

STATE NUCLEAR TRANSPORTATION PERMITS AND FEES

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ABSTRACT

Among the most significant forms of state regulation over nuclear materials transportation are nuclear transportation permit and fee laws. The compatibility of such laws with federal nuclear transportation law has been, or is being, addressed in several federal court and Department of Transportation (DOT) advisory opinions. Knowledge about the terms and conditions of such laws and their consistency with federal law is important to federal repository transportation planning and any ongoing nuclear shipments.

INTRODUCTION

The operation of a federal repository for the permanent disposal of high-level nuclear waste under the terms of the Nuclear Waste Policy Act will occasion shipments of nuclear waste and spent fuel from nuclear facilities throughout the country on an unprecedented scale. Responsibility for the operation of this repository and the transportation of nuclear waste to such a facility rests with the Department of Energy (DOE). Although the transportation of nuclear waste is largely a matter of federal regulation, state regulation in this area is increasing. The DOE Transportation Legislative Database (TLDB), researched by Battelle, contains summaries of all federal and state nuclear waste transportation laws. Research for the TLDB has disclosed that perhaps the most prevalent and potentially restrictive form of state nuclear transportation regulation takes the form of state nuclear transportation permit and fee laws. All of these laws have arisen virtually within the last 10 years. To date, 13 states have such laws with another such law passed by the City Council of Washington, D.C., in December 1988 and awaiting Congressional review. Newly proposed transportation permit laws are also pending in Tennessee and Wyoming. Understanding the terms of these state laws and their relationship to federal nuclear transportation law is important to the formulation of repository transportation program options and policy on state law compliance. This paper provides an analysis of state nuclear transportation permit and fee requirements and their relation to applicable federal law. This information should prove valuable to present commercial nuclear shippers and carriers as well.

STATE NUCLEAR TRANSPORTATION PERMIT AND FEE LAWS

Colorado

The Colorado Nuclear Materials Transportation Act of 1986 prohibits nuclear materials transportation in state without a Public Utility Commission permit. See Colo. Rev. Stat. sec. 40-2.2-201. The permit application must

contain a motor vehicle operator training certification, proof of federally-required liability insurance, and a nuclear incident cleanup plan. A permit fee is to be placed in a fund for administering this statute.

Connecticut

The Connecticut Atomic Energy Act of 1976 prohibits the transportation of radioactive materials within the state without a permit from the Commissioner of Transportation (Commissioner). The permit application must identify the

shipment origin and destination, schedule, route, and any other information required by the Commissioner. See Conn. Gen. Stat. Ann. sec. 16a-106. The Commissioner may require changes in schedule or routes, or require the use of escorts if deemed necessary to protect public health and safety. A permit fee is authorized to be established by regulation.

Georgia

The Georgia Transportation of Hazardous Materials Act of 1985 prohibits the transportation of radioactive materials without a permit from the Georgia Public Service Commission (Commission). See Ga. Code Ann. sec. 46-11-4. The Act authorizes the Commission to require changes in schedule, routes, detention, holding, or storage of such materials during transportation as necessary to maximize protection of the public health, safety, welfare, and environment. The Act exempts transportation under the direction or supervision of the Nuclear Regulatory Commission (NRC) where such transportation is escorted by NRC-designated personnel. Commission regulations of 1988 require a permit application to include an emergency contact, the number of trips, a materials description, shipment origin and destination, routes, and history of actual movements for the preceding 3 months. See regulation 1-15-1-.05. An annual and single trip permit fee is prescribed.

Illinois

The Illinois Nuclear Safety Preparedness Act of 1979 imposes a \$1,000 fee per cask for shipments of spent nuclear fuel in the state to be paid by the shipment owner. This fee is not associated with a transportation permit. See Ill. Ann. Stat. ch. 111-1/2, sec. 4304(7).

Michigan

Pursuant to the Michigan Radiation Control Act of 1978 (Mich. Comp. Laws Ann. sec. 333.13501) and Michigan Fire Code (Mich. Comp. Laws Ann. sec. 29.1), the Michigan Department of Public Health (Public Health Department) and Michigan Department of State Police (State Police), respectively, promulgated joint regulations in 1982 requiring the approval of both agencies prior to the transport of radioactive materials in the state. See Public Health Department regulation R325.5801 and State Police regulation R29.551. Under these regulations, an application for transport approval must be submitted to both agencies at least 15 days prior to shipment. The application must identify each road, rail, major bridge or waterway to be used (including the designation of alternative routes and the reasons for the selection of the proposed route) and copies of any required NRC route approval. The application must

further contain an emergency contact, shipment schedule, attestation of vehicle inspection, copies of any required NRC licenses, a carrier emergency plan, and a certification that the shipment will be in compliance with applicable federal and state requirements. Approval to transport may include any conditions either department determines is necessary.

Minnesota

The Minnesota Radioactive Waste Management Act of 1984 imposes a \$1,000 transportation fee for each vehicle carrying nuclear waste in the state. This fee is not associated with a transportation permit. See Minn. Stat. Ann. sec. 116C.731.

Mississippi

The Mississippi Radioactive Waste Transportation Act of 1982 prohibits the transport of radioactive waste in Mississippi without a permit from the Mississippi Emergency Management Agency (Agency). See Miss. Code Ann. sec. 45-14-57. Shippers are required to apply to the Agency for an annual permit 30 days prior to shipment into Mississippi. The following information is required of the shipper: (1) compliance with all federal and state laws regarding packaging and transportation of radioactive waste, (2) anything the Agency deems necessary for protection of public health and safety and the environment, (3) evidence of liability insurance sufficient to compensate the state and public for possible radiological personal injury or property damage, and (4) certification that it will hold the state harmless for all legal claims arising out of radiological injuries or damage to persons or property occurring during transportation. A permit fee is based on a fee schedule reflective of the relative hazard to the public health and safety of the radioactive waste.

New Jersey

The New Jersey Radiation Protection Act was amended in 1977 to prohibit the transportation of large quantity radioactive materials without a certificate of handling from the Department of Environmental Protection (Department). See N.J. Stat. Ann. sec. 26:2D-18. Any person seeking a certificate must submit the following information within 7 business days of the scheduled transportation: shipment schedule, origin and destination, route, and any other requested information. The Department has the discretion to change shipment schedule or routes if necessary to "maximize" public health and safety protection.

Under 1980 amendments to Department regulations, the certificate of handling application must include the name of the shipper and carrier, material description, schedule, origin and destination, route, type of vehicle and cask, safeguard plan, affidavit of insurance, and any additional information required by the Department. See 7 N.J. Admin. Code ch. 28. The proposed route must utilize railroads, roadways, or other transport modes deemed safe by the Department and state police. Major highways must be used for road shipments except where the Department judges that such routes would place a greater threat to the public health and safety than alternative routes or where

secondary roads must be used for a minimum distance for egress from the point of origin or ingress to the final destination. The applicant may not transport in any county which has a population density exceeding 1,000 persons per square mile. If movement through a densely populated area is unavoidable, the following additional measures must be taken: the transit must be nonstop, primary roads must be used, an armed escort force must be provided by the shipper, and no spent fuel may be shipped between 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m.

New Mexico

The New Mexico Radiation Protection Act of 1978 authorizes state licensing and regulation of nuclear materials. See N.M. Stat. Ann. sec. 74-3-1. The Act does not apply to radioactive materials transportation in conformity with DOT or other applicable federal regulations or to federally owned material.

The New Mexico Environmental Improvement Division (Division) promulgated implementing regulations in 1980. See Rad. Prot. Regs. 1-101. The regulations are inapplicable to NRC licensees. Common and contract carriers subject to DOT or Postal Service regulations are also exempt. The regulations require a specific license for a carrier to transport nuclear waste on New Mexico highways. The license application must contain a statement of federal law compliance, evidence of sufficient financial protection, a statement of the origin, destination, and proposed routes for transportation. Proposed routes are subject to Division approval and are required, to the extent practicable, to use interstate highways, minimize travel time, and avoid heavily populated areas, tunnels, narrow streets, and alleys.

Oregon

A 1981 Oregon statute regulating nuclear facilities prohibits radioactive materials transportation without a permit. See Or. Rev. Stat. sec. 469.605. The permit is issuable for a one-year period. The application must describe the materials to be transported, proposed routes, transport mode, and other information required by the Department of Energy (Department). A permit fee is required to cover the costs of administering the permit program and to cover state emergency response training if federal funds are insufficient. Department implementing regulations issued in 1982 additionally require disclosure of past federal or state nuclear transportation law violations and a commitment to comply with Department regulations.

Rhode Island

Rhode Island Public Utilities Commission (Commission) regulations promulgated in 1978 pursuant to a Rhode Island public utilities and carriers law (see R.I. Gen. Laws sec. 39-12-1) provide that the highway shipments of the following radioactive material require the carrier to obtain a permit from the Commission: any "large quantity" radioactive material under NRC regulations, any quantity of radioactive waste produced as part of the nuclear fuel cycle which is being shipped through the state to a waste disposal facility, and any placarded shipment of radioactive material. Radioactive materials shipped by or for the United States

Government for military, national security, or national defense purposes are exempt. The permit application must be filed at least 4 hours prior to entry in Rhode Island. The permit application must include the following information: shipment schedule, origin, and destination; routes; proof of proper insurance; certification from the shipper that the articles described in the shipping papers are properly classified, described, packaged, marked, and labeled, and in proper condition for transportation according to applicable NRC and DOT regulations; and a certification that the packaged radioactive material has been properly loaded, blocked, and secured onto the transport vehicle and is in compliance with applicable DOT motor carrier safety regulations. It is not clear what, if any, authority the Commission has to require utilization of a different route than that specified. The regulations prohibit transportation of radioactive material over the highways of the state during the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Monday through Friday.

South Carolina

The South Carolina Radioactive Waste Transportation and Disposal Act of 1980 requires any shipper of radioactive waste into the state to obtain a permit from the Department of Health and Environmental Control (Department). See S.C. Code Ann. sec. 13-7-140. In order to obtain a permit, the shipper must provide evidence of sufficient liability insurance, certify that it will comply with all applicable federal and state laws regarding packaging, transportation, and delivery of radioactive waste, possess a shipping manifest, certify that it will hold the state harmless for transportation-related radiological damage, and provide such other information as the Department considers necessary to protect public health and safety and the environment. Permit fees are prescribed in the Department's 1981 implementing regulation 61-83. No other permit requirements are imposed by regulation.

Vermont

Pursuant to a 1985 Vermont hazardous materials transportation law (5 Vt. Stat. Ann. sec. 2001), the Vermont Agency of Transportation (Agency) promulgated regulations in 1986 regarding radioactive waste transportation. These regulations require written approval from the Agency to transport radioactive waste in Vermont. The permit application must contain the following information: proposed route and transport mode, emergency telephone numbers, materials description, schedule, certification of vehicle compliance inspection, copies of any NRC approved routes, emergency plan, certification of compliance with applicable federal and state regulations, copy of the NRC container certification, certification of acceptable bond or insurance, a certification that the selected route is the shortest and most direct, and a \$1,000 fee for each shipment. A permittee must notify the Agency at least 48 hours in advance of the scheduled shipment.

SUMMARY

To summarize, virtually all state permit laws require the provision of schedule and route information to the state

permit authorities. Route review or approval appears to be explicitly or implicitly conferred on state permit authorities in Connecticut, Georgia, Michigan, New Jersey, New Mexico, Oregon, and Rhode Island. Proof of financial liability insurance is a permit prerequisite in Colorado, New Jersey, New Mexico, and Vermont. Mississippi requires transportation permittees to waive state liability for any claims arising out of radiological inquiries or property damage due to transportation. The permit laws in Connecticut, Georgia, Michigan, Mississippi, New Jersey, and Oregon appear to afford the greatest discretion to require unspecified information of a permit applicant or to condition the receipt of a permit. A certification of compliance with applicable federal and state nuclear transportation regulations is required of permit applicants in Colorado, Michigan, Mississippi, New Mexico, Rhode Island, and Vermont. A transportation emergency plan is required as part of the Michigan permit process and a transportation safeguards plan required as part of the New Jersey permit process. The New Jersey and New Mexico permit schemes also restrict transport through densely populated areas.

FEDERAL NUCLEAR TRANSPORTATION PERMIT AND FEE LAW AND DECISIONS

Hazardous Material Transportation Act (HMTA)

The HMTA authorizes DOT to promulgate hazardous materials transportation regulations. DOT implementing regulations include requirements for containerization, marking, labeling, placarding, shipping papers, and highway routing. There is no federal permit requirement. At the same time, the HMTA contains an express provision concerning federal preemption of state and local law. Specifically, section 112(a) preempts "any requirement of the state, or political subdivision thereof, which is inconsistent with any requirement" of the HMTA or implementing regulations. A state requirement is federally inconsistent if compliance with both the state and HMTA or implementing regulation is not possible ("dual compliance" test) and the state requirement is an obstacle to the accomplishment and execution of the HMTA and implementing regulations ("obstacle" test). DOT is authorized to render advisory opinions on the federal consistency of state or local laws, termed inconsistency rulings.

DOT regulations contain a policy statement (49 CFR Part 177 Appendix A) which identifies those areas of state and local regulation that DOT deems inconsistent with federal regulation, including any that require the submission of route plans or unnecessarily delay transportation. The appendix further provides that any state or local routing rule that significantly restricts or delays highway movement due to the hazardous nature of the cargo and that involves highway route-controlled quantities of radioactive material (high-level nuclear waste) is inconsistent if it (1) prohibits transport by highway between two points without providing an alternative route, or (2) is not adopted with a proper safety analysis. The term "routing rule" is defined as "[a]ny action which effectively redirects or otherwise significantly restricts or delays the movement by public highway of motor vehicles containing hazardous materials, and which applies

because of the hazardous nature of the cargo. Permits, fees and similar requirements are included if they have such effect. . . . (Emphasis added.)

Judicial Decisions

There have been no judicial decisions solely concerning state nuclear materials transportation permit or fee laws. There have been two decisions concerning nonnuclear hazardous materials transportation permit or fee laws and one recent decision concerning a storage permit for in-transit hazardous (including nuclear) materials shipments. These are discussed briefly here.

In the first case, National Tank Truck Carriers, Inc. v. Burke, 698 F.2d 559 (1st Cir. 1983), a Rhode Island permit regulation requiring submission of a written application at least 4 hours prior to the motor vehicle transport of liquified energy gases was found inconsistent with the HMTA requirement to avoid unnecessary delay in transport.

In the second case, New Hampshire Motor Transport Association v. Flynn, 751 F.2d 43 (1st Cir. 1984), a state licensing requirement and associated fee for hazardous materials waste transporters was found not to be federally preempted. The proceeds from the license fee were to benefit several state programs, including accident response, regulatory enforcement, and hazardous waste cleanup. The First Circuit concluded that the license-fee system was not inconsistent with the HMTA. The court stated that the transportation delay occasioned by the license requirement was not significant enough to interfere with DOT's "speedy-transport mandate." *Id.* at 53. The court pointed out that individual licenses were obtainable during normal business hours and that an annual license could be obtained if shipments were anticipated at other times. Additionally, it cited the DOT statement in IR-3 (which involved a nonnuclear hazardous material transportation permit requirement) that a "bare" license or permit requirement is consistent with the HMTA and considered the New Hampshire system at issue to fall in that category.

In the third case, Southern Pacific Transportation Co. v. Public Service Commission of Nevada, No. CV-N-86-444BRT (D. Nev., filed Sept. 28, 1988), a Nevada regulation requiring railroads to obtain a permit to load, unload, transfer, or temporarily store hazardous material on railroad property for more than 48 hours was found not to constitute an HMTA regulated transportation restriction so as to be preempted thereunder. DOT inconsistency ruling IR-19, discussed below, reached a different conclusion.

Permit application requirements include the provision of proposed loading, unloading, storage, or transfer location maps, operational procedures, track inspection reports, a track construction summary, a summary of previously carried hazardous materials, a summary of past materials releases, sabotage prevention procedures, and accident plans. A permit fee is assessed.

DOT Inconsistency Rulings

DOT has rendered a number of inconsistency rulings regarding state and local nuclear transportation permit and fee requirements. DOT has stressed that, since its

inconsistency proceedings are conducted pursuant to the HMTA, it considers only statutory preemption. It has noted that a federal court could find a nonfederal requirement preempted on interstate commerce grounds even if not statutorily preempted. DOT does not make such determinations.

IR-8

IR-8 involved the Michigan permit law summarized earlier. See 49 FR 46637 (1984) and 52 FR 13000 (1987) (appeal). Michigan contended that the permitting system was a permissible exercise of its public safety police power and that radioactive materials transportation posed a greater risk in Michigan than in other states. DOT rejected this argument and concluded that federal regulation of radioactive materials transportation safety pursuant to the HMTA and implementing regulations was so thorough and pervasive that it effectively precluded any such state and local requirements. DOT stated that: ". . . in the absence of an express waiver of preemption, no authority exists, for state of [sic] local government to impose a permit requirement on shipments of radioactive materials which applies because of the hazardous nature of the cargo." See 49 FR at 46643. DOT stated that a state requirement that operators obtain a permit when they intend to transport loads that exceed certain size or weight limits, irrespective of the nature of the cargo, was an example of an acceptable permit requirement under a state's police power.

IR-11

IR-11 involved a New York bridge authority regulation prohibiting highway transportation of radioactive materials without a permit. DOT found that this constituted a routing rule in the form of a permit requirement. See 49 FR 46647 (1984). It reasoned: "If the [local authority] could impose such restrictions on the availability of highway routes to vehicles engaged in the transportation of radioactive materials, then any political subdivision of the state could do so . . . [T]he proliferation of independently enacted restrictions would lead to the type of regulatory balkanization which Congress sought to preclude by enacting the HMTA . . ." *Id.* at 46649.

Local transportation permit requirements were also deemed to constitute inconsistent routing rules in IR-12 (*Id.* at 46650) and IR-13 (*Id.* at 46653). Under the same rationale espoused in IR-8, DOT noted that "radioactive materials routing rules in the form of shipment-specific permit requirements were . . . inconsistent per se." *Id.* at 46652.

IR-15

IR-15 involved the Vermont permit law summarized earlier. See 49 FR 46660 (1984). DOT found that the Vermont permit requirement constituted a routing rule in the form of a permit. The Vermont regulation imposed a permit fee upon the shipment of highway route-controlled quantity material. The fee was imposed to reimburse the state for the expense of providing state escorts and emergency response. DOT found that spent fuel shipment posed a historically lower risk of transportation accident necessitating emergency response than other hazardous materials, and that the

permit fee was hence discriminatory in its selective application. DOT also found that Vermont's transport approval fee had the direct effect of redirecting shipments away from Vermont whenever possible. The foreseeable indirect effect was to encourage other states to take similar action which "would amount to a system of internal tariff barriers which would completely undermine [the DOT routing regulation] by forcing transporters to select routes on the commercial basis of reduced cost rather than the safety basis of reduced time in transit." *Id.* In view of these impacts, DOT concluded that the Vermont fee presented an "obstacle to the accomplishment and execution" of the HMTA and DOT routing regulation and was, therefore, inconsistent. *Id.*

IR-17

IR-17 involved the Illinois spent fuel transportation fee law summarized earlier. See 51 FR 20926 (1986) and 52 FR 36200 (1987) (appeal). DOT concluded that the fee was not inconsistent with, nor preempted by, the HMTA and regulations since it was used to fund a state program which was federally consistent and did not unnecessarily or unreasonably delay transportation. DOT distinguished the Vermont transportation fee found federally inconsistent in IR-15 and the present Illinois fee requirement on the grounds that the latter did not entail advance state transit approval, did not deny entry to any shipment for failure to pay the required fee in advance, and did not purport to deny entry to any shipment in compliance with DOT standards.

IR-18

IR-18 involved a Prince Georges County, Maryland, permit requirement. See 52 FR 200 (1987) and 53 FR 28850 (1988) (appeal). The permit provisions in question included several advance notification and informational requirements regarding shipment schedule, route, stops, origin and destination, and other "reasonably related" information requested by the county. A showing was also required that containers, packaging, labeling, operation and equipment were in conformance with relevant federal or county regulations. See 52 FR at 203.

DOT found that these particular provisions exceeded federal requirements, created an additional burden or delay and were, consequently, inconsistent with the HMTA and related regulations. DOT found further that the required notification information violated NRC and DOT prohibitions against disclosure to non-law enforcement authorities of schedules and itineraries for specified radioactive shipments and thereby failed the "dual compliance" regulatory test for inconsistency. DOT found that the balance of the information requirements constituted an impermissible local packaging requirement and noted that state and local governments may not issue different or additional packaging requirements.

The permit process took 3 business days; permitted the county to change transport dates, routes, and times; precluded transport absent a finding that an adequate emergency response capability was present "in a manner necessary to protect public health and safety"; and contained discretionary escort requirements. DOT found that the 3-day processing time period was inconsistent with the

49 CFR Part 177 policy statement appendix provisions against unnecessary transportation delays. The provisions authorizing date, route, and time changes and the "vague" transport prohibition absent an emergency response capability finding were similarly found to be in conflict with the federal regulatory scheme, an obstacle to the achievement of the HMTA, and inconsistent. On the matter of emergency response, DOT further stated that the county could neither shift its own responsibilities to carriers nor hold carriers "hostage" to a case-by-case county determination of emergency response adequacy. *Id.*

Finally, DOT found that the "open-ended" authority to require escorts is a prohibited obstacle to transportation, exceeded NRC's escort provisions and was inconsistent with the HMTA and regulations. *Id.* It noted that state or local escort requirements which were identical to or "facilitated" NRC escort requirements were consistent. *Id.*

IR-19

IR-19 involved the Nevada rail permit regulation summarized earlier. See 52 FR 24404 (1987) and 53 FR 11600 (1988) (appeal). DOT cited the HMTA definition of "transportation" which includes "any loading, unloading, or storage incidental thereto" and cited several HMTA time-in-transit and interim storage regulations with which it found the Nevada regulations to be inconsistent. DOT stated that the applicability of the Nevada permit system solely to railroad transportation related activities and its inapplicability to nontransportation facilities demonstrated that it was not a land use or zoning regulation as Nevada claimed.

IR-21

IR-21 involved the Connecticut transportation permit law summarized earlier. See 52 FR 37072 (1987) and 53 FR 46735 (1988) (appeal).

DOT found the Connecticut scheme inconsistent with the HMTA and regulations on several grounds. First, it found that the permit scheme contained informational requirements exceeding those in federal regulations. Second, it concluded that the requirements posed a potential for undue delay in transportation. Third, the provisions authorizing the Commission to require date, time, or route changes or the use of escorts were found to be an inconsistent discretionary state routing requirement. Finally, DOT found that inspection procedures to ensure compliance with inconsistent permit conditions were themselves inconsistent.

IRA-44

The Department of Energy has submitted an inconsistency ruling application (IRA-44) seeking a determination of whether the Colorado Nuclear Materials Transportation Act and regulations are inconsistent with the HMTA and regulations. See 53 FR 30418 (1988). This Act is summarized above. The State of Colorado filed a subsequent lawsuit in Federal District Court in Denver (Docket

No. 88Z-1524) seeking to have this Act declared federally consistent.

SUMMARY

To summarize, court decisions appear to accord more latitude to state nonnuclear hazardous materials transportation permit or fee laws than has been accorded state nuclear transportation permit or fee laws in DOT inconsistency rulings. While each state law must be evaluated on an individual basis, DOT inconsistency rulings have generally found most state nuclear transportation permit laws to be inconsistent with, and preempted by, the HMTA and implementing regulations. DOT has generally determined that

such requirements constitute "routing rules" within the meaning of the DOT routing regulation and that, depending on their terms, they have an impermissible and adverse effect on nuclear waste transportation, including, among other things, undue delay and incentive to reroute transportation to nonpermit states. State nuclear transportation fees not associated with transportation permits have fared better. DOT inconsistency rulings seem to affirm the federal consistency of such laws if they are not associated with, or used to fund, a federally inconsistent state nuclear transportation program.