

Environmental Issues in Transportation Law

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State and federal environmental laws have affected transportation projects in three principal ways. First, they have generally required that all the adverse impacts of each project be assessed before the project can proceed. Second, these laws have required that the assessment of impacts be publicly disclosed and subject to review and comment. Third, the impacts must then be avoided, minimized, or compensated for to varying degrees. Compliance with each of these principal requirements is measured in required approvals of projects and in the outcome of litigation that challenges project approvals. The ability of transportation agencies to understand the requirements of the pertinent environmental laws and prepare for frequent court challenges can affect their ability to complete the projects they are directed to carry out.

This paper provides a brief summary of the recurring issues affecting the development of environmental laws as they pertain to the approval and implementation of transportation plans and projects. An attempt is made to predict how these issues will be addressed in the foreseeable future. Although the report is broken into five areas of discussion, the topics are all interrelated. The discussion indicates that lawyers practicing in the field of environmental and transportation law will need to remain abreast of developments in the physical and social sciences.

AIR QUALITY

Approval and Implementation of Transportation Plans and Projects

For the geographic areas that do not meet the air quality standards, each state must prepare an implementation plan (SIP) that contains the necessary laws, regulations, and commitments to bring the region's air quality into compliance with the standards. Each area's long-range transportation plan and 3-year transportation improvement plans (TIPs) cannot be approved by the metropolitan planning organizations (MPOs) unless they conform to (are consistent with) any SIP that has been adopted in the same geographic area. As new projects are developed, they must first be added to the MPO's long-range plan, checked for conformity with the SIP, then added to the TIP, which also must be found to conform. In making its conformity determination, the MPO must find that the plan and TIP will "not cause or contribute to new violations of air quality standards, exacerbate violations, or interfere with timely attainment or required emissions reductions towards attainment." A third check for conformity occurs when a National Environmental Policy Act

(NEPA) document (environmental impact statement or environmental assessment or categorical exclusion) examines specific project design to forecast effects of congested locations on local hot-spot levels of carbon monoxide.

Foreseeable Future

Conformity

There is widespread opinion that the rules governing conformity of transportation plans and programs with SIPs are too complex, too prescriptive, and too difficult to enforce. For all three reasons, the regulations lack credibility with the public. The challenge for the U.S. Congress and the Environmental Protection Agency (EPA) over the next several years is to simplify the statute and the rules to achieve greater credibility with the public and make tangible progress in the areas worst in air quality.

Global Warming

Notwithstanding the consensus of scientific opinion concerning the role of greenhouse gases in global warming and the data reflecting the transportation sector's responsibility for those gases, there is little political support—domestic or international—for enactment of the Kyoto Protocol, which would reduce the emission of these gases. U.S. transportation—commercial and private combined—accounts for 5 percent of the carbon dioxide emitted worldwide. Currently, decision makers have only two approaches to reducing motor vehicle emissions of greenhouse gases. They can encourage reductions in driving through taxation, denser land use, and other policies aimed at changing travel behavior, or they can develop new technologies that use either alternative fuels or smaller amounts of petroleum fuels. The two approaches can be carried out together, but both require a better public understanding of the risks and consequences of global warming.

Clean Fuels and Clean Vehicles

At long last, under regulatory pressure from EPA and competitive pressure overseas, General Motors, Ford, and Chrysler are hard at work on the fuel cell and hybrid gas and electric technologies necessary for mass production of low-emission vehicles (LEVs). By 2002, each of the Big Three will have entered the market with multiple LEV makes and models that can get in the range of 80 mi/gal. Will the American public buy them, however, even if Detroit aggressively markets them? And will any of the Big Three make the leap into lower emissions in the sport utility markets, where the best profits lie?

NEPA AND RELATED LAWS

Before a transportation project can receive federal funding or approval, the alternatives to the project and its environmental impacts must be reported. The level of documentation required under NEPA and the sufficiency of the documentation are frequently the subjects of litigation. Related laws that govern the protection of parkland, historic sites, wild and scenic rivers, threatened and endangered species, floodplains, farmland, and wetlands also require an analysis of alternatives and impacts. Compliance with the related laws is usually documented in the environmental impact statement, environmental assessment, or other report prepared to document compliance with NEPA.

Many of the federal agencies involved in reviewing the NEPA documents are responsible for compliance with the related federal laws. These agencies will continue to work with the transportation agencies on methods to integrate compliance with all the related requirements. These efforts, though, are not likely to result in a reduction of litigation in this area. There will continue to be a gradual accretion of environmental requirements either through acts of Congress (e.g., Section 1309 of the Transportation Equity Act for the 21st Century) or through the courts. The courts can be expected to expand the duties under federal laws to nonfederal actions undertaken by state and local governments. Because the multitude of federal environmental laws are spread out among several congressional committees, and because of the strength of the environmental lobbies, no comprehensive overhaul or coherent integration of these environmental laws can take place. This trend is not contingent on control of the executive branch of the federal government by either of the political parties. The overlapping and sometimes conflicting nature of the requirements is likely to continue for the next several years.

WASTE MANAGEMENT

Waste management by transportation agencies has been and continues to be extensively regulated by federal, state, and local agencies. The primary federal laws, which states have generally copied, are the Resource Conservation and Recovery Law (leaking underground storage tanks fall under a portion of this law) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA is overdue for reform, but Congress has been unable to agree on how. In the meantime, many states have been revising their laws, which are now very different from the federal law. Laws and regulations governing waste, therefore, are a crazy quilt. They are evolving rapidly, and there can be conflicts between the state and federal levels. Unless and until CERCLA is reauthorized, the future holds more confusion.

These laws and regulations affect land acquisition and project implementation because they can create substantial liability for the owner or operator of property contaminated with hazardous substances or petroleum. They affect product use and waste management in operations and can require agency facilities to be cleaned up. They create pressure for agencies to beneficially reuse industrial waste in transportation construction projects.

To avoid incurring liability for contamination in a right-of-way, transportation agencies investigate property to be acquired or an existing right-of-way suspected of being contaminated. If it is, the agencies avoid the acquisition of the new right-of-way or determine how to manage the problem by including special provisions in construction projects and providing oversight of the removal and disposal of contaminants. They may also consider the effect of contamination on property value in eminent domain and the recovery of cleanup costs from parties responsible for the contamination after the project is completed.

Changes in state law, including the adoption of risk-based approaches to cleanup and a move from strict and joint and several liability to proportionate share liability, are reducing the costs of cleanup and the risk of liability. That trend is likely to continue and will accelerate if CERCLA is similarly reformed. The appraisal of contaminated property in eminent domain is a challenge, and is likely to continue to be, since risk-based approaches

will complicate that process. Recovery of cleanup costs is also a challenge, and nothing on the horizon will change that.

Waste management in operations must improve. Several states have incurred substantial costs and civil penalties dealing with improperly disposed of hazardous waste. For instance, the disposal of lead-based paint removed from bridges has sometimes been improper. However, proper disposal of large volumes of hazardous waste is costly. To avoid these problems, waste minimization, pollution prevention, and better waste management are likely to gain ground in the states. Pennsylvania appears to be taking the lead in comprehensive, systematic management of waste.

Remediation of transportation yards and facilities has involved inventorying, assessing, and addressing cleanup with the latest available technology. For instance, disposal of laboratory waste has in some states been improper, and those states are facing sizable cleanup costs and liabilities to those allegedly affected by the contamination. To the extent that hazardous waste generation is minimized, those problems will be ameliorated. Risk-based approaches to corrective action will also help contain cleanup costs for these facilities.

Because industries are also affected by the high cost of waste disposal, they have looked to transportation agencies to use their by-products in lieu of virgin materials. The pressure to use these wastes—such as shredded tires in asphalt—has created engineering and environmental concerns for the agencies. Federal and state environmental laws do not do a very good job in dealing with recycling of waste. They make it difficult to determine whether recycling will be considered an improper disposal. No changes in the law have appeared to improve this situation.

WATER QUALITY AND WETLANDS

Any transportation project requiring the placement of fill material in wetlands requires a permit. The permit cannot be issued if there are reasonable alternatives that avoid the fill. If the fill cannot be avoided, the impacts must be minimized and compensated for through a mitigation plan. The permit program is currently being examined to determine whether it should be expanded to include construction activities that only indirectly affect wetlands. In addition, innovative methods are being developed to handle required mitigation. They involve mitigation banks where acreages of new wetlands can be created, bought, sold, and traded by transportation agencies and real-estate developers who occasionally need to fill wetlands. Under certain conditions, the issuance of a permit can be vetoed by EPA. These conditions have not proven to be predictable so far.

Construction, operation, and maintenance of transportation facilities often involve the discharge of water. The effluent present in these discharges can include contaminants in the form of sediment, fuel residue, and material spilled onto the right-of-way. A control program has been evolving to address this form of water pollution. Some degree of federal presence is expected to establish a minimum level of control. State and local standards are expected to fill out these programs.

ENVIRONMENTAL JUSTICE

Civil rights laws limit the discriminatory effect of government programs. These laws have been interpreted to limit the adverse effects from construction of transportation projects by

prohibiting a disproportionate adverse impact on protected classes of people. This concept has been expanded to include low-income populations in the categories of protected classes. Under the expanded concept, adverse environmental impacts on the protected classes have been examined under the heading of environmental justice. This area of law is evolving rapidly and is developing its own norms of acceptable types and levels of public involvement and adverse impacts among the populations included within its reach. It is not expected to generate fixed standards of acceptable impacts because of its highly local application.