

THE ENVIRONMENTAL STORY

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My participation in this symposium is undertaken with some trepidation and uneasiness. The title of my talk, which I did not select, and was negligent in correcting, suggests an expansive and definitive paper which will once and for all settle and resolve all environmental matters. In fact, as anyone who has been involved in environmental work must have assumed, it is nothing of the kind.

Rather than attempt to discuss the substantive components of an oil shale environmental study, which have been discussed and reviewed on many occasions similar to this, and which are included in considerable detail in the Environmental Statement for the Federal Prototype Oil Shale Leasing Program, I would like to discuss in general terms the environmental regulatory scheme and the administration of environmental work from the standpoint of a prospective developer of oil shale.

The construction of a commercial oil shale facility is a very large and complex business undertaking which involves the commitment of large amounts of capital and the orchestration of many varied components to become a reality. One of these components which has a significant effect on the investment decision and on the timing of the project is the environmental work which must be performed. My discussion today will be geared toward the management and administration of various major environmental tasks as they relate to an oil shale project in western Colorado.

Throughout this talk, some distinctions will be made of the differences between development on private lands and development of federal lease lands. At the present time, there are two federal lease tracts in Colorado and there is a significant, although relatively smaller, amount of private oil shale land. Development of both of these types of land is likely to occur in the future. Because the federal leases are subject to a large body of federal law and regulation, as well as to specific lease terms and environmental stipulations, they are subject to special environmental requirements which are not applicable to private lands. For example, the performance requirements of environmental monitoring, the development of certain specific operational plans, the compliance with substantial re-

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porting requirements, the need for approval by the mining supervisor of all field operational activities, and the liaison with, and review by, the Oil Shale Advisory Panel will, perhaps, constitute oil shale operations on federal land as the most closely and intensively scrutinized and managed energy development project in this country.

Finally, the environmental management of an oil shale project, not unlike other industrial projects, must accomplish at least two objectives in order to attain its proper business purpose. First, it must, in a timely scheduled fashion, properly meet and comply with the requirements of law, regulation, and in the case of federal leases, the contractual terms of the lease.

Secondly, and of equal importance, the environmental manager must be able to communicate the environmental information gathered to the government, the public and to project management in terms which can be translated into environmental decision making which will, in fact, benefit the environment. This latter obligation is perhaps the most difficult to carry out in practice because it requires great diplomacy, a strong determination, a trained mind to distinguish between the possible and the impossible and significant and insignificant detail, and an ability to weigh judgmental factors and make and carry out decisions. It requires analytical skills and communication skills. In the final analysis, communication with all facets of the government, the public, and industry will be the determinative factor between what becomes an environmentally acceptable project and one which ends in environmental litigation.

The environmental manager's problem arises because although we are all environmentalists, we do not all agree on environmental solutions. This diversity of opinion among the same species is illustrated by an anecdote I heard recently concerning a missionary traveling in the jungle and a lion which he encountered. The missionary was overcome with fear for his life as the lion appeared ready to devour him. The missionary decided his only salvation was in prayer which he began with some fervor. After several minutes—when he had not yet been eaten—the missionary looked up and to his surprise he found the lion was also on his knees praying. "Oh," said the missionary with relief, "I see you are a Christian too." "Yes," said the lion, "But there is a difference between us. You are praying for salvation. I am saying grace." The moral of that story may be that although we are all environmentalists searching for salvation, we may all have different views as to how to get there. And while the discretionary management decision making of an environmental manager is less subject to definition than the mandatory requirements of a lease or of law, it is clearly a requirement for a successful project.

The remainder of this talk is devoted to some of the specific procedural—if not theological—steps which are required on the way to environmental salvation.

The first major environmental law at the federal level is the National Environmental Policy Act of 1969, commonly called “NEPA.” NEPA established among other purposes a national policy of maintaining a healthy environment, and of preserving and enhancing the renewable environment. Through its procedural requirements, NEPA requires the preparation and consideration of a detailed statement of environmental setting and impact analysis prior to the time the federal government takes any *major* action.

The required statement (which is generally referred to as a “NEPA statement,” an “impact statement,” an “environmental statement,” or a “Section 102 statement”) is beginning to become reasonably well defined in scope and detail through practice and litigation, and it is beyond the scope of my talk, today, to outline those matters in detail. For those who have not yet seen it, the U.S. Department of the Interior six-volume Environmental Impact Statement for the Federal Prototype Oil Shale Leasing Program is an excellent point of departure for those interested in the content of such statements.

The question of what constitutes a “major” federal action has been, and seems likely to continue to be, a subject of litigation. The tendency of interpretation and of federal policy has been to give a broad application to the term “major” and to use the impact statement procedure in many decisions which in other contexts might not seem to be major actions. From the viewpoint of the developer, the determination of whether a federal act is major poses a question of project risk and timing which has serious implications. If the question is a close one legally, and an agency determines that its action is not major—and, thus, no impact statement is required—and if that determination proves to be wrong, it is the developer who bears the risk and the costs of delay. The costs of such delay can be enormous as evidenced by the extreme case of the trans-Alaska pipeline. In terms of capital costs alone, in an inflationary economy, those costs can amount to millions of dollars per month. The twin incentives of cost saving and certainty create a strong impetus to consider carefully and carry out all environmental planning at the earliest possible date.

With respect to oil shale development, the need for NEPA statements may arise most obviously in two circumstances. First an impact statement is required for any significant leasing program as in the case of the Prototype Oil Shale Leasing Program. Since the Environmental Statement has been prepared for the Prototype Program, the principal NEPA question

remaining is whether subsequent actions by the Department of the Interior in carrying out its responsibilities under the lease terms amount to major federal actions.

The lease program provides for public hearings on the Detailed Development Plans of lessees, which together with the existing Environmental Statement and the environmental work to be performed by the lease terms, will comply with NEPA. Some environmental groups have suggested that supplemental or separate impact statements will be required at the time the final development plan is considered.

From the standpoint of environmental management, that question is largely moot, since in preparation for public hearings it seems certain that the full substance and analysis which goes with an impact statement will occur in the procedures leading up to those hearings.

The second potential major action which may trigger a NEPA statement applies equally to lease tracts and to plants on private lands. That action—or combination of actions—arises from the likely need by oil shale developers for various federal approvals and permits which relate to the oil shale plants, but which directly involve ancillary matters. For example, if significant product pipeline rights-of-way are required over federal lands, if significant utility corridor rights-of-way are required, if major water projects requiring federal actions occur, or if other contacts between oil shale plants and the federal government takes place requiring major federal action, the question of need for a NEPA statement must be addressed. If the answer to that question is affirmative, a second question must be considered. This second question is whether a NEPA statement for an off-site activity, through the doctrine of “secondary impacts” under NEPA, expands the scope of the statement to cover the environmental setting and impacts of the connected plant and related facilities. In that regard, the Colony Development Operation, on private land near Parachute Creek, has conducted a 2½ year environmental study which encompasses not only the off-site product pipeline which may trigger the NEPA requirement, but also the plant and off-site activities on private land. Those studies, which were caused to be carried out by Colony, have been delivered to the Bureau of Land Management for its evaluation and use in NEPA compliance which is now underway.

In summary, under federal lease terms or under off-site related activities of private lands, the likelihood of NEPA application to early oil shale development is high. Under lease terms, even if technical NEPA application is not required, the environmental work required by the stipulations which are incorporated in the lease terms are equivalent or greater than those required by NEPA. On private lands, because of the potential for

off-site involvement with the federal government, which is a major landholder in the Piceance Basin, and the severe time penalties resulting from failure to carry out early environmental planning, the need for, and likelihood of, detailed environmental and ecological evaluation is high.

The second major system of environmental regulation is air quality control. Under the federal-state air quality implementation program, the direct administration of air quality regulations in Colorado rests with the Colorado Air Pollution Control Commission.

From the developer's point of view, air pollution control compliance requires that both meteorological and air quality work must be initiated early in order to establish baseline data to carry out environmental planning and design, and to be prepared to demonstrate compliance with emission and permit regulations.

The need for baseline data is important both from the standpoint of regulatory control evaluation and for legal protection in connection with plant operations. Modeling and dispersion studies are an essential part of the air quality and meteorological programs for design and planning work. Related to this work is the project engineering evaluation and design of pollution control systems which are required for the APCC construction permit application.

Colorado APCC Regulation 3 requires new emission sources to obtain an Authority to Construct and a Permit to Operate from the Air Pollution Control Division for new emission sources. These permits are based upon formal applications and a thorough engineering review by the division of staff of air quality and meteorology data and of plant design and emission control equipment. Early planning and data collection are essential for project scheduling and timing of commencement of construction. Failure to obtain adequate data or ability to demonstrate compliance with emission and ambient standards can potentially result in costly delay.

The air quality regulations appear to apply equally to development on federal lease tracts and on private lands.

The third major tier of environmental regulation is at the county level. Regulation at this level usually occurs through zoning regulations, building regulations and related land use controls.

Zoning regulations provide for the use of land for particular purposes. Both Garfield County, (in which most of the private lands are held) and Rio Blanco County (the location of most federal land) have enacted county-wide zoning regulations. In connection with certain use of land applicable to industrial operations, special or conditional uses may be allowed by special or conditional use permits. Procedures for public hear-

ings and preparation of an impact statement by the applicant may also be required.

Experience under these regulations is limited at this time for industrial operations. However, the requirements for impact statements appear to be generally no more severe than those required by NEPA. Thus, if NEPA work is adequately performed, it should also suffice for county permit applications. However, these applications must be administered separately and considered in connection with plant timing schedules or again significant delays could occur.

The foregoing major environmental regulatory areas illustrate only the principal areas of work. There is, of course, in addition, a long list of specific regulations and laws which apply and which have not been covered in this discussion. My purpose has been to generally indicate the scope and extent of environmental regulation and to emphasize that early planning and action on environmental matters must be done to avoid costly delays. An understanding of the interrelationships among the various environmental regulatory schemes is essential to carry out that work effectively.