts. Under the proposal, the agency also would be able to assess up to double the amount of a false claim. The proposal was published under The Program Fraud Civil Remedies Act, which was signed into law on Oct. 21, 1986. The act requires each affected federal agency to set procedures for investigating claims, conducting hearings and assessing penalties. Under EPA's proposal, the Inspector General or his designee will investigate suspected false claims and statements, and EPA officials in the General Counsel's and Administrator's offices will serve as review and hearing officials. The proposal was published in today's Federal Register and provides for a 30-day public comment period.

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