

1 National Life Drive
Davis 2
Montpelier, VT 05620-3901

Tel: (802) 828-1294
Fax: (802) 828-1250

www.anr.state.vt.us



Deborah L. Markowitz
Agency Secretary

Trey Martin
Deputy Secretary

State of Vermont
Agency of Natural Resources

MEMORANDUM

DATE: July 31, 2015

RE: Applicability of Vermont's Non-radiological Hazardous Waste Regulatory Program to Entergy Nuclear Vermont Yankee and the Vermont Yankee Nuclear Power Station Site

FROM: Jen Duggan, General Counsel, Agency of Natural Resources
Jordan Gonda, Associate General Counsel, Department of Environmental Conservation

TO: Christopher Wamser, Site Vice President, Entergy Nuclear Vermont Yankee

BACKGROUND

Entergy Nuclear Vermont Yankee (ENVY) is a generator of non-radiological hazardous waste subject to state regulation under the Vermont Hazardous Waste Management Regulations (VHWMR). Under the VHWMR, generators of non-radiological hazardous waste are subject to the general management standards set forth in subchapter 3 of the VHWMR, including the generator closure requirements of VHWMR § 7-309(c).

The Agency of Natural Resources (Agency), in consultation with the Environmental Protection Agency, Region 1, Office of Regional Counsel and the Vermont Office of the Attorney General, has determined that the Agency's authority to regulate ENVY and the Vermont Yankee Station under the non-radiological hazardous waste generator standards of the VHWMR is not preempted by federal law. The State of Vermont is authorized by federal law to administer a non-radiological hazardous waste regulatory program in lieu of the federal hazardous waste program under the Resource Conservation and Recovery Act (RCRA). This express federal authority authorized to the State to administer a non-radiological hazardous waste program is not in conflict with the regulatory authority conferred to the Nuclear Regulatory Commission (NRC) over radiological safety. Furthermore, Vermont's general non-radiological hazardous waste management standards and generator closure requirements of VHWMR § 7-309 are not preempted because the purpose of these requirements is unrelated to regulation of radiological risks and because application of these requirements generally do not conflict with ENVY's obligations under the Atomic Energy Act.

I. STATE AUTHORITY TO REGULATE NON-RADIOLOGICAL HAZARDOUS WASTE

The Agency of Natural Resources (Agency) is Vermont's administrative agency with primary regulatory oversight over the use, treatment, and handling of non-radiological solid and hazardous wastes. The Agency regulates these waste-related activities under the provisions of title 10 chapter 159 of the Vermont Statutes Annotated and the regulations promulgated thereunder.

The Agency's authority over non-radiological hazardous waste specifically extends to the management of non-radiological hazardous wastes generated, transported, treated, stored, or disposed of in the State. 10 V.S.A. § 6603(9). This authority is executed through the administration of a federally-authorized regulatory program that fulfills the minimum requirements of Subtitle C of the federal Resource Conservation and Recovery Act of 1976 and amendments thereto (RCRA). *Id.* Consistent with its federal mandate, the Agency has promulgated a set of comprehensive regulations (the Vermont Hazardous Waste Management Regulations) to oversee non-radiological hazardous waste activities in Vermont. These regulations have been authorized by the Environmental Protection Agency as being at least as stringent as the requirements of Title 40, Subtitle C of the Code of Federal Regulations. A state's provisions that have been determined by EPA to be equivalent to or more stringent than RCRA Subtitle C are part of the state's federally authorized non-radiological hazardous waste program and are federally enforceable. 42 U.S.C. § 6926(b).¹ The purpose of the VHWMR regulations is to protect the public health and the environment by regulating the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of non-radiological hazardous waste² in Vermont. VHWMR § 7-102.

II. VERMONT'S HAZARDOUS WASTE GENERATOR MANAGEMENT AND CLOSURE STANDARDS

The VHWMR contains specific requirements for generators of non-radiological hazardous waste ("generators").³ Generators are subject to specific notification requirements of VHWMR § 7-104, including the requirement to initially notify the Secretary of non-radiological hazardous waste generation activities, and the requirement to maintain an updated Hazardous Waste Handler Site ID Form with the Secretary describing current non-radiological waste generation and other waste-related activities. VHWMR § 7-104; § 7-304. Generators are also required to operate in

¹ States may also adopt provisions that are broader in scope than the federal requirements. 40 C.F.R. § 271.1(i)(1). These "broader in scope" provisions are enforceable under state authority. 40 C.F.R. § 271.1(i)(2).

² The definition of "hazardous waste" as set forth in the VHMWR specifically excludes "[a]ll special nuclear, source, or byproduct material, as defined by the Atomic Energy Act of 1954, as amended...".

³ A generator is defined as "any person, by site, whose act or process produced hazardous waste or whose act first causes hazardous waste to become subject to regulation" and "includes any person who imports hazardous waste into Vermont from a foreign country." VHMWR § 7-103.

accordance with the general management standards outlined in subchapter 3 of the VHWMR. See VHWMR § 7-301(a) (“The requirements of this subchapter apply to hazardous waste generators and ... (3) any person that is required to meet generator standards as specified elsewhere in these regulations.”).

Subchapter 3 of the VHWMR establishes requirements applicable to generators based on the generator’s status as a “conditionally exempt” generator (addressed in § 7-306), a “small quantity” generator (addressed in § 7-307), or a “large quantity” generator (addressed in § 7-308). VHWMR § 7-301(b). A determination of generator status is made pursuant to VHWMR § 7-305, which requires an accounting of all non-radiological hazardous wastes generated by the facility. The materials and wastes specifically listed in VHWMR § 7-305(a)(1) through (a)(7) are not considered in, and are specifically excluded from, a determination of generator status. VHWMR § 7-305(a)(6).

Small and large quantity generators are required to comply with the general management standards of VHWMR § 7-309, including those applicable to closure of the generator facility. See VHWMR § 7-307(c)(5) (requirement for small quantity generators to comply with § 7-309); § 7-309(c)(5). Under § 7-309(c)(1), a generator must implement closure 90 days after ceasing generation or management of non-radiological hazardous waste at the generator site, and must employ closure activities to ensure compliance with the standard in § 7-305(c)(1) for final closure. Where a generator does not close the entire site at one time, but rather intends on closing a portion of a site or ceases operation for an indefinite period of time, the generator shall implement a “partial closure” of the facility. VHWMR § 7-309(c)(6); VHWMR § 7-103 (definition of “partial closure”). Partial closure must be completed to minimize the need for further maintenance of the facility or the closed portion of the facility, and must ensure that non-radiological hazardous wastes from any discontinued processes and activities are properly removed to a designated facility. *Id.*

Whether implementing final closure or partial closure activities, a generator is required to provide notification of the intent to commence closure activities by submitting a Pre-Closure Notification Form (Notification Form) to the Secretary 90 days prior to commencement of closure activities. VHWMR § 7-304(d); § 7-309(c)(2).⁴ Based on the information reported by the generator in the Notification Form, the Secretary may require that the generator develop and submit a plan for proposed non-radiological hazardous waste closure activities. VHWMR § 7-309(c)(2). The closure plan must identify how the generator will achieve the performance-based standards of VHWMR §

⁴ The completed form must include specific site information including the type of closure (final site closure or partial closure), the reasons for closure, plans for future use of the site, type of business (including details of waste generation operations), description of site conditions, types of wastes in storage at the facility at the time, identification of any underground or aboveground storage tanks, and identification of any known spills or releases of hazardous materials or waste. A copy of the Pre-Closure Notification Form is available through the Agency website at the following link: <http://www.anr.state.vt.us/dec/wastediv/rcra/documents/Preclosurenotificationform.pdf>.

7-309(c) for non-radiological hazardous waste for the entire site (if implementing final closure) or a portion of the site (if implementing partial closure).

III. AS A SMALL QUANTITY NON-RADIOLOGICAL HAZARDOUS WASTE GENERATOR, ENVY IS SUBJECT TO THE REQUIREMENTS OF VHWMR SUBCHAPTER 3

Based on the type of non-radiological waste ENVY generates and the frequency of those generation activities, ENVY is a “small quantity generator” of non-radiological hazardous waste under the VHWMR § 7-307. Generators of non-radiological hazardous waste are required to report such generation activities to the Secretary on a Hazardous Waste Handler Site ID Form as required by VHWMR § 7-304. ENVY has consistently reported its status as a generator of non-radiological hazardous waste since 1980. The most recent Hazardous Waste Handler Site ID Form submitted by ENVY on April 6, 2015 acknowledges ENVY’s status as a small quantity generator, identifying that ENVY handles approximately 780 pounds of hazardous waste on a monthly basis.

As a small quantity generator of non-radiological hazardous waste, ENVY is required to comply with the general management standards in VHWMR subchapter 3, including the generator closure requirements set forth in VHWMR § 7-309(c). These provisions require ENVY to employ certain activities when closing the ENVY site or portions of the site (i.e., when non-radiological hazardous waste accumulation, handling, and storage areas are no longer used; when buildings containing non-radiological hazardous wastes are demolished or deconstructed; as historic non-radiological hazardous contamination becomes accessible for further remediation, etc.) to satisfy the requirements of VHWMR § 7-309(c).⁵ The provisions of VHWMR § 7-309(c) also require that ENVY provide the Secretary with prior notice of the commencement of closure activities on the site or a portion of the site.

IV. VERMONT’S REGULATION OF ENVY AS A NON-RADIOLOGICAL HAZARDOUS WASTE GENERATOR IS NOT PREEMPTED BY THE ATOMIC ENERGY ACT

The Agency’s authority to regulate ENVY and the VY Station under the non-radiological hazardous waste generator standards of VHWMR subchapter 3 is not preempted by federal law. As stated above, the State of Vermont has been authorized by federal law to administer a non-radiological hazardous waste regulatory program in lieu of the federal RCRA program. This express authority provided to the State to administer a non-radiological hazardous waste program is not limited by the regulatory authority conferred to the NRC over radiological safety when the state is carrying out the minimum requirements of RCRA subtitle C. Furthermore, all of Vermont’s generator closure requirements of VHWMR § 7-309(c) are not preempted because (i) the

⁵ Relocation of non-radiological hazardous waste storage and/or accumulation areas does not render the closure requirements inapplicable. Rather, the relocation of non-radiological hazardous wastes stored and accumulated in these areas creates new Hazardous Waste Management Units (HWMUs) while creating a requirement to close those HWMUs no longer in use in accordance with the closure standards of § 7-309(c).

purpose of these requirements is unrelated to regulation of radiological risks and (ii) these requirements generally do not conflict with ENVY's obligations under the Atomic Energy Act.

A. The AEA does not Preclude Vermont's Administration of a Federally Authorized Non-radiological Hazardous Waste Program

In enacting the Atomic Energy Act in 1954, 42 U.S.C. § 2011 et seq. (the "AEA"), Congress provided a federal agency (the NRC) with regulatory authority over nuclear safety, including radiation hazards associated with nuclear material, and precluded regulation of radiological safety by the states. See *Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 209 (1983); *English v. Gen. Elec. Co.*, 496 U.S. 72, 82 (1990); *ENVY v. Shumlin*, 733 F.3d 393, 409 (2d Cir. 2013); *Skull Valley Band of Goshute Indians v. Nielson*, 376 F.3d 1223, 1242 (10th Cir. 2004); *U.S. v. Kentucky*, 252 F.3d 816, 823 (6th Cir. 2001); *Illinois v. Kerr-McGee Chemical Corp.*, 677 F.2d 571, 581 (7th Cir. 1982). The federal courts, including the United States Supreme Court, have specifically held that NRC's preemption over nuclear hazards does not expand to or impact "regulation of non-radiation hazards by the states." *Pacific Gas*, 461 U.S. at 209-10; *Kerr-McGee*, 677 F.2d at 580-81. This limitation on NRC's preemption authority is stated explicitly in a savings clause included by Congress in the Act, which preserves for the states certain regulatory powers not related to nuclear safety. This provision, 42 U.S.C. § 2021(k), states that "[n]othing in this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards." 42 U.S.C. § 2021(k); see also *Pacific Gas*, 461 U.S. at 209-12; *Kerr-McGee*, 677 F.2d at 580-81; *Shumlin*, 733 F.3d at 410.

In 1976, Congress enacted a separate federal law, RCRA, authorizing the federal government to regulate the generation, management, and disposal of hazardous and solid waste. Congress specified that activities and substances regulated under the AEA were excluded from RCRA's scope, except to the extent that regulation under RCRA is not inconsistent with the requirements of the AEA. 42 U.S.C. § 6905. Congress also expressed clear intent that individual states have a regulatory role in carrying out the federal RCRA Subtitle C hazardous waste program to regulate non-radiological hazardous waste and the risks such waste poses to human health and the environment. 42 U.S.C. § 6902(a)(7). To administer an authorized hazardous waste program in lieu of the federal program, a state's regulations must, at a minimum, be equivalent to the federal RCRA hazardous waste regulations. 40 C.F.R. § 271.1(i).

Because Vermont is exercising regulatory and enforcement authority expressly authorized by federal law, and is required to meet federal minimum requirements when administering RCRA Subtitle C, the analysis is not properly framed as potential preemption, but rather the proper interpretation of these two federal statutes. *POM Wonderful LLC v. Coca-Cola Co.*, 134 S.Ct. 2228, 2236 (U.S. 2014) (the "state-federal balance [of preemption] does not frame the inquiry" where two federal statutes overlap); see also *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F.Supp.2d 295, 344 (D. Vt. 2007) (Vermont's enforcement of emissions standards

under federally-authorized Clean Air Act did not implicate preemption but rather the doctrine of overlapping federal laws and in such cases, “courts have a duty to give effect to both” federal laws). And between the two federal statutes in this instance, “[t]he RCRA and the AEA are certainly not in irreconcilable conflict.” *Legal Environmental Assistance Foundation v. Hodel*, 586 F. Supp. 1163, 1167 (D.C. Tenn. 1984). Rather, Congress clearly intended for a dual system of state-authorized RCRA regulation over non-radiological activities and substances at facilities regulated under the AEA. *Id.*; see also *Martin v. Kansas Bd. of Regents*, Civ. A. No. 90-2265-0, 1991 WL 33602, at *6 (D. Kan. Feb. 19, 1991) (concluding that “the AEA and RCRA are capable of co-existence” and holding that “[w]hile the AEA applies to the radioactive element of a substance, the RCRA regulates the hazardous component of the substance.”).

In the absence of any express statement to the contrary or conflict between the federal statutes, both must be given effect. *Morton v. Mancari*, 417 U.S. 535, 551 (1974) (“When two [federal] statutes are capable of co-existence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective”); *Chemical Manufacturers Association v. EPA*, 673 F.2d 507, 512 (D.C. Cir. 1982) (“If the statutes do not contradict one another no choice need be made.... At most, two statutes may result in promulgation of two sets of guidelines.... Such regulatory overlap is not the same as a situation where two statutes provide mutually exclusive results.”).

Further, preclusion of Vermont’s administration of a non-radiological hazardous waste program by the AEA would ultimately result in gaps in coverage of non-radiological hazardous waste regulations, resulting in Vermont’s regulations being less stringent than RCRA’s federally required minimums—a situation federal law does not allow. 42 U.S.C. § 6926(b); *Kerr-McGee*, 677 F.2d at 583 (Congress “did not intend to create a situation in which some hazards could go unremediated.”). See also Letter from Kenneth C. Schefski, EPA Office of Enforcement and Compliance Assurance to Katie Koelfgen, Minnesota Pollution Control Agency, at p. 4 (April 9, 2015) (rejecting argument of an implied repeal of RCRA hazardous waste requirements by the Drug Supply Chain Security Act [in part] because that would leave gaps in RCRA coverage and result in no hazardous regulations of any kind); Memorandum from EPA Region 1 Associate Regional Counsel to EPA Region 1 RCRA Enforcement Unit (September 18, 2015) at pp.5-6 (rejecting argument of preemption of federally authorized state hazardous waste regulations under federal Pipeline Safety Act because that would leave gaps in RCRA’s coverage and result in applicable State regulations being less stringent than RCRA’s federally required floor).

Without explicit indication that Congress intended to interfere with states’ authority to administer the federally authorized non-radiological hazardous waste regulatory program, Vermont’s authorized hazardous waste program must be given effect.

B. The AEA does not Preempt Vermont's Hazardous Waste Generator Closure Requirements

Further, the AEA does not preempt even those specific provisions of the VHWMR that are more stringent or broader in scope than the minimum requirements of RCRA Subtitle C. The closure requirements enforced under state law are neither within the field of nuclear safety, nor in general conflict with any provision of the AEA.

First, while under the AEA, the NRC occupies the field of nuclear safety, the AEA is clear that preemption of nuclear safety regulation does not impinge on states' authority to regulate non-radiation hazards. 42 U.S.C. § 2021(k). The courts have also confirmed that there is no field preemption by the AEA of states' regulations adopted to regulate for purposes other than protection against radiation hazards. *Kerr-McGee*, 677 F.2d at 581 ("state retains the right to regulate non-radiation hazards"). In determining the purposes of a state regulation, the court may consider whether the regulation was grounded in, or primarily motivated by, radiological safety concerns. *Pacific Gas*, 461 U.S. at 213; *Shumlin*, 733 F.3d at 422.

Vermont's hazardous waste regulations are not grounded in or motivated by a nuclear safety rationale. Consistent with the purposes of RCRA (as outlined in 42 U.S.C. § 6902), Vermont's longstanding regulatory scheme applies to all non-radiological hazardous waste generators in the state and is intended to protect public and environmental health from hazards associated with *non-radiological* hazardous waste. 10 V.S.A. § 6601(a); VHWMR § 7-102. In the same vein, the Agency has adopted the generator closure requirements of VHWMR subchapter 3 to ensure that non-radiological hazardous wastes are properly removed from all closed generator facility sites, and that non-radiological hazardous wastes, contaminants, leachates, etc. are remediated.

Vermont's regulation of ENVY and the Site in this manner thus bears no resemblance to unsuccessful attempts by other states to regulate radioactive wastes. *Compare, Boeing v. Movassaghi*, 768 F.3d 832 at 837-38 (9th Cir. 2014) (state law that established cleanup standards for pollutants with radioactive as well as non-radioactive characteristics preempted by the AEA because it "regulates the federal government directly."); *Missouri v. Westinghouse Elec., LLC*, 487 F. Supp. 2d 1076 at 1087-88 (E.D. Mo. 2007) (state consent decree aimed at regulating areas of facility site that were known to be contaminated with radioactive materials was field preempted by the AEA because the consent decree was "an attempt to regulate the safety of nuclear contaminants."); *Brown v. Kerr-McGee Chemical Corp.*, 767 F.2d 1234, 1242 (7th Cir. 1985) (state action ordering removal of all waste, including radiological waste, from nuclear processing facility site was preempted because injunction would present "an obstacle to the accomplishment of the full purposes and objectives of federal regulation of radiation hazards.").

Here, Vermont's long-established hazardous waste program was adopted to manage *non-radiological* environmental risks and does not single out nuclear facilities. Therefore, the program

is not field preempted by the NRC's regulatory authority over nuclear safety. *Silkwood*, 464 U.S. at 255.

Second, there is no conflict between Vermont's hazardous waste regulations and the AEA. Only where a specific state action to regulate non-radiation hazards actually conflicts with the NRC's authority over radiological safety would a court find the state action preempted under the AEA. *Kerr-McGee*, 677 F.2d at 582, 584; *Kentucky*, 252 F.3d at 822 (citing *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238,284 (1984)) ("If Congress has not entirely displaced state regulation over the matter in question, state law is still preempted to the extent that it actually conflicts with federal law, that is, when it is impossible to comply with both state and federal law, or where the state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress.").

Consistent with the purpose of the VHWMR, the Agency's administration of, and ENVY's compliance with, the closure standards, advanced notification, and closure plan requirements of VHWMR § 7-309(c) are necessary for the Agency to anticipate and understand the scope of potential risks associated with any non-radiological waste-related closure activities, and ensure that ENVY minimizes these risks and resolves any issues in accordance with applicable state standards. As noted above, these requirements address solely non-radiological activities and substances and there is no inextricable conflict with NRC's regulation of radiological risks. *Compare Brown v. Kerr-McGee*, 767 F.2d at 1241-42.

Here, ENVY's compliance with Vermont's non-radiological hazardous waste generator closure requirements does not make impossible or otherwise obstruct ENVY's radiological safety obligations under federal law. The Agency acknowledges that the NRC decommissioning process may take decades to complete under the SAFSTOR decommissioning method that ENVY has selected. Because of the nature and sequence of the decommissioning process, the Agency has acknowledged that a similar "phased" approach to non-radiological hazardous waste generator closure of the site may be appropriate. The requirement to provide notification and a closure plan prior to commencing the non-radiological aspects of closure or partial-closure activities does not prevent ENVY from compliance with the AEA, nor does it dictate or otherwise interfere with ENVY's radiological decommissioning process or timeline for such activities or its plans for closure of part or all of the site, or issues related to nuclear safety or hazards associated with radiological waste.

For the above-stated reasons, Vermont's regulation of ENVY's non-radiological waste activities under the VHWMR is authorized by RCRA and not preempted by the Atomic Energy Act.

ENVY may direct questions about this document to:

JEN DUGGAN – General Counsel for the Agency of Natural Resources
Agency of Natural Resources
Secretary's Office
1 National Life Drive, Davis 1
Montpelier, VT 05602-3901
Phone: (802) 461-5309
Email: jen.duggan@vermont.gov

With respect to the EPA's position, ENVY may contact:

JEFFREY FOWLEY – Senior Assistant Regional Counsel, Environmental Protection Agency,
Region 1
Environmental Protection Agency, Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023
Phone: (617) 918-1094
Email: Fowley.Jeff@epa.gov

cc: Michael Twomey, Entergy Nuclear Operations, Inc., Vice President of External Affairs
Joseph Lynch, Entergy Nuclear Operations, Inc., Manager of Government Affairs
Bill Glew, Esq., Entergy Nuclear Operations, Inc.
Daniel Dorman, Regional Administrator, U.S. Nuclear Regulatory Commission, Region 1
Jeffrey Fowley, Regional Counsel, Environmental Protection Agency, Region 1
Scot Kline, Assistant Attorney General, Vermont Office of the Attorney General
Christopher Recchia, Commissioner, Vermont Department of Public Service
Dr. Harry Chen, Commissioner, Department of Health
Mr. Perry Plummer, Director, New Hampshire Department of Safety
Mr. John Giarrusso, Jr., Nuclear Preparedness Manager, Commonwealth of Massachusetts