

eral resources to be developed only by the few who are skillful enough or lucky enough to be able to handle the problems of public hearings?

The following two papers describe two alternatives at the state level currently being practiced in California and New York State.

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Impact of New York Reclamation Law on Aggregate Source Development

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ABSTRACT

New York State's Mined Land Reclamation Law of 1975 committed the state to the balanced policy of assuring the orderly development of its mineral deposits while mitigating adverse environmental effects of the mining process. A new mining operation requires a permit from the New York State Department of Environmental Conservation (DEC), with the permit based on a mining plan and a reclamation plan. Because the state cannot contravene town land use laws, operating a new property usually requires action also by the town in which the mining is to occur. Thus situations arise in which the state issues a permit but the town does not. However, the state law has proved helpful in that the DEC has a professionally trained staff that understands the mineral industry, its environmental impacts, and their mitigation. The presence of the staff and the advice they give is that of a detached third party that can answer questions with professional objectivity. In the event that the town requests an environmental impact statement (EIS), the DEC helps by supplying a format for the EIS and evaluating it once completed. Although the state does not assure that needed deposits can be developed, the

Mined Land Reclamation Law has made it possible that some deposits have been developed that otherwise may not have been. The DEC has ultimately approved more than 90 percent of the requests for mining permits. However, there are no statistics about the number of mining permits that ultimately have received local approval.

On April 1, 1975, New York State passed the Mined Land Reclamation Law (MLRL). The legislature thereby committed the state to a policy of balance: On the one hand the purpose was orderly economic development of the mining industry to meet the state's needs, while on the other hand the law also protected the environment by requiring the industry to carry out sound reclamation, designed to return the mined land to further usefulness.

Although 4 years passed before the law was implemented in a meaningful way, it quickly produced benefits for both the general public and for members of the mining industry. The presence of a detailed mining law that objectively addressed mining and reclamation issues demonstrated that a balance of economic development and sound environmental practice was feasible. Experience has now proved that the requirements of MLRL actually assist in obtaining local mining permits, zoning changes, or special use permits.

In this paper the ways in which the aggregate industry has found the New York State MLRL to be advantageous are discussed.

AGGREGATE INDUSTRY IN NEW YORK STATE

New York ranked 14th in the nation among producers of sand and gravel and crushed stone on a dollar basis in 1982, with a total value of nonfuel mineral production in 1982 of \$500 million. In tonnage of portland cement and nonfuel minerals produced, the state ranked seventh. Records of the New York State Department of Environmental Conservation's Division of Mineral Resources indicate that, of 1,220 presently permitted mines in the state, 88 percent produce sand and gravel and 9 percent produce crushed stone, leaving only 3 percent of the mines producing minerals other than construction aggregate.

Aggregate producers are distributed throughout the state, but they are concentrated for the most part in urban counties. For example, Region 8, with 11 counties in the Rochester area, has the largest number of permitted mines, followed closely by the 6-county Buffalo area (Region 9). However, the boroughs of New York City (Region 2) have no mines, and their suppliers of aggregates and cement include areas as far as 75 miles north near Kingston, New York, as well as New Jersey, Connecticut, Massachusetts, Pennsylvania, and Canada.

In many areas of the state aggregate resources are diminishing rapidly. Two primary causes for this trend are, first, that existing reserves are being depleted by mining, and second, that developmental pressures continue to nullify resources by adverse zoning or by building over them. Most urban areas are now importing aggregates from sources well outside their immediate boundaries.

NEW YORK RECLAMATION LAW

The purposes of the MLRL are to foster and encourage the sound development of the New York mining industry and to assure that the development is carried out in a sound environmental manner. Specifically, the law states that New York's policy is as follows:

To foster and encourage the development of an economically sound and stable mining and minerals industry and the orderly development of domestic mineral resources and reserves necessary to assure satisfaction of economic needs compatible with sound environmental management practices. The legislature further declares it to be the policy of this state to provide for the wise and efficient use of the resources available for mining and to provide, in conjunction with such mining operations, for reclamation of affected lands; to encourage productive use including but not restricted to: the planting of forests, the planting of crops for harvest, the seeding of grass and legumes for grazing purposes, the protection and enhancement of wildlife and aquatic resources, the establishment of recreational, home, commercial and industrial sites; to provide for the conservation, development, utilization, management and appropriate use of all the natural resources of such areas for compatible multiple purposes; to prevent pollution; to protect and perpetuate the taxable value of the property; to protect the health, safety and general welfare of the people, as well as the natural beauty

and aesthetic values in the affected areas of the state.

The law requires two plans: a mining plan and a reclamation plan. The mining plan deals with geologic, engineering, and environmental aspects of the site; and the reclamation plan deals with returning the mined land to an environmentally acceptable and useful condition. A reclamation bond is required, usually \$1,500 per acre for land affected by mining.

The mining plan requires discussions of the method of excavation, the impacts on air and water resources, and methods of preventing adverse impacts on the environment. The reclamation plan requires a general statement of the proposed use of the property following mining, discussions of drainage, revegetation, removal of equipment, and a reclamation schedule.

The New York State Department of Environmental Conservation (DEC) administers the MLRL through mining specialists in each of DEC's nine regions throughout the state. The mining specialists work under the general direction of DEC's Division of Mineral Resources in Albany, and follow the rules and regulations developed by DEC to administer the MLRL. Regional administrators have at least a general knowledge of the mining industry and, through the exercise of their duties, learn the practical aspects of the industry. They are technically oriented people, ranging from ex-aggregate industry employees to geologists or forestry experts. For the most part they work cooperatively to help aggregate producers meet the requirements of the MLRL in a realistic manner.

LOCAL MINING REGULATIONS

Of New York's 932 towns, a few have developed land use ordinances with provisions for extractive industries. A much larger number, however, exert their principal control over mining through zoning ordinances, and New York's policy of "home rule" does not allow the state to contravene town land use laws. MLRL states specifically that nothing within the law shall prohibit municipalities from enacting ordinances with more stringent requirements than the state's law. MLRL does not replace local law, but rather it is an additional permit that is necessary before mining.

Thus many cases are known where the state issued a permit, but the town refused to enact the zoning change that would permit mining. Article 78 of the law makes provisions for legal action against the town by applicants if they believe the town acted in an arbitrary and capricious manner in denying their request.

APPLICATION OF MINING LAWS

The local and the state mining laws tend to be applied in different ways. Local administrators of land use laws are usually volunteers from a wide variety of backgrounds that seldom include a knowledge of mining. The local permit process is often surrounded by emotionalism, lack of understanding, misinformation, and political interests, and the producer may find himself fighting a quagmire of innuendos and issues that have little bearing on the facts of the application. The state permit process, however, is far more predictable. Regional mining specialists understand mining and ways to mitigate environmental impacts. More important, they do not have to answer politically to special interest groups, although they must take such comments into

account. Thus the permit application will be reviewed fairly and, if environmental problems can be resolved, the permit will be granted.

One of the most positive benefits of the MLRL is that it has set an example for rational decision making--a situation that exists unevenly at the local level. The following case studies show that both towns and mineral producers may seize on MLRL's objective framework as an evaluation tool, especially when a mining specialist or other technical expert enters the picture as a disinterested party to explain the technical aspects and mitigating features of contemporary mining law and practice.

EXAMPLES OF MLRL APPLICATION

MLRL Replaces Local Law

The Norlite Corporation, a lightweight aggregate producer near Albany, made its initial application for a mining permit in 1977, soon after MLRL was applied to the industry. As part of the application for the operation, Norlite notified the town of Colonie in accordance with DEC regulations. Complications arose when the town attempted to consider the application under its soil removal ordinance, a law that was not designed to meet conditions of a deep shale mining operation such as Norlite's. Further, the property was split by a town line. Once Norlite and its geologic consultant demonstrated that the town's interests were met by the extractive and environmental conditions of MLRL, the problems were resolved when the town waived the soil removal ordinance and accepted the terms of MLRL as the town's requirement. This not only removed the need to try to conform to an inappropriate ordinance, but also removed a level of inspection and regulation by local people with little knowledge of the mining industry.

Framework for Data Presentation and Review

The crushed limestone operation of Concrete Materials, Inc., in the town of Sweden, north of Rochester, was operating with the required state and local permits. The company desired to expand westward into reserve land that it owned, but the land was improperly zoned. Because of a small number of vocal opponents, the town wanted Concrete Materials to address broad and irrelevant environmental aspects of the proposed expansion in a potentially detailed and expensive study. Negotiations between the town and the MLRL regional mine specialist led to restricting the report to technical and environmental issues directly affected by mining; in other words, to topics that were required to be addressed by the MLRL. This greatly limited the scope of study. It also became the framework for review by comparing proposed actions and impacts with regulatory guidelines.

Award of Permit in Face of Opposition

Although MLRL requires proof of notification of the town by obtaining a signature from the principal administrator, the state recognizes that some town officials may refuse to sign for political reasons, even though such a signature is in no manner an approval by the town. Thus after an appropriate length of time, proof of attempt to notify (registered mail receipt) and perhaps conversation with town officials by DEC personnel, the regional mine specialist will proceed with the review. This has

led to a number of occasions when the state permit was received during deliberation by the town.

Red Wing Properties, Inc., in Green Haven, east of Poughkeepsie, applied for a permit for a new sand and gravel operation to both the town and the state. In spite of the town's refusal to sign the application, the state eventually proceeded with the review and awarded the permit. This gave Green Haven's Town Board and Planning Board members, who were generally in favor of the proposal but were confronted by vocal opposition, ammunition to respond to local complaints. They ultimately awarded the permit. It was a dramatic moment during the public hearings when the applicant announced that he had received his state permit that day.

Basis for Operational Changes

MLRL lays out guidelines and specifications for mining and reclamation and thereby creates a measure of the degree of positive action undertaken by the applicant.

Valente Gravel, Inc., in North Greenbush, east of Troy, had an ongoing operation and wanted to expand across a town line into their reserve property. Only part of the area was properly zoned for mining. In general, town officials were favorably inclined toward the expansion but, again, had to meet concerns of local opposition to the zoning changes. Valente runs a large sand and gravel operation. Its operation predates MLRL and, therefore, parts of the former mining areas are not subject to reclamation requirements. The producer, however, began an aggressive reclamation program following guidelines of the present law, developing an ongoing reclamation plan to continue throughout the life of the operation. The agreement to carry out reclamation that was not legally required gave them credibility, and the MLRL provided the ability to measure progress against specifications. Further, it provided town officials the kind of data needed to respond to local complaints and award the zoning change.

MINING ADVOCACY

The MLRL is leading gradually to another benefit: actions by the state as a supporter of the mining industry. In New York there are no public interest groups other than industry associations that have as their mission the promotion and support of mineral development to meet the state's needs. In the past this had led to the difficult situation of a producer facing opposition from local government and interest groups, and opposition as well from state agencies such as the Department of Agriculture and Markets, which represents farmers.

MLRL clearly lays responsibility for fostering and encouraging mining on the DEC. Some say that this role conflicts with the more broadly based requirement of DEC to act as regulator and protector of environmental interests. Industry leaders, however, expect DEC to also serve the purpose of the MLRL by becoming more of an advocate for the industry. They hope that DEC will undertake activities such as public education on the needs and benefits of mining, support through dissemination of data to be used to applicants' benefit before localities, and even perhaps to appear at local hearings to discuss needs and benefits of mining and positive experiences of other mining operations.

Meanwhile, a DEC spokesman estimates that more than 90 percent of the applicants are granted permits to mine. Occasionally problems arise when ap-

plications are not as good as they should be, and occasionally environmental protection requires restrictive clauses; but by far the majority of applications are granted.

There is at least one example in which a producers' application for a zoning variance for quarry expansion produced 2 years of bitter fighting and alleged illegal actions by townspeople. Eventually, DEC interceded, proper legal action was taken, and permits were issued.

DEC's simultaneous support for mining and for environmental protection is a goal that is not yet achieved on a statewide basis, but movement in that direction is under way. In practice, the MLRL is already providing some advocacy for New York's mining industry. DEC regional mining specialists understand industry needs and impacts and constantly must look beyond the emotionalism of local opposition. They often meet with town officials, discuss various technical and procedural aspects with those officials, and will occasionally attend public hearings to discuss the application of the mining law.

SUMMARY

The MLRL has benefited both the state's mining and environmental interests in a number of ways. It provides a statewide, rational framework for regulating mining to supply minerals needed for New York State's development while it also protects the

state's environment. Most producers have received even-handed and intelligent assistance from the professionals who administer the law in the state's nine regions and who understand the special conditions in their region.

Still, the law is not yet problem free. Some people still call the MLRL a poor law, citing problems with uneven administration, especially during the early years of its administration. Uncooperative or even antagonistic state officials have been encountered. In fact one producer took DEC to court on a point of interpretation and finally won the right to mine, after the case went through two lower courts. Further, some sophisticated special interest groups have used MLRL rules and regulations to their advantage to forestall applications.

Although it may not be the final answer, everyone agrees that the MLRL is a good place to start. Towns generally rely on the state's knowledge of mining and reclamation procedures and producers appear to be in accord on the benefits of reclamation--benefits that accrue to both the community and to themselves.

Generally, implementation of New York State's MLRL has placed order into an otherwise chaotic condition. With increasing experience and with greater understanding between industry leaders and environmentalists, the ability to meet community needs for basic construction materials in an atmosphere of government and public cooperation is coming closer to reality.

Positive Impact of Urbanization on the Aggregate Industry

DON REINING

ABSTRACT

The planning and environmental control process, as it relates to mining in California, was triggered essentially by a 1967 amendment to California's General Code, which added "natural resources" to those things that must be considered in land use planning. Then in 1973 the California Division of Mines and Geology published a report that showed (a) the need for mineral resources, (b) how mineral resources were being needlessly lost to the people of the state, and (c) what the cost to the citizens of California was likely to be by the year 2000. The state has officially acknowledged that management of mineral resources is a critical part of the planning process. California currently has laws in which quantification of mineral resources is under the California Division of Mines and Geology, land reclamation is administered under the Surface Mining and Reclamation Act, and opening new deposits requires environmental impact reports that are administered under the California Environmental Quality Act. Develop-

ment of laws relating to environmental and economic impacts of the mineral industry in California was accomplished in close cooperation with the state's mineral aggregate producing associations and with the approval of the Sierra Club. Some specific efforts of the Southern California Rock Products Association are also noted in this paper. This body of laws has proved beneficial to some mineral producers. However, the process of evaluating requests for approval to mine has been slow, often with a 10-year period between the first submittal of a proposal and actual mining. This prolonged process is costly and tends to eliminate the small mineral producers that dominated the aggregate industry in the past.

During the past two decades the Southern California Rock Products Association has been involved with legislation that vitally affects the mineral industry and the people of the state of California. The long and complex interplay between California's legislature, some of its bureaucracies, conservation groups, and the mineral industry has resulted in