

PERMISSIBLE STATE AND LOCAL REGULATION OF RADIOACTIVE MATERIALS TRANSPORTATION

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ABSTRACT

The Congressionally-mandated construction of a nuclear waste repository by the year 1998 has focused attention on the development of a safe transportation system for radioactive materials. While numerous state and local governments have enacted laws to regulate the movement of radioactive materials, shippers and carriers have successfully challenged some of these laws. More challenges can be expected in the future when more regulations are passed as state and local governments prepare for the greatly increased numbers of shipments associated with the operation of a high level radioactive waste repository. Therefore, state and local governments need guidance as to the criteria used to determine the validity of their regulations. Examination of the Department of Transportation's inconsistency rulings and federal court cases reveals three approaches a state or local government may choose in regulating radioactive materials transportation: conservative, moderate, or activist.

INTRODUCTION

State and local governments have met with uneven success in their attempts to regulate radioactive materials transportation. Shippers and carriers have successfully challenged some of the regulations and more challenges can be expected in the future when both the number of regulations and the volume of shipments increase as the high-level radioactive waste repository begins operations. Therefore, it is important for state and local governments to examine the criteria which the Department of Transportation and the courts will use to determine the validity of their regulations.

Examination of the existing Department of Transportation inconsistency rulings and federal court cases reveals three approaches a state or local government may choose in regulating radioactive materials transportation: conservative, moderate, or activist. The three approaches are discussed in detail below. Briefly, the most conservative course of action would be to follow the Department of Transportation's inconsistency rulings. A more moderate approach would look to the federal court decisions, which have often been more permissive than the advisory opinions issued by the Department of Transportation. Finally, some state and local governments may desire a more activist approach which tests the outer limits of the law or seeks to change existing law.

No single approach is recommended for all state and local governments. Factors which will influence the governing body's choice of an approach include: the general political philosophy of the government; the degree to which radioactive materials transportation presents a problem in the jurisdiction; and the amount of time, energy, and money the state or local government is willing to invest in defending its regulations against challenges by shippers and carriers.

In the discussion below, the types of permissible state and local regulations are cumulative. That is, the permissible regulations presented under the moderate approach are in addition to those acceptable under the conservative approach, while the activist approach includes regulations permissible under either the conservative or moderate approach.

CONSERVATIVE APPROACH

The most conservative approach would be to follow the Department of Transportation (DOT) inconsistency rulings. DOT issues advisory opinions (inconsistency rulings) as to whether a state or local regulation is inconsistent with the Hazardous Materials Transportation Act (HMTA) (49 U.S.C. Section 1801 *et seq.*) or the federal regulations adopted pursuant to this Act. The state or local regulations will be found inconsistent if compliance with both the federal and state/local regulations is impossible or if the state/local regulation is a significant obstacle to accomplishing the purposes of the HMTA. If the regulation is found inconsistent, the state or local government can apply to DOT for a waiver of preemption. Then DOT will waive preemption of the regulation if the state/local regulation provides at least an equal level of safety and does not place an unreasonable burden on interstate commerce.

The sixteen inconsistency rulings issued by DOT as of January, 1986, reveal a restricted view of the extent to which state and local governments may regulate the transportation of radioactive materials. In several rulings, DOT expanded the definition of "routing restriction" to include almost any regulation whose effect is to make transportation through the enacting jurisdiction less attractive to a carrier than transportation through an alternate jurisdiction. DOT then states that any routing restriction other than the designation of an alternate preferred route in accordance with the DOT-prescribed procedures is inconsistent with the HMTA. A conservative approach to state and local regulation would involve avoiding the numerous types of state and local regulations which have been held inconsistent with the federal regulations under this line of reasoning.

DOT has held that only four types of state and local regulation of radioactive materials transportation are permissible:

- traffic control or emergency restrictions which apply to all transportation, regardless of cargo;
- designation of alternate preferred routes in accordance with federal guidelines;

- adoption of federal or consistent state/local regulations; and

- enforcement of consistent regulations or regulations which have received a DOT waiver of preemption (IR-8: 49 Fed. Reg. 46,632; Nov. 24, 1984).

Traffic Control

The first type of regulation is self-explanatory. Radioactive materials shipments must obey traffic signals, speed limits, overweight truck permit requirements, weight restrictions, etc.

Route Designation

States may also designate highway routes, provided they follow the federal requirements. Under federal law, highway route controlled quantities of radioactive materials may be transported on any interstate highway unless the state has designated an alternate preferred route. In designating an alternate route, states must adequately consider the overall risk to the public, and consult "with affected local jurisdictions and with any other affected States to ensure consideration of all impacts and continuity of designated routes." 49 C.F.R. 171.8. DOT has prepared guidelines to assist the states in conducting the necessary risk analysis of alternate routes. While use of the DOT Guidelines for Selecting Preferred Highway Routes for Highway Route Controlled Quantity Shipments of Radioactive Materials is not mandatory, states using a different methodology may be required to show that the method used was equivalent to the DOT guidelines.

The federal statutes and regulations are silent on the issue of designating routes for rail shipments. Currently, the choice of rail routes is left to the shipper and carrier. No states are known to have enacted rail routing requirements. However, such requirements have a moderate chance of being upheld by DOT. Because the federal regulations are silent, there would be no direct conflict between the federal and state law. Furthermore, because the absence of federal rail routing requirements is more the result of federal inaction rather than a deliberate policy against rail routing, it would be difficult to find that the federal government has preempted this field. However, it is possible that DOT would conclude that HMTA has preempted the entire field of safety regulation (thus, including rail routing restrictions) and that state rail routing laws create unnecessary delays in transportation. A state regulation designating rail routes would be most likely to be upheld if it were based on a safety analysis similar to that outlined in the DOT guidelines for highway shipments.

A state or local requirement that radioactive materials shipments use state- or locally-designated safe havens for planned stops (and, where possible, for emergency stops) has a reasonable likelihood of being upheld by DOT. DOT has held that, absent a direct conflict between federal and state/local requirements, general operating requirements are not precluded by the HMTA. (IR-2: 44 Fed. Reg. 75,566; Dec. 20, 1979) However, if such a requirement was coupled with a failure to designate any safe havens, particularly in a geographically large state where a stop would be necessary, DOT could conclude that the requirement was a de facto ban on transportation, and thus, inconsistent with federal law.

Adoption of Consistent Rules

The third category of permissible state/local regulation, adoption of federal or consistent state/local laws, has generated the most discussion. The DOT's procedures for determining whether a state/local law is consistent with federal law are discussed elsewhere in these proceedings. Following are the specific types of regulations DOT has upheld in its inconsistency rulings:

- required radio communication via two-way radio (IR-2);

- immediate accident notification to appropriate state personnel (IR-2; IR-3: 46 Fed. Reg. 18,918; March 26, 1981);

- required illumination of headlights at all times (IR-2, IR-3);

- time-of-day restrictions in a city for shipments originating in or destined for points within the city (IR-3);

- required use of major thoroughfares within a city where possible (IR-3); and

- specified separation distances between moving or parked vehicles carrying hazardous materials except when passing or when traffic conditions make this impossible (IR-3).

DOT has invalidated the following types of state and local regulations as being within the exclusive jurisdiction of the federal government:

- any prenotification that is different from federal requirements (IR-6: 48 Fed. Reg. 760; Jan. 6, 1983; IR-8; IR-10 to 15: 49 Fed. Reg. 46,632; Nov. 27, 1984);

- different hazard classification or definitions (IR-5: 47 Fed. Reg. 41,991; Nov. 18, 1982; IR-6, 8, 12, 15);

- additional packaging and container requirements (IR-2, 8);

- statewide curfews during rush hours (IR-2);

- written accident reports to be submitted to state (IR-2, 3);

- time-of-day restrictions in a city for through-shipments (IR-3); and

- shipping papers with different color markings (IR-4: 47 Fed. Reg. 1,231; Jan. 11, 1982).

In some cases, DOT has stopped short of ruling that federal regulation has completely preempted a field, leaving no room for state or local regulation. Instead, the state or local rules were invalidated because there was no proof of unique circumstances justifying the more stringent rule. The following types of regulations received this conditional preemption treatment:

- requirements for additional personnel, equipment, or escorts, or a requirement that the state/local government be reimbursed for providing such additional resources (IR-8, 11-15); and

- liability insurance requirements in excess of those required under federal law (IR-10, 11, 13-15).

While the rulings would appear to leave the door open to state and local governments in these areas, it should be noted that proving the existence of unique circumstances to DOT's satisfaction would be difficult. In its sole waiver of preemption hearing to date, DOT denied New York City's petition to enforce its inconsistent rules because the City failed to show that transporting spent fuel through the densely populated New York City presented any unique circumstances. (50 Fed. Reg. 37,307; Sept. 12, 1985)

Enforcement of Consistent Rules

Finally, state and local governments are allowed to enforce consistent regulations or regulations which have received a DOT waiver of preemption. Enforcement procedures which have been upheld by DOT include: vehicle inspection at loading and unloading points within the state (IR-2); penalties, unless so extreme or arbitrary that they effectively reroute or delay shipments (IR-3); and a requirement that a validly-required permit be carried with the shipment and a decal displayed (IR-3).

Permit/Fee Systems and Liability

Two types of state or local regulation deserve more detailed discussion because of the attention they have received - the permit/fee system and liability. The DOT has ruled that a bare permit requirement is not inconsistent with federal law (IR-8). However, DOT has invalidated every permit/fee system it has considered.^a This seemingly incongruous result is based on DOT's opinion that a state or local government's desire to promote safety is an impermissible basis for a permit system because the Hazardous Materials Transportation Act and its regulations have preempted the field of safety regulation. DOT has also concluded that the application processes burdened transportation, thus conflicting with the HMTA's goal of minimizing transportation delays. A state or local permit/fee system with a reasonable chance of being upheld by DOT would have the following characteristics:

- enacted for non-safety reasons, such as a need to raise funds for inspection, enforcement, and emergency response (areas which have not been preempted by federal law);
- a fast, simple application process which does not delay transportation; and
- a small or moderate permit fee.

State and local governments have expressed an interest in changing the federal liability insurance requirements. As discussed above, DOT is unlikely to uphold any requirement that increases the levels of liability insurance a shipper or carrier is required to obtain. However, the Price-Anderson Act (42 U.S.C. Sections 2014 and 2210, as amended), which establishes the federal liability system for spent fuel and high-level radioactive waste incidents, clearly recognizes a state role in determining compensation for nuclear materials transportation accidents. Congress considered, and rejected, creating a uniform federal tort system for nuclear

a. An exception was New York City's permit system, which was upheld in 1978 in DOT's first inconsistency ruling (43 Fed. Reg. 16,954). However, in response to this ruling, the DOT then enacted the highway routing rules (known as HM-164), which were then used to invalidate the City's permit system.

incidents. (Reference 4, p. 17). Instead, in the absence of an extraordinary nuclear occurrence (a large nuclear incident), state law controls all issues of determining who was liable and what the damages were. Even when an extraordinary nuclear occurrence is declared, so that certain state laws are preempted, state law will continue to control many aspects of a claim. For radioactive materials transportation incidents not covered by the Price-Anderson Act (e.g., low-level radioactive waste shipments), state law will control all aspects of a claim. Therefore, DOT can be expected to uphold state or local laws regarding the standard of liability (strict liability, negligence); defenses to liability (governmental immunity, assumption of risk, contributory negligence); calculation of damages; methods of proof of causation (rebuttable presumptions, statistical probability); statutes of limitation; and sovereign immunity. (See reference 2 for a more detailed discussion of state roles in liability issues.)

MODERATE APPROACH

Limiting state and local regulation of radioactive materials transportation to those types of regulations approved by DOT may be an unnecessarily conservative approach. The DOT inconsistency rulings are advisory only and are not binding upon anyone. The courts, which are ultimately responsible for determining the validity of the state/local regulations, are influenced by DOT's rulings, but have generally adopted a more permissive attitude towards state and local laws affecting nuclear materials transportation. A moderate approach by state and local governments would involve the adoption of regulations similar to those previously approved by the courts as well as those types of regulations not yet addressed by the courts, but which are reasonably likely to be upheld if challenged in court (although possibly in direct conflict with prior DOT inconsistency rulings).

The federal courts of appeal have not had as many opportunities yet as DOT has had to address state and local regulation of radioactive materials transportation. Therefore, it is more difficult to determine at this time what types of rules the courts would uphold. However, while in several instances the courts have upheld regulations similar to those invalidated by DOT, there are no known cases of a federal court invalidating a state/local rule which would have been upheld by DOT.

The federal courts will generally use the following guidelines in determining that a state or local regulation of radioactive materials transportation is invalid:

- direct conflict with federal law;
- unnecessary duplication of rules;
- unnecessary transportation delays;
- absolute bans on shipments; and
- discrimination against shipments originating outside of the jurisdiction.

Following is a discussion of the likely results of court challenges to various types of state and local regulations.

Curfews

Rush-hour curfews for hazardous gases in urban areas, even for intercity shipments, have been upheld

in court as a justifiable inconvenience in light of "the public interest in avoiding a catastrophic accident in a densely populated area." National Tank Truck Carriers, Inc. v. City of New York, 677 F.2d 270 (2nd Cir. 1982). It is likely that a federal court would uphold similar city-wide curfews for radioactive materials transportation. This is a more liberal position than that taken by DOT, which refused to uphold such a requirement for through-shipments in Boston because the City had not consulted with other jurisdictions affected by the time-of-day restriction. (IR-3). However, the courts, like DOT, are unlikely to approve of statewide time-of-day restrictions because of their potential for creating scheduling problems and transportation delays. National Tank Truck Carriers, Inc. v. Burke, 698 F.2d 559 (1st Cir. 1983).

Transport Bans

Absolute bans on radioactive materials transportation through a state are extremely unlikely to be upheld by the courts. If a statewide time-of-day restriction is too burdensome on interstate commerce, as discussed above, a complete ban on transportation would be even more burdensome. However, a city-wide ban may be acceptable to the courts in some circumstances. A court upheld New York City's prohibition against transport through the city unless no practical alternative route existed. National Tank Truck Carriers, Inc. v. City of New York, *supra*. Such a decision is in conflict with the DOT rules which state that only a "state routing agency" has the authority to designate alternate routes. 49 C.F.R. Section 177.825.

Bans against out-of-state shipments, while intrastate shipments are permitted, are likely to be found invalid. People of State of Illinois v. General Electric Co., 683 F.2d 206 (7th Cir. 1982) (spent fuel); Washington State Building and Construction Trades Council, AFL-CIO v. Spillman, 684 F.2d 627 (9th Cir. 1982), cert. denied, 103 S.Ct. 1891 (1983) (low-level radioactive waste).

Permit/Fee Systems

The courts' rulings on state and local permit/fee systems have been less restrictive than the DOT inconsistency rulings. The courts may have a broader view of the permissible purposes for which state/local permit systems may be enacted. New York City's permit system for hazardous gases was upheld as a valid exercise of the local regulation of highway safety. National Tank Truck Carriers, Inc. v. City of New York, *supra*. This decision conflicts with DOT's ruling that permit systems based on a state or local government's desire to promote safety of radioactive materials transportation are inconsistent with federal law. (IR-8). A permit/fee system based on a state's desire to be reimbursed for its costs of inspection, enforcement, and emergency response has been upheld in court. New Hampshire Motor Transport Association v. Flynn, 751 F.2d 43 (1st Cir. 1984). DOT has not had the opportunity yet to consider a permit based on non-safety concerns, although language in its inconsistency rulings indicates that such permit systems may be acceptable.

As with DOT's inconsistency rulings, the courts' decisions on permit systems are linked to the permit application process. Thus, a state permit system which required a written application four hours before entering the state was found inconsistent with the HMTA's goal of avoiding unnecessary transportation delays. National Tank Truck Carriers, Inc. v. Burke, *supra*. In contrast, a permit which

could be obtained over the telephone was upheld. National Tank Truck Carriers, Inc. v. City of New York, *supra*. Also upheld was a permit which could be purchased on-the-spot during normal business hours for a single trip or in advance on an annual basis. Flynn, *supra*.

The court's decision in Flynn provides guidance to state and local governments regarding the size of permissible fees. The court ruled that transport fees are permissible, provided they are not shown to be unreasonable in amount in relation to the costs imposed on the state by the transportation, even if the fees collected are used for purposes unrelated to transportation activities. Although the fees involved in Flynn were small (\$15 per trip or \$25 per year), presumably, the same principles would be used in determining the validity of larger fees. The court stated that if fees were imposed by numerous jurisdictions, DOT would be free to enact a rule preempting state/local fees. However, it is possible that a court confronted with a very large fee would find the fee to be an impermissible burden on interstate commerce.

Driver Training

Some state and local governments have expressed interest in adopting more stringent driver training regulations than those imposed by the federal government. Two aspects of training are discussed most frequently: actual driving experience in different types of terrain and more comprehensive training regarding the hazards of radioactive materials and emergency response to radioactive materials accidents.

The courts have not addressed the extent to which state and local governments may regulate training for interstate drivers who transport radioactive materials. However, such regulations have a reasonable chance of withstanding a court challenge. More stringent training regulations could promote safety while causing little or no delay in transportation. Because of the relatively small number of radioactive materials carriers and drivers, training requirements would probably impose only a slight burden on interstate commerce.

Recordkeeping Requirements

Some state or local governments may wish to impose recordkeeping requirements on carriers of radioactive materials and require the carriers to provide the government access to these records. Such "post-notification" can provide the governments with historical data needed to improve emergency response capabilities, infrastructure, and inspection and enforcement along the most frequently used routes.

Post-notification has not been addressed by the courts, but is likely to be upheld, especially if the information requested is of a type likely to be recorded by the carrier. The information can be valuable in promoting safety; because of the timing, it can not be said to delay transportation; and, depending on the exact information requested, may impose no burden on interstate commerce. Periodic reporting of aggregate data, rather than post-notification of each shipment, would probably impose less of a burden on interstate commerce, and thus, would be more likely to be upheld.

ACTIVIST APPROACH

Some state and local governments may not be satisfied with existing DOT advisory opinions and

court decisions and may seek to test the outer limits of the law or to actively pursue the creation of a new federal policy. An activist approach could include one or more of the following: adopt state and local regulations of a type not yet considered by the courts, but extremely unlikely to be upheld; adopt regulations similar to those invalidated by courts in other jurisdictions, but not yet considered by a court with jurisdiction over a particular state or local government; or appeal to Congress or the relevant federal agency to specifically authorize the type of state/local regulation desired.

No state or local government is bound by the decisions of a federal court in another jurisdiction. Therefore, no state or locality is barred from adopting a regulation merely because a similar regulation has been successfully challenged in another jurisdiction. Furthermore, the federal courts of appeal are not always in agreement. While one federal court may find a state or local regulation to be an undue burden on interstate commerce, another federal court may review a similar regulation in a different light and come to a different conclusion.

Even where the law is clear, there are several reasons a state or local government may wish to adopt a regulation which has little or no chance of being upheld if challenged. Until a court with jurisdiction over a particular state or local government invalidates that government's regulation, the regulation is legally enforceable. Therefore, until the regulation was successfully challenged, the state or local government could enjoy the safety benefits temporarily while seeking a more permanent solution. Permanent solutions could include a Congressional act which would specifically authorize state and local governments to enact the desired regulations, a change in technology, or a change in other aspects of regulation which eliminates the need for the challenged rule. It is also possible that the regulation would never be challenged, particularly if it caused only a minor inconvenience to shippers and carriers while promoting safety. A governing body might also adopt a stringent regulation as a political statement, even if the regulation was not enforced.

The one inadvisable reason for adopting an activist approach is to force shipments into an adjacent jurisdiction. This does nothing to increase overall safety; it merely exports the risk. It may also subject the enacting jurisdiction to legal action. Finally, obstructionist actions by state or local governments could result in Congress or the Department of Transportation explicitly preempting certain aspects of radioactive materials transportation regulation. Such preemption could be broader than the scope of the regulations which prompted the federal response, thus leaving the state and local governments with a more limited area in which to act.

Following is a list of some of the types of regulations which have been rejected by various courts, but which can be adopted in other jurisdictions:

- container testing requirements, National Tank Truck Carriers, Inc. v. City of New York, 677 F.2d 270 (2nd Cir. 1982);

- lengthy permit application processes, National Tank Truck Carriers, Inc. v. Burke, 698 F.2d 559 (1st Cir. 1983);

- written accident reports in addition to those required by the federal government, National Tank Truck Carriers, Inc. v. Burke, *supra*;

- statewide time-of-day restrictions, National Tank Truck Carriers, Inc. v. Burke, *supra*;

- different placarding requirements, National Tank Truck Carriers, Inc. v. City of New York, *supra*;

Other types of regulation may not have been fully addressed by the courts, but are extremely unlikely to be upheld because of the burdens they place on interstate commerce and because of the pervasive federal regulations which preempt state or local action in the field. The following regulations may be considered under an activist approach:

- high permit fees, especially if not reasonably related to the cost of providing state services;

- statewide transportation bans;

- additional insurance requirements;

- additional prenotification requirements;

- restrictions on rail stops in addition to the federal restrictions; and

- requirements for additional personnel, escorts, or equipment, or a requirement that the shipper or carrier pay for such resources provided by the state or local government.

GENERAL CONSIDERATIONS

Regardless of which approach, or combination of approaches, a state or local government chooses, there are several general ideas the governing body should consider.

Comprehensive Hazardous Materials Regulation

Radioactive materials transportation should be considered in the context of hazardous materials transportation in general. Radioactive materials, particularly high-level radioactive waste, have often received far more attention than other hazardous materials. However, radioactive materials will account for only a small portion of the total amount of hazardous materials transported even when shipments of high level waste increase sharply after the repository begins operation. Also, non-nuclear hazardous materials cause injuries and fatalities every year, while the record for nuclear materials transportation has been very good to date. While the potential (of whatever magnitude) for a radioactive materials accident of catastrophic proportions demands careful regulation of radioactive materials transportation, state and local governments should at least consider including radioactive materials regulation in a system which addresses the transportation of all hazardous materials. Advantages of a comprehensive regulatory system include: protection against shippers and carriers of radioactive materials challenging the regulation on the grounds that they have been unfairly singled out; increased safety benefits from a given expenditure of state and local resources; and an opportunity to fine-tune the regulatory system for radioactive materials transportation based on the lessons learned from a much larger number of non-radioactive hazardous materials shipments.

TABLE I

State and Local Regulation of Radioactive Materials Transportation

	<u>Permissible</u>	<u>Impermissible</u>
CONSERVATIVE APPROACH	Traffic control regulations which apply to all vehicles, regardless of cargo	Additional prenotification
	Designation of alternate routes in accordance with DOT guidelines	Different hazard classes or definitions
	Required use of two-way radios	Additional packaging and container requirements
	Immediate accident notification	Written accident reports to state
	Use of headlights at all times	Time-of-day restrictions for through-shipments
	Time-of-day restrictions for intercity shipments	Shipping papers with different color markings
	Required use of major thoroughfares	Additional personnel, equipment, or escorts
	Minimum separation distances	Additional liability insurance requirements
	Vehicle inspection at loading and unloading	Permits based on safety concerns
	Non-arbitrary, non-extreme penalties	
	Liability laws related to statutes of limitation, proof of causation, standard of liability, sovereign immunity	
MODERATE APPROACH	Rush hour curfews for intercity shipments	Permits with 4-hour advance written application
	Shipment bans through city, unless no practical alternative	Discrimination against out-of-state shipments
	Permits based on safety concerns or desire to be reimbursed for costs of emergency response, inspection and enforcement	Absolute bans on transportation
	Fees reasonably related to cost of state services	Different placarding, marking, container testing
	Permits available on-the-spot or by phone	Statewide time-of-day restrictions
	Driver training	Written accident reports to state
	Recordkeeping	
ACTIVIST APPROACH	High permit fees, with lengthy application process	Regulations adopted primarily to force transportation into another jurisdiction
	Transportation bans or statewide time-of-day restrictions	
	Additional placarding, container testing requirements	
	Written accident reports	
	Additional insurance requirements	
	Additional prenotification	
	Additional personnel, escorts, equipment	

Multi-Jurisdictional Agreements

State and local governments should also consider multi-jurisdictional agreements for inspection, enforcement, and permit/fee systems. The Commercial Vehicle Safety Alliance and the inspection agreements between Oregon and Washington and between Wisconsin and Illinois illustrate the benefits of a multi-jurisdictional approach. A multi-state approach may alleviate some of the concerns at the federal level that a multitude of individual state and local regulations will place an undue burden on interstate commerce. Other benefits include decreased expenditures of time and money by the participating states and improved safety due to increased efficiency of inspection and enforcement.

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