Antidegradation

Water "whose quality is or becomes consistently higher than that quality necessary to sustain the national goal uses shall be maintained at that higher level unless limited degradation is authorized by the Division" of Water Pollution Control, according to the regulations.

The regulations define waters having outstanding recreational, ecological, and aesthetic values as national resource waters. In addition, the regulations prohibit new discharges and require elimination of existing discharges to those waters unless a discharger can prove alternate disposal is not reasonably available or feasible or that discharge will not degrade water quality.

The state will limit or prohibit nutrient discharges as necessary "to prevent excessive eutrophication." The regulations prohibit new or increased discharges of nutrients into lakes, ponds, or their tributaries and require treatment of existing discharges.

The regulations divide Massachusetts into river basin/drainage areas and designate national goal uses for each area. Inland areas are designated as cold water, seasonal cold water, or warm water fisheries.

The regulations include maps and tables for each area. Tables include designated uses and physical descriptions by boundaries and mileage for each area.

Nuclear Energy

WASTE REDUCTION SYSTEM CAN SAVE PLANT $1 MILLION ANNUALLY, DEVELOPER REPORTS

A new nuclear waste volume-reducing system has been developed that can save the typical nuclear power generating plant an estimated $750,000 to $1 million in annual disposal costs, according to the Aerojet Energy Conversion Company of Sacramento, Calif.

Aerojet vice president Wayne E. Kramer said the first commercial sales of the system in the U.S., (totaling $6.5 million, have been made to the Commonwealth Edison Company of Chicago and Carolina Power and Light Company of Raleigh, N.C., for generating plants under construction.

The system, which reduces low-level radioactive waste to one-tenth the original volume, uses a unique fluid bed heat exchange process that converts wastes in to a free-flowing solid with a salt-like consistency. The salts are mixed with a solidification agent, such as cement, and put into 55-gallon metal drums for shipment to burial sites, the company said.

Low-level radioactive wastes constitute about 90 percent total radioactive wastes generated from commercial nuclear power plants, the balance being the high-level wastes generated during reprocessing of spent fuel elements.

A typical 1,000-megawatt nuclear plant generates approximately 5,000 drums of waste per year. Aerojet's system reduces the number of drums to be packaged, transported, and buried to one-tenth the number required for waste not reduced, the company said.

Commonwealth Edison will install the Aerojet system at its Byron nuclear station, 100 miles west of Chicago, and at its Braidwood station, some 40 miles southwest of the city.

The North Carolina utility will install two systems at its has been operating a full-size demonstration system on Shearon Harris nuclear site, 20 miles south of Raleigh.

Aerojet has been operating a full-size demonstration system on simulated wastes since July 1975. A similar fluid bed volume-reduction process has been in use for 15 years at the Idaho National Engineering Laboratory in Idaho Falls, where only high-level radioactive defense wastes are processed.

Under the terms of the contracts with Commonwealth Edison and Carolina Power and Light, Aerojet will supply the hardware and engineering services to the utilities, which will install the systems.

Nuclear Energy

NRC REVISES REGULATORY GUIDES ON ELECTRICAL SYSTEMS, PLANT DESIGN

The Nuclear Regulatory Commission has revised two regulatory guides on methods for complying with NRC's electrical system and seismic design classification regulations for nuclear power plants.

NRC said regulatory guide 1.75, revision 2 — "Physical Independence of Electric Systems," which describes methods for achieving physical independence of circuits and electric equipment associated with the class 1E power system, protection system, and supporting systems — was revised to include minor editorial changes clarifying applicability relative to fire hazards (September 20, 43 FR 42320).

The other guide, regulatory guide 1.29, revision 3, "Seismic Design Classification," which outlines methods for identifying and classifying light-water-cooled nuclear power plants designed to safely shutdown because of earthquakes, was reevaluated and revised following public comment (September 28, 43 FR 44575).

Regulatory guides are available for inspection at NRC, Public Document Room, 1717 H St., N.W., Washington, D.C. Single copies are available from NRC, Washington, D.C. 20555; Attn: Director, Division of Technical Information and Document Control.

Comments and suggestions on improving the guides should be addressed to Secretary, NRC, Washington, D.C. 20555; Attn: Docketing and Service Branch.

North Carolina

TEST SCRAPING CARRIED OUT IN N.C.; SEARCH FOR PCB DISPOSAL SITE GOES ON

RALEIGH, N.C. — (By an Environment Reporter staff correspondent) — State officials in North Carolina are searching for a site within state boundaries to bury the tons of PCB-contaminated material that will be scraped from more than 200 miles of road shoulders.

A test scraping of contaminated soil has, however, been carried out on a one-mile stretch of highway in Warren County.

The state has coated the soil containing the toxic chemical waste with activated carbon topped by asphalt as a temporary measure to bind the PCBs (polychlorinated biphenyls) until a dump site is prepared. The nearest federally approved landfill is in Alabama, but North Carolina Governor James B. Hunt has said he feels that North Carolina should take care of its own hazardous waste.

A Kernersville company, Chem-Dyne Co., has applied for state approval to build a chemical waste disposal facility near Kinston, N.C., but a state official said that landfill would not handle PCB material.

O.W. Strickland, supervisor of solid waste programs for the state Department of Human Resources, said that the state is still considering Chem-Dyne's application, which would also have to be approved by the Environmental Protection Agency.

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The facility would handle hazardous materials which cannot be put in conventional landfills. But radioactive materials and PCBs would be excluded.

Initially the trial scraping in Warren County was held up when officials in Warrenton obtained a court order blocking the test. The town board was concerned that the creek which supplies the town's drinking water would be contaminated by PCBs. The state had planned to store the soil in a highway maintenance area above the creek.

Arguments on the court order were to have been heard October 10. A state spokesman said, however, on October 2 that the state had been able to lease one-half acre elsewhere in Warren County and that Warrenton officials had agreed to the alternate storage site.

The state will pay the private landowner $100 to store the contaminated soil until January 1, 1979, said Special Deputy Attorney General William Raney.

"It's going to present a serious problem if we haven't gotten a final disposal site by then," he said.

Fighting Extradition

Three New York men charged by state and federal authorities with dumping the PCB wastes are fighting extradition to North Carolina.

An attorney for Robert J. Burns, 49, and his two sons has filed a writ of habeas corpus challenging an extradition order from New York governor Hugh L. Carey.

The extradition hearing will be October 23 in Jamestown, N.Y. Burns and his sons were scheduled to appear October 6 in federal court in Buffalo, N.Y. at a removal hearing in connection with federal charges filed in the case.

The three had been held in the Chautauqua County, N.Y. jail until last week each posted $5,000 bond on the North Carolina charges.

They were released from jail and transported by deputy U.S. marshalls to Buffalo to appear in federal court.

After that appearance the Burnses posted $5,000 bond each on the federal charges and were released.

Illinois

NEW STATE REGULATIONS CONFORM WITH FEDERAL MINING, RECLAMATION RULES

New Illinois mining and reclamation rules bring the state's regulatory program into compliance with federal interim regulations, according to the Department of Mines and Minerals.

The regulations affect "permits and determinations required of all existing and new surface and underground coal mines."

The Department's Land Reclamation Division adopted the emergency regulations, effective August 25, under the Federal Surface Mining Control and Reclamation Act of 1977 and the Illinois Surface-Mined Land Conservation and Reclamation Act, effective August 11.

The federal law requires federal establishment of interim mining and reclamation regulations until states adopt approved permanent regulatory programs or until the Federal Government imposes a program.

The federal government's permanent program regulations were proposed September 18 by the Department of Interior (Current Developments, September 22, p. 973).

State Requirements

All mining operations require a permit and "deadlines set in the federal regulations shall apply," according to the Illinois regulations.

Persons conducting blasting operations require a certificate of competency, according to the regulations.

All reclamation plans approved before May 3, 1978 — the deadline for compliance under the federal interim rules — still are effective. Plan approval is required before changes are made in post-mining land use, the regulations say.

The regulations exempt from prime farmland requirements existing surface mines not operating under permits before August 3, 1977, and permit extensions or renewals as defined by state regulations.

The regulations permit stockpiling "for the shortest practicable period, not exceeding 11 months" and shorter periods may be determined on a case-by-case basis, consistent with "optimal reclamation practice." The regulations require approval for surplus soil disposal.

Permit applicants must identify water pollutants and substances "toxic to vegetation" if treatment or burial will not conform with federal regulations, according to the regulations.

The regulations require that mine operators notify the Land Reclamation Division "if waste materials are causing or threatening to cause the formation of acids, toxic materials, combustible materials, or upward migration of salts." The division then must determine "adequacy of cover."

New Jersey

NEW REGULATIONS RELAX FUEL SULFUR STANDARDS

New regulations adopted by New Jersey relax sulfur-in-fuel oil standards for nine New Jersey counties, effective October 12.

New Jersey adopted relaxed standards because Pennsylvania recently adopted stricter sulfur standards, according to the Department of Environmental Protection.

Several industries suggested sulfur standards should be relaxed even further, the department said.

The new regulations will allow higher-sulfur fuel burning in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, and Salem Counties.

The regulations prohibit sale, storage, delivery, or "exchange in trade for use in New Jersey" of fuels exceeding sulfur-in-fuel weight limits.

Former sulfur-in-fuel allowances ranged from 0.2 to 1.0 percent by weight. The new regulations allow from 0.2 to 2.0 percent sulfur in fuel by weight.

The regulations establish six zones defined by counties and limit sulfur content by weight according to fuel oil grades, oil viscosity classifications, and geographic zones.

The regulations also limit sulfur dioxide emissions by pounds per million BTUs gross heat input according to the same guidelines.

The regulations exempt sulfur dioxide emissions resulting from combustion of a combination of fuels with facility byproducts, or byproducts alone, if emissions can be proved predictable and not exceeding "310 parts per million by volume adjusted to 12 percent carbon dioxide by volume."

In such cases, the department may require other emissions controls including sampling and analysis.

If fuel oil grade does not agree with viscosity classification, allowable sulfur content will be determined by viscosity classification, the regulations say.

The regulations exempt ocean vessels and motor vehicles.

The state submitted regulations to the U.S. Environmental Protection Agency for approval under the Clean Air Act.

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