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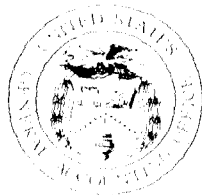
United States General Accounting Office

Report to the Chairman, Committee on
Interior and Insular Affairs, House of
Representatives

January 1989

SURFACE MINING

Operation of the Applicant Violator System Can Be Improved



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United States
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Washington, D.C. 20548

Accounting and Financial
Management Division

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January 24, 1989

The Honorable Morris K. Udall
Chairman, Committee on Interior
and Insular Affairs
House of Representatives

Dear Mr. Chairman:

Your December 10, 1987, letter asked us to review the automated permit review system implemented October 1, 1987, by the Office of Surface Mining Reclamation and Enforcement (OSMRE) and its related civil penalty and reclamation collection efforts. This report discusses our assessment of the permit review system. A report on OSMRE's collection efforts will follow.

The new automated system, referred to as the Applicant Violator System, has been plagued from the outset by poor quality data, such as incomplete names and addresses, and by problems in updating the information. Currently, OSMRE continues to rely on a manual process rather than the automated system as the primary means of internal control for ensuring that a permit is denied when an applicant or controlled entity has an outstanding mining violation.

We are recommending steps to improve data quality and other actions that will enable OSMRE to have an automated system which can be relied on for accurate issue or deny recommendations and not one that is operational in name only that requires a 100-percent manual verification. As agreed with your office, unless you publicly announce the contents of this report earlier, we will not distribute it until 30 days from its date. At that time, we will send copies to the agency and other interested parties. Copies will also be made available to others upon request.

This report was prepared under the direction of Jeffrey C. Steinhoff, Associate Director. Other major contributors are listed in appendix III.

Sincerely yours,

Frederick D. Wolf
Director

Executive Summary

Purpose

The Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201) was enacted by the Congress to establish workable standards nationwide to prevent harm to society and the degradation of the land and water resources, including severe land erosion and the pollution of water supplies. Since then, reports issued by GAO and various congressional committees have criticized the Department of the Interior's attempts to implement the law and thus protect the environment from unnecessary damage from coal mining operations.

A key provision of the act requires that permits be denied to applicants who have outstanding violations of the act. In light of the difficulties Interior has had in meeting this provision, the Chairman of the House Committee on Interior and Insular Affairs asked GAO to evaluate the automated permit review system recently implemented by the Office of Surface Mining Reclamation and Enforcement (OSMRE). He also asked whether this system, commonly referred to as the Applicant Violator System, could be upgraded by using features of a similar system developed and implemented by the National Wildlife Federation.

Background

The Surface Mining Control and Reclamation Act was enacted to protect society and the environment from the impact of irresponsible surface mining practices of some coal mine operators. A key provision of the act is section 510, which requires denial of mining permits to applicants who have outstanding violations of mining regulations. In response to the continued criticism that it has not fulfilled this provision of the congressional mandate and because of a January 1985 court order, OSMRE began developing an automated permit review system to identify operators who have outstanding violations of the act.

Results in Brief

GAO identified fundamental problems in the automated permit review system. From the outset, system recommendations to issue or deny a permit have been unreliable. In light of this risk, OSMRE relies on extensive manual verification. This practice has delayed both the states' and OSMRE's abilities to fulfill their permitting responsibilities in a timely manner. As long as OSMRE cannot accurately compare applicants to violators, there is an increased risk that applicants with outstanding violations could still receive mining permits.

GAO concluded that although the output of OSMRE's system and that of a similar automated system used by the National Wildlife Federation must be manually verified, the Wildlife system is more comprehensive in

determining whether or not a permit should be issued because it has access to state permit and Department of Labor mine safety and health data. Such access enables the Wildlife system to better identify business and ownership relationships between current applicants and those with unabated violations.

Principal Findings

System Information Is Not Always Current and Complete

GAO found that information contained in OSMRE's automated permit review system is not adequate for recommending whether mining permits should be issued or denied. Problems identified include

- unreliable data, such as incomplete names and addresses initially entered into the system;
- poor quality of the data, including inconsistencies between hard copy record files and computerized reports, periodically provided by other OSMRE systems; and
- lack of definitions for key issues (such as what constitutes ownership and control of a mining entity and how frequently the information should be updated) during the ongoing system development effort.

In March 1988, OSMRE reported the high error rate of the system. It disclosed that about half of the system recommendations to issue or deny a mining permit were reversed following manual verification of the data. (See chapter 2.)

AVS' Ability to Link Applications to Violators Is Limited

Before OSMRE's system can adequately compare applicants to violators, it must have sufficient data elements and sources to make the best possible linkage. However, OSMRE has not incorporated data from all of the most appropriate sources of ownership and control information into the system. (See chapter 2.)

Manual Verifications Are Not Always Prompt

GAO noted that due to problems with data in the system:

- The agency must manually verify all system recommendations to issue or deny a mining permit, thereby losing much of the benefit of an automated system. In essence, it is still working with a manual system since 100 percent of the recommendations have to be manually verified.
- The manual verifications are not being performed in time to meet states' projected approval dates.
- The timeliness of the manual verifications will become a greater problem when state and environmental violations are incorporated in the system. (See chapter 2.)

More Data in the Wildlife System

GAO's comparison of OSMRE's automated system with a similar system used by the National Wildlife Federation showed that the Wildlife system has additional capabilities. It has a broader data base with which to link applicants and violators and consequently can make more comprehensive determinations of whether or not a permit should be issued. However, the Wildlife system also has inaccurate and incomplete information and its output must also be manually verified. OSMRE is assessing the Wildlife system to identify features which could be used to enhance its own system. (See chapter 3.)

Recommendations

GAO is recommending several actions that the Department of the Interior should take to improve and update the data in its automated systems and to ensure compliance with recent rules and regulations. GAO's specific recommendations are presented at the end of chapter 4.

Agency Comments

Throughout the course of this review, GAO discussed its work with responsible officials of the Department of the Interior in order to ensure the accuracy and completeness of the information in this report. Their comments were considered in preparing the report. In accordance with the requester's wishes, GAO did not request official comments on a draft of the report.

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Abbreviations

AML	Abandoned Mine Land
AVS	Applicant Violator System
CMIS	Collections Management Information System
GAO	General Accounting Office
MSHA	Mine Safety and Health Administration
NWF	National Wildlife Federation
OSMRE	Office of Surface Mining Reclamation and Enforcement
SMCRA	Surface Mining Control and Reclamation Act of 1977

Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) (30 U.S.C. 1201) was enacted to protect society and the environment from the impact of irresponsible surface mining practices of some coal mine operators. At a time of rapid growth in the coal industry, the Congress sought to establish workable standards nationwide to prevent unnecessary degradation of land and water resources, including severe land erosion, mudslides, and the pollution of surface and underground water supplies.

A key provision of SMCRA calls for denying mining permits to applicants who have outstanding violations of SMCRA. Due to the difficulties OSMRE has had in its attempts to implement this provision, the Chairman of the House Committee on Interior and Insular Affairs asked GAO to evaluate an automated permitting review system recently implemented by the Office of Surface Mining Reclamation and Enforcement (OSMRE). The Chairman also asked GAO to compare the OSMRE system with a system developed and implemented by the National Wildlife Federation.

Background

SMCRA created OSMRE within the Department of the Interior. OSMRE's principal function is to implement and administer SMCRA, which was designed to provide more uniform protection to society and the environment than legislation enacted earlier by a number of coal-producing states. SMCRA encourages the coal-producing states to assume regulatory responsibility for surface coal mining activities within their boundaries if their programs have been approved by OSMRE. It also requires OSMRE to ensure that the states' operations conform to their approved programs. Currently, 24 states have assumed such responsibility. Included in their program responsibilities are (1) receiving mining applications, (2) processing applications, and (3) issuing or denying mining permits. OSMRE is responsible for these same programs in states which do not have approved programs, as well as for surface coal mining operations on federally and Indian-owned lands.

In carrying out its responsibilities, OSMRE assesses and collects civil penalties from coal companies which violate federally mandated performance and environmental standards and collects reclamation fees based on the amount of coal removed from each operating mine.

Our office and certain congressional committees have issued reports which identify numerous problems, including delays, which OSMRE has experienced in implementing SMCRA. One of the most frequent criticisms

has been the difficulty OSMRE has had in denying mining permits to mining operators who either have an existing violation or who own or control a mining operation that has an existing mining violation of SMCRA, including unpaid fines. (Appendix I contains a list of those reports.)

Section 510 of SMCRA requires denial of mining permits to applicants with outstanding violations. OSMRE considers unabated mining violations, unpaid civil penalties, and delinquent reclamation fees to be those violations requiring permit denial. This section of the act also requires that any mining operations owned or controlled by the applicant not be in violation of SMCRA. Generally speaking, ownership or control is a relationship which gives one person or entity express or implied authority to determine the manner in which another person or entity conducts coal mine operations. Control can also be defined as the legal record or beneficial ownership of an entity; for example, owning 10 percent or more of the voting stock in a corporation.

In a 1984 report, the Subcommittee on Environment, Energy, and Natural Resources of the House Committee on Government Operations concluded that OSMRE “. . . should develop a fully workable system for denying permits to operations owned or controlled by operators who have violated the Act. . .” The Subcommittee concluded in a report dated July 17, 1985, that OSMRE still did not have a system for identifying, matching, and providing to the states and others information on coal operators who have violations and owe civil penalties.

In addition to reports calling for improvements in the permit review process, on December 29, 1982, U.S. District Judge Barrington Parker issued an order requiring OSMRE to promptly assess and collect civil penalties and pursue alternative enforcement action in cases where violations have not been corrected. This order was the result of a lawsuit brought against Interior by environmental organizations because of OSMRE's continued problems in implementing SMCRA.

In January 1985, Judge Parker revised his 1982 order to require OSMRE to develop an automated system to match mining violators with existing permits and pending permit applications and to update the data contained in the system at least quarterly. (See appendix II for sections of the order pertinent to the matters discussed in this report.) Subsequently, the order was revised to require this automated permit review system to be fully operational by October 1, 1987. In order to monitor OSMRE's system, the National Wildlife Federation developed a computerized permit review system.

Automating the Permit Review Process

In 1985, OSMRE began developing an automated system to match the names listed on new applications for mining permits with the names of those with outstanding violations. The end result was the Applicant Violator System (AVS), which was implemented on October 1, 1987.

In November 1985, Interior awarded a contract for about \$790,000 to the Science Management Corporation for the development and maintenance of the system as well as the collection of the data from the permit files and data bases in the states. Since then, several modifications have been made to the contract which now totals about \$5 million. To date, OSMRE has spent about \$15 million for both in-house and contractual support in designing and implementing the system.

The initial portion of the system development established an entity master file which includes the names of the owners and controllers of coal mining entities. The information for the entity file was extracted by the system contractor from the hard copy permit and application files in all coal-producing states and, in some cases, from the states' automated permit data bases. At the same time, a violation file was established based on the data in two OSMRE systems—the Collections Management Information System (CMIS) and the Abandoned Mine Land (AML) System for reclamation fees. CMIS is used to collect civil penalties against coal companies for violations under SMCRA, whereas the AML system collects fees for the coal removed from each mine.

AVS has been designed to link the names in the entity file with names of violators. OSMRE limited the system initially to federal violations, but it plans to incorporate state violations and penalties and certain air and water quality violations related to surface coal mining operations in fiscal year 1990.

When the application for a permit is received, permitting authorities within each coal-producing state are required to enter the data from each application into AVS through a remote computer terminal. As each name on the application is entered, an entity identifying number is assigned. If the identical name is subsequently entered, it is assigned the same identifying number.

After the application information has been entered, the system compares the applicant information with the violator information already in the data base. If the system finds that the applicant or a controlled entity has a violation, it recommends denial of the permit. Conversely, if no outstanding violation is found, it recommends issuance.

Since accurate and complete data are needed to make this system effective, and since OSMRE was aware of the poor quality of the data in the state permit files and data bases, OSMRE established a Clearinghouse in August 1987 to manually verify the accuracy of the recommendations to issue or deny which are generated by the system. The Clearinghouse is staffed by both OSMRE and contractor personnel. During our review, the Clearinghouse had a staff of 14 OSMRE and contractor personnel.

The current manual verification includes such efforts as (1) telephone calls to state authorities and entities or individuals associated with the applicant, (2) searches through various sources, such as the Mine Safety and Health Administration system reports, for additional information, and (3) audits of reclamation fee payments. The results of the Clearinghouse verifications are used to correct the system, thereby updating the data base for subsequent comparisons of applicants and violators.

The Clearinghouse staff also (1) serves as a liaison between the state and the computer center on the automated aspects of the system, (2) assists the state and OSMRE personnel in operating the AVS equipment, and (3) modifies the system's automated operations based on input from its users.

Objectives, Scope, and Methodology

In a letter dated December 10, 1987, the Chairman of the House Committee on Interior and Insular Affairs asked that we review OSMRE's civil penalty and reclamation fee collection efforts and the related automated permit review system. This report concerns our assessment of OSMRE's permit review system. A report on OSMRE's collections will follow. Our objectives in examining the operations of OSMRE's recently implemented automated permit review system included determining whether it enables OSMRE to accurately determine if a permit should be issued or denied based on the information in the system.

Our work was conducted primarily in the Washington, D.C., area and included discussions with OSMRE officials at their Washington headquarters as well as officials of OSMRE's system development contractor, Science Management Corporation. We also reviewed the OSMRE Clearinghouse operations as well as the guidance provided to the states on their role in the permitting process and their use of the system. We examined proposed and published procedures, application and violation records, and internal and external studies related to the permit review system.

We reviewed several reports, including (1) OSMRE's assessment of the system operations and results for the period October 1, 1987, through March 3, 1988, and (2) contractor reports in developing the system and in collecting and entering the information in the system.

We visited state mining regulatory officials in Pennsylvania, Virginia, and West Virginia to review their use of OSMRE's permit review system. These visits also included a review of their permit review and approval procedures. These states were chosen because of the substantial coal mining within their borders.

As requested, we also compared OSMRE's system with a similar system maintained by the National Wildlife Federation and discussed the strengths and weaknesses of both systems' operations with their representatives.

We also performed a limited test of the permit review process through a selected judgmental sample of permit applications which was processed through both systems to determine if the system output was reliable for issuing or denying permits. The sample contained 13 applications selected from 126 applications which appeared on the list of permits expected to be issued by Kentucky, Tennessee, and Virginia in April 1988. The lists from these states were chosen because the National Wildlife Federation system includes violation data from these states. We did not evaluate the related general and application controls for either the AVS or the Wildlife Federation automated system programs.

We performed our review from February through July 1988, in accordance with generally accepted government auditing standards. We discussed the findings in this report with agency program officials and have included their comments where appropriate. However, as requested, we did not ask for official agency comments.

The Permit Review System Can Be Improved

The information in AVS is insufficient for purposes of recommending the issuance or denial of permits to mine coal because it is often outdated and incomplete. Consequently, OSMRE must manually verify each system recommendation of whether a permit should be issued or denied before each recommendation can be used in the permitting process. These verifications reverse almost half of the recommendations produced by the system. However, these verifications are very time-consuming and have often not been completed at the time OSMRE and state permitting authorities need the information.

The poor quality of the system recommendations is primarily the result of inaccurate and incomplete data used by OSMRE to establish the system's data base. Also contributing to the inaccurate data was the lack of a definition of "owned or controlled" at the time the system was being developed and implemented. Compounding this problem is the lack of published rules and regulations which clearly define the roles and responsibilities of OSMRE and the states in using the system in their permit approval and denial process. Together, these problems severely limit OSMRE's ability to review applications to determine whether permit applicants are linked to mining violators.

Implementation of an automated system has done little to assist OSMRE in meeting one of SMCRA's key provisions which calls for the denial of a permit to any applicant who has an existing mining violation. Without significant improvements in the system, OSMRE will have to continue to rely on manual verifications. Until OSMRE is able to make these improvements, it will continue to be handicapped in its efforts to limit the coal mining community to owners and operators who comply with coal mining guidelines.

Information Is Not Always Current and Complete

An effective automated permitting review process is dependent on a system which contains accurate, complete, and current information on those who own or control each mining operation. Without such a system, the agency has no assurance that those who own or control interests in mines with violations are included in the comparisons of violators and applicants.

From the outset, AVS has been an example of the situation where management decision-making can be no better than the data used for that purpose, commonly referred to as "garbage in, garbage out." This is the result of the lack of accurate and complete data used to establish and

operate the system and lack of a clear definition of "ownership or control" prior to the implementation of the system.

As of March 1988, the AVS contained about 62,000 separate entities representing permit applicants, permit holders, owners and controllers of applicants and permit holders, and violators. According to the Clearinghouse staff, complete address information is lacking for about 13,000 of these entities. Also, most of the entries for the remaining 49,000 entities lack such basic information as names or social security numbers. Because the system requires an exact match of name and address, or name and social security number, attempts at matching applicants and violators fail. More accurate and complete information would ensure proper matching of applicants and violators and would thereby increase the usefulness of the system recommendations.

The agency directed establishment of the system's entity master file—a list of permit holders—based on data in the existing state permit files and automated data bases. At the time the system development contractor was collecting the data from the permits or data bases within each state, OSMRE knew the information was often out-of-date, incomplete, and inaccurate. In those instances where the ownership and control information regarding the permittee was not in the state files, nothing was entered in the AVS data base.

Other OSMRE systems that are used to update information in AVS also lack good quality data. For example, our review of 10 abandoned mine reclamation fee payment files disclosed that data in 6 of the hard copy files were different from summary information in the automated reclamation fee system used to collect fees for coal removed from each mine. Such errors in the data used by AVS undermine its ability to link applicants and violators.

Reports provided to OSMRE by the system contractor described the status of the development effort. The reports revealed early concerns with the quality of the data being entered into the system, and these concerns have not yet been alleviated. The Director of OSMRE testified before the Subcommittee on Interior and Related Agencies of the House Appropriations Committee in March 1988 that the quality of data continues to be a problem since much of the information is several years old and is not very accurate.

As early as February 1986, in a progress report prepared by the system contractor, the lack of a clear definition of what constitutes ownership

and control of an applicant or permittee was cited as a factor contributing to some of the delays it had experienced in its system development and data collection efforts. Although a clear definition is one of the basic elements needed to ensure uniform interpretation and disclosure of who owns or controls an applicant or permittee, OSMRE did not publish its ownership and control rule until October 3, 1988. The system, then, was developed and implemented without agreement as to what ownership and control criteria should be used to issue or deny a permit in accordance with section 510 of SMCRA.

In addition, the data base should be updated more systematically. Presently, OSMRE updates it only when an application is filed and after a permit is issued or assumed by another entity. The Parker Order requires that certain data be updated at least quarterly. Current and accurate information is essential because several months typically elapse between the submission of a permit application and permit issuance.

The problems discussed above result in a system which produces unreliable issue or deny recommendations. A high error rate of the system's issue or deny recommendations was reported by OSMRE in March 1988. From its implementation in October 1987 through March 3, 1988, the system made 749 recommendations—660 to issue and 89 to deny. The subsequent manual verifications of all system-generated recommendations reversed approximately 50 percent of the issue recommendations and 20 percent of the deny recommendations. Overall, about 46 percent of the system recommendations were reversed. Currently all recommendations are manually verified; however, OSMRE plans to restrict the verifications to the deny recommendations.

Our review of 13 pending applications for which permits were expected to be issued during April 1988 revealed that the subsequent manual verifications reversed the system-generated recommendations for 5 of the applications. Thus, it is highly probable that any decision to issue or deny a permit without manual verification will be incorrect.

AVS Could Use Additional Data to Match Applicants With Violators

In addition to accurate and complete data, AVS must have sufficient data elements and sources to compare and match applicants and violators. Without such information, the validity and completeness of its comparisons are suspect. However, OSMRE has not incorporated all the available sources for ownership and control information within the system. Instead, it has used manual verifications to access certain data sources not currently contained in the AVS.

During the manual verification process, one of the primary sources used is the Mine Safety and Health Administration (MSHA) identification numbers obtained from the Department of Labor. The MSHA system, which includes an identification number assigned by MSHA to mining activities, includes ownership and control information. MSHA uses such information to monitor the health and safety components of mining operations. The MSHA information also includes the dates that each ownership and control relationship existed. These dates would be valuable to OSMRE in determining who owned or controlled a violator at the time the violation occurred. In addition, the MSHA system provides information which is often more current than that of the AVS because the Labor Department requires quarterly updates.

The usefulness of MSHA data for the purposes of issuing permits was demonstrated in our analysis of 13 pending applications. Manual verification by the Clearinghouse confirmed eight but reversed five of the system recommendations. In reviewing two instances where the issue recommendations were reversed, the reversals were due to linkages made to violators through the use of the MSHA identification numbers. The MSHA identification numbers had been obtained by the Clearinghouse during its manual verification of the AVS recommendations.

In the three instances where the system recommendations were reversed from deny to issue, the revisions were due to ownership and control data in the system which had incorrectly identified a relationship between an applicant and a violator. After GAO pointed out the usefulness of MSHA data during our audit work, OSMRE informed us that it plans to incorporate the MSHA information in AVS in the near future.

Manual Verifications Are Not Timely

OSMRE's policy is to manually verify all system recommendations before they can be used to issue or deny a permit. In reality, under the current permit review process, it is the Clearinghouse, and not the automated system, which is the primary means or internal control for making sure that a permit is denied when an applicant or affiliated entity has a violation.

Because of the large number of applications, the Clearinghouse currently requires each state to provide a monthly list of those applications it anticipates approving the following month. This procedure is designed to enable the Clearinghouse to prioritize its verification efforts and thereby ensure that the recommendations to deny or issue a permit are based on the best available information.

However, in reviewing the 13 sample applications for which states planned to issue permits in April 1988, we found none were verified by that time. We also reviewed five permit applications on Virginia's April 1988 priority list for which permits were issued by the state in April to determine whether the manual verifications had been completed before issuance. We found that four of the five verifications had been completed during May or later, 32 to 85 days following issuance of the permit. The remaining verification had not been completed as of the end of July 1988 when we completed our field work.

In our visits to Pennsylvania and West Virginia, we found they too have issued permits before completion of the manual verifications. State officials said that several months had lapsed following the implementation of AVS before they became aware that the manual verifications were not being performed immediately after they had entered the application information into the system. Officials of these states told us that they assumed the verifications had been completed prior to their second query to obtain the AVS generated recommendations which is required before they can issue or deny a permit. According to OSMRE, it typically takes several months between the submission of a permit application and issuance of the permit.

The timeliness of the manual verifications by the Clearinghouse may become an even more serious problem once OSMRE's new Technical Information Processing System is implemented. This automated system is designed to shorten the time required to address technical questions, such as what effect coal mining operations will have on local ground water. Such environmental issues need to be considered and assessed before a surface mining permit can be issued. According to OSMRE, this new processing system will take minutes to perform what now takes hours.

The timing issue may become even more serious when AVS is expanded to include state and air and water quality violations. As discussed earlier, the data in the violations file is currently limited to federal violations. The incorporation of the state violations will increase the number of violations in the system by more than 600 percent, from about 9,000 to 59,000. At this time, the number of air and water quality violations has not been determined. The addition of both the state and the air and water quality violations will make the manual verification process even more difficult because of the massive increase in ownership and control relationships which will need to be verified as well as the additional sources which the verification process must access.

It is imperative that OSMRE have in place a reliable, operational, automated system in order to ensure accurate issue or deny recommendations. The information in the system must be cleaned up and updated on a prescribed basis. This would allow the Clearinghouse to simply spot-check system recommendations and would eliminate the need for its current 100-percent manual verifications of all recommendations.

Necessary Rules and Procedures Were Not Published When the System Was Implemented

Prior to the implementation of a system, we believe a determination must be made regarding the data to be collected, the frequency of updating, and the roles and responsibilities of the system operators and users. Without these basic determinations, the likelihood of a successful system is remote.

From the outset of its automation effort, OSMRE has had problems in its attempts to make such determinations and to publish the necessary regulations and procedures. These problems were primarily due to the difficulties OSMRE incurred in reaching a consensus with the coal-producing states and the mining industry. We realize that without such consensus, there is a greater possibility of legal challenges to any published regulation. The AVS would have better data if OSMRE had defined what constitutes ownership or control and how frequently the data should be updated prior to system implementation. Better use of the system would have been possible if OSMRE had more clearly described the role of the Clearinghouse and the necessity for the states to await completion of the manual verifications before issuing or denying a permit. Despite OSMRE's extensive efforts to publish such rules and procedures, the results have been long in coming.

Definition of Ownership or Control

OSMRE established the AVS entity master file based on the data in the existing permit files or automated data bases within each state. At that time, OSMRE and the data collection contractor knew that the information being extracted from those files and data bases was incomplete and inaccurate. To a great extent, this inconsistent information was the result of the varying interpretations by the states, OSMRE, and permit applicants as to what constitutes ownership or control and the varying degrees to which the states required disclosure of such data in their past permitting process.

After a series of proposals beginning in April 1985, on October 3, 1988, OSMRE published its ownership or control rule. This rule amends OSMRE regulations by defining the terms "owns or controls" and "owned or

controlled" for purposes of section 510(c) of SMCRA. In addition, the rule establishes the criteria by which the computer will match permit applicants, their owners, and controllers with current mining violators.

Information Update Rule

A related rule which has not been finalized requires applicants to update information on the application just prior to issuance of the permit to improve the quality of the data being used by the system. Under this proposed rule, states will be required to obtain and enter the updated information into the system before the system makes an issue or deny recommendation. The proposed rule was published in May 1987, and OSMRE officials expect to issue it in January 1989. Currently, it is being reviewed by the Department of the Interior's Office of the Solicitor and OSMRE.

Clearinghouse Procedures Manual

Although the AVS was implemented in October 1987, detailed information explaining both the verification procedures and matters relating to their roles and responsibilities was not provided to the states or the Clearinghouse staff. Rather, such guidance has been provided on a piecemeal basis as the Clearinghouse procedures evolve. No matter how well and carefully a system has been designed, it is of little value if the operators and users do not understand how the system operates and how they are to use the system output. OSMRE officials told us that such procedures have been drafted and they anticipate making them available to the states as soon as possible.

Assessment of the National Wildlife Federation's Permit Review System

Our comparison of AVS and a similar permit review system maintained by the National Wildlife Federation (NWF) shows that the Wildlife system has additional capabilities. The major difference between the two systems is the inclusion of MSHA and state mining violation data from four of the largest surface mining states in the Wildlife system. Such information permits more comprehensive comparisons of applicants and violators and thus provides a broader data base for determining whether or not a permit should be issued. However, the Wildlife system also contains inaccurate and incomplete information and, as is the case with AVS, its output must also be manually verified.

More Data in the Wildlife System

The Wildlife system has three basic categories of information: (1) applicant and permittee, (2) violator, and (3) mining entity ownership. The applicant and permittee data are furnished periodically by OSMRE and are identical to the applicant and permit information in AVS.

In addition to the federal violation data obtained from OSMRE, the Wildlife system contains state violations cited by Virginia, West Virginia, Kentucky, and Pennsylvania. According to Wildlife representatives, the majority of state violations have occurred in these states. In entering these four states' violation data in the system, NWF had to manually eliminate differences in the way names, state permit numbers, and other data were recorded by the states. This effort initially involved over 11,000 state records.

However, unlike AVS, the Wildlife system's data on ownership and control of applicants, permittees, and violators, as well as on entities related to the owners, are obtained from MSHA, Kentucky's mines and minerals system, and the surface mining information systems of Kentucky and Virginia. These data are vital in order to determine through the matching process whether the applicant had an interest in a mine at the time the violation occurred. Although AVS does not currently include this type of information, MSHA data are obtained as part of the Clearinghouse manual verification process and are used to correct AVS information.

The Wildlife system primarily relies on information from the MSHA and state permit numbers to determine if applicants have or are related to entities with outstanding violations. It compares data on the applicant and related entities with its MSHA and state mining informational data bases to identify potentially related identification and permit numbers.

It also compares data on the applicant and related entities with its violator information data base. OSMRE plans to incorporate state violation data into AVS in fiscal year 1990.

Data Quality Problems Exist

The Wildlife system has data quality problems similar to those AVS has experienced. It not only receives applicant and violator data from OSMRE which, as discussed in chapter 2, is known to be unreliable, but it also receives state violation data which are not routinely updated. Due to the poor quality of the data received from both OSMRE and the states, the output from the Wildlife system must also be manually verified, similar to AVS, before it is considered acceptable by NWF.

Limited Test Shows Wildlife's System More Reliable Than AVS

As part of our comparison of the two systems, we asked the NWF to process the same 13 pending applications that we processed through AVS. In comparing the outputs, we found that while the Wildlife system does not make actual issue or deny recommendations, it does identify more potential matches between applicants and violators.

In one instance, the Wildlife system identified an operator with an outstanding state violation operating a mine for the applicant. AVS could not identify this relationship because it does not have state violation data. In the other two cases, AVS recommended permit issuance, while the Wildlife system associated the applicants with violators by matching the MSHA number and indicated that the permits should be denied.

Recognizing that the Wildlife system may have advantages over AVS, OSMRE, in cooperation with NWF, compared the two systems from January through March 1988. OSMRE confirmed that the Wildlife system was able to identify additional applicant and violator matches because it had more extensive data obtained from other sources, such as MSHA. As a follow-up to this comparison, OSMRE is conducting a more detailed assessment of the Wildlife system to identify those features and informational sources which could be used to enhance the AVS. In this regard, OSMRE and NWF are engaged in ongoing discussions on how to technically evaluate the system.

Conclusions and Recommendations

Efforts by OSMRE to develop and implement an automated system to review applications for mining permits have to date been unsuccessful.

Before OSMRE can effectively use the computer to assist and monitor its permit review process, it must improve the accuracy and completeness of the data in its system. Without better data, system recommendations regarding whether a permit should be issued or denied will continue to be unreliable and therefore not usable. Accurate and complete data files will reduce the amount of effort currently being expended in performing the manual verifications of the automated system output recommendations.

Inclusion of other informational sources accessed during the Clearinghouse's manual verifications, such as MSHA in AVS, will also provide information on current ownership or control of applicants, the relationship of the applicant to other entities, as well as ownership of the mine at the time of a violation. Such information would improve the quality of the AVS recommendations and reduce the necessity for manual verification. The Clearinghouse cannot cease to manually verify all the system recommendations until such information is provided.

To ensure more current data, OSMRE needs to establish and publish its requirements for updating frequency and for assigning responsibility for obtaining and entering such data into the system.

In an effort to enhance AVS' coverage and operation, OSMRE should complete the comparison between its system and the Wildlife system. OSMRE and the NWF should agree upon the best methodology for completing the comparison of systems and should then establish milestones to measure the progress of this comparison.

In addition, OSMRE must issue detailed operating procedures to the states and the Clearinghouse staff to help ensure that they fully understand their role in the process. Without a procedural manual, they cannot be expected to thoroughly understand the process and their responsibilities.

As long as OSMRE cannot accurately compare applicants to those entities with outstanding violations, there is an increased risk that current violators could still receive mining permits.

Recommendations

To improve the accuracy of the data in the system and thereby reduce the reliance on the manual verifications and ensure compliance with section 510 of SMCRA, we recommend that the Department of the Interior

- incorporate the data sources accessed during the manual verification process into AVS, including but not limited to the Labor Department's MSHA system, to improve the quality of the data in the system;
- expedite efforts to finalize both the information update rule and the Clearinghouse procedures in order to obtain more current information; and
- monitor state adherence to the recently promulgated ownership and control rule and, when finalized, the information update rule.

In addition, we recommend that the Department of the Interior work with the National Wildlife Federation to establish specific dates and milestones to

- complete its comparison of the AVS and Wildlife system and incorporate those features of the Wildlife's system which will enhance AVS' coverage and operation.

Past Reports Which Include Discussions About OSMRE's Need for a System to Deny Mining Permit Applications

1. Surface Mining Law: A Promise Yet To Be Fulfilled, Committee on Government Operations, House Report 100-183, June 25, 1987.
2. Debt Collection: Interior's Efforts to Collect Delinquent Royalties, Fines, and Assessments,(GAO/AFMD-87-21BR, June 18, 1987).
3. Office of Surface Mining: Beyond Reclamation?, Committee on Government Operations, House Report 99-206, July 17, 1985.
4. Management Review of the Office of Surface Mining, Committee on Interior and Insular Affairs, House Committee Print No. 3, July 1985.
5. Breakdowns in the Department of the Interior's Civil Penalty Assessment and Collections Program Have Adversely Affected the Enforcement of the Surface Mining Control and Reclamation Act of 1977, Committee on Government Operations, House Report 98-1146, October 5, 1984.

Sections of the Judge Parker Order Pertinent to the Matters Discussed in This Report

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

SAVE OUR CUMBERLAND MOUNTAINS,)
INC., et al.,)
)
Plaintiffs,)
)
v.)
)
WILLIAM P. CLARK, et al.,)
)
Defendants.)

Civil Action No. 81-2134

FILED

JAN 31 1985

JAMES E. PAYEY, CLERK

ORDER

Upon consideration of the Joint Motion filed by all parties to this action, and without admission by any party of any issue of liability, law or fact, the Court finds that the interests of justice require the modification of the Order entered by this Court on December 29, 1982. Modification of the Court's previous order is necessary to permit the defendants to direct their efforts toward those remedies which, in light of experience under the Court's previous order, will help fulfill the goals and requirements of the Surface Mining Control and Reclamation Act of 1977 (the "Surface Mining Act"). Accordingly, the Court does hereby ADJUDGE, ORDER and DECREE this 31 day of January, 1985, that:

I.

Establishment of a System to
Implement 30 U.S.C. § 1260(c)

1. The defendants will establish and maintain a computerized system which contains: (a) the identity of all permanent program permit applicants and permittees; (b) the identity of all persons who own or control such applicants or permittees as set

Appendix II
Sections of the Judge Parker Order Pertinent
to the Matters Discussed in This Report

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forth in 30 U.S.C. § 1257 1/; (c) the identity of all entities, including corporations, partnerships, and individuals, which are responsible for unabated cessation orders issued by OSM during the interim or permanent programs; (d) the identity of all persons who own or control such entities; (e) the identity of all entities which have failed to pay any penalty imposed by OSM under 30 U.S.C. § 1268(h) 2/ in either the interim or permanent programs; and (f) the identity of all persons who own or control such entities.

2. The defendants will update the data contained in the computerized system at least quarterly to add the identities of (a) new applicants, (b) persons responsible for unabated cessation orders issued since the previous update, (c) persons who have failed to comply with an abatement plan or payment schedule approved by the defendants, (d) persons owing newly final assessments of civil penalties imposed under 30 U.S.C. § 1268(h), and (e) persons who own or control any entity added

1/ 30 U.S.C. § 1257(b)(4) requires as part of each application for a permit under any permanent program the names of every officer, director and any person holding 10% or more of the voting stock of corporations which apply for permits, and the name of all partners of partnerships which apply for permits. The defendants shall use no less inclusive class of persons in establishing and implementing the computer system required by Paragraphs 1 through 3 of this Order.

2/ Except for the Secretary's obligation to assess civil penalties under 30 U.S.C. § 1268(h), which is established in Paragraph 7 of this Order, references to penalties imposed by OSM under 30 U.S.C. § 1268(h) encompass only those penalties assessed as of the date of this agreement for the maximum 30 day period under 30 C.F.R. 732.15(b)(2) or 845.15(b)(2) for which OSM has issued a final order requiring payment.

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under (a)-(d). The defendants shall delete the identities of those past violators who have abated all cessation orders subject to this Order for which they are responsible and paid all civil penalties subject to this Order for which they are responsible, or who have agreed to an abatement plan or payment schedule approved by the defendants for all such unabated cessation orders or civil penalties, as well as all persons who own or control such past violators.

3. The computer system will determine, on at least a quarterly basis, if any person in control of a permit applicant was or is in control of any entity with an unabated cessation order or unpaid penalty which is subject to this Order. If the computer system identifies such persons, or if other information indicates that persons with outstanding violations or unpaid civil penalties have applied for or received permanent program permits, the defendants will promptly inform the state regulatory authority, if any, and request the regulatory authority to refuse to issue the permit or to revoke the permit, as the case may be. If within thirty (30) days of such notice the state regulatory authority does not refuse to issue or revoke the permit in question and no person responsible for the cessation order executes an appropriate abatement plan or payment schedule, the defendants will immediately issue a Ten Day Notice to the state regulatory authority and request the state regulatory authority to initiate

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proceedings to revoke the permit. ^{3/} If the state regulatory authority fails to initiate permit revocation proceedings, OSM will issue a notice of violation to the operator in accordance with 30 U.S.C. § 1271(a), which shall cause the operation to cease until all cessation orders are abated, all civil penalties are paid, or an appropriate abatement plan or payment schedule is approved by OSM for all outstanding cessation orders and civil penalties.

4. Nothing in this Order requires the defendants to use their authority under 30 U.S.C. § 1260(c) to cause the revocation of a permit on the basis of violations committed by the permittee during the term of that permit. The system described in Paragraphs 1 and 2 of this Order will be fully operational within twenty-four (24) months of entry of this Order.

^{3/} If the Secretary is the regulatory authority, the Secretary will refuse to issue or will revoke the permit in question pursuant to 30 U.S.C. § 1260(c), unless a person responsible for the unabated cessation order or unpaid civil penalty executes an appropriate abatement plan or payment schedule.

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