

RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations,

126794 30994

UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

April 4, 1985

RESOURCES, COMMUNITY,
AND ECONOMIC DEVELOPMENT
DIVISION

B - 214727

RELEASED

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

The Honorable Nick J. Rahall II
Chairman, Subcommittee on Mining and
Natural Resources
Committee on Interior and Insular Affairs
House of Representatives

Subject: Analysis of the Department of the Interior's Administration of the Duck Nest Creek Coal Lease Exchange (GAO/RCED-85-103)

In a letter dated June 9, 1983, the Chairman of the former Subcommittee on Mining, Forest Management and Bonneville Power Administration, House Committee on Interior and Insular Affairs, requested our analysis of the subject exchange. The initial focus of that work involved determining whether Interior's decision to exchange the northern portion of the Duck Nest Creek tract was legal or if it violated the criteria established in the enabling statute, Public Law 96-401, 94 Stat. 1701. An additional objective was to determine whether Interior's administrative procedures were adequate to ensure the exchange was properly implemented.

On June 11, 1984, we briefed the requester's office on the results of our initial work. On February 28, 1985, we briefed your offices on our evaluation of Interior's exchange administration procedures. As agreed with your offices, we are enclosing with this report an expanded version of the briefing document used at the latter meeting. The material covered in each briefing is discussed separately below.

BRIEFING - JUNE 11, 1984

MESSAGE: EXCHANGING THE
NORTHERN PORTION OF DUCK
NEST CREEK WAS ACCEPTABLE
UNDER THE LAW



126794

For federally owned coal deposits to qualify for exchange under the authorizing law, Interior had to determine that for the foreseeable future those lands were unlikely to be separately mined efficiently and economically except by incorporation into the existing mining operation of the company proposing the

(005574)

exchange. In a June 11, 1984, briefing, we informed the requester's office that the exchange of the northern portion of the Duck Nest Creek tract was within the flexible criteria established in the law. This position was based on our analyses of overall tract mining conditions, prevailing coal market conditions, and potential competitors' need for additional coal.

The analysis of tract mining conditions disclosed that unfavorable mining conditions made the tract an unlikely candidate for a new mining operation—the coal was deeper than any then, or now, being mined in the region and was on an ever-deepening slope which would make it even more expensive to mine, and thus less competitive with other mines. We concluded that companies simply had better mining opportunities elsewhere in the immediate region and in other federal coal regions as well. The tract could, however, be mined as an extension of an existing operation.

Drawing on our prior evaluation of the Powder River Basin coal lease sale, we reexamined evidence available late in 1981 to obtain a picture of prevailing market conditions. Our analysis indicated that at the time of the exchange, the coal market was not growing as fast as in previous years. The rate of growth in the demand for additional coal production was leveling off or flattening. Industry and Interior refer to markets with this characteristic as "soft." From our prior work, we know that new mine development is a risky proposition that few, if any, companies will undertake during soft market conditions—because opportunities to obtain new coal supply contracts are too scarce.

Under the market conditions which existed late in 1981, companies were seeking to expand existing mines through the acquisition of adjacent coal lands. Our analysis of tract mining conditions and coal market conditions supported the conclusion that if Duck Nest Creek was to be mined in the foreseeable future, it would likely be developed as an extension of an existing mine. Three companies had properties bordering the tract: the Amax Coal Company, the Mobil Corporation, and the Atlantic-Richfield Company (Arco).

Amax was the logical developer of the Duck Nest Creek tract. The company was mining in the immediate area and needed additional coal reserves. Over 90 percent of the coal reserves for the company's mine were committed—since 1976—to existing coal supply contracts. Amax's ongoing operation was immediately adjacent to the tract on its east side and the company owned property rights for lands north of the tract. Along the southern border, Mobil had just opened a new mine. Arco held a Wyoming state lease

¹ Analysis of the Powder River Basin Federal Coal Lease Sale: Economic Valuation Improvements and Legislative Changes Needed, GAO/RCED-83-119, May 11, 1983.

fronting the western tract boundary. At issue was whether Mobil or Arco should have been considered prospective competitors for Duck Nest Creek.

We found that Mobil's mine was in the early stages of production, had substantial uncommitted reserves, and could not meet Interior's regulatory standard of diligent development. At that time, Interior required annual coal production equal to or exceeding 2.5 percent of total mining unit reserves. Unable to satisfy Interior's regulatory test for diligent development, Mobil was in the process of litigating for an extension of the time by which it would have to meet the diligence requirements. Clearly, the company was in the position where it did not have an immediate or foreseeable need for more coal. In addition, Mobil had withdrawn an earlier exploration license application which had included lands within the Duck Nest Creek tract. In Mobil's September 25, 1981, letter withdrawing the application, the company cited consideration of the

- --diligent development production requirements associated with new federal leases,
- -- soft market for Powder River Coal, and
- --existing reserve position at its mine to the south of Duck Nest Creek.

In our judgment, Mobil's circumstances made it unreasonable to consider the company a potential competitor for Duck Nest Creek.

Concerning Arco's property interest, although it held a state lease adjoining the Duck Nest Creek tract's western border, the company had no mining facilities nor immediate development plans for the property. Given the unfavorable mining conditions and soft coal market, Arco would not appear to warrant serious consideration as a prospective competitor for the Duck Nest Creek tract. In addition, Arco was in the final stages of starting up its "Coal Creek" mine to develop coal of very similar quality to the coal in Duck Nest Creek. This mine, however, had superior mining conditions -- the coal was only about one-third to one-half as deep as Duck Nest Creek's coal. Yet most of the mine's reserves were uncommitted -- a condition which still existed a few years later at the time of our evaluation. Because Arco was having difficulty selling similar quality coal which was less expensive to mine, it seems unreasonable to consider the company as a potential competitor for the Duck Nest Creek tract.

Thus, based on our analyses of mining conditions, prevailing market conditions, and potential competitors' need for additional coal, we believe Interior's decision to exchange the northern portion of Duck Nest Creek was acceptable under the statute. Although the Department made an acceptable decision, as discussed in the next section, it was not a consequence of the administrative process.

BRIEFING - FEBRUARY 28, 1985

MESSAGE: PROBLEMS WITH INTERIOR'S

EXCHANGE ADMINISTRATION AND ACTIONS

INTERIOR COULD, AND SHOULD, HAVE

TAKEN--AS LESSONS LEARNED

In briefing your offices on the adequacy of Interior's exchange administration procedures, we examined the criteria established in the enabling legislation; discussed actions Interior took to implement the law; identified problems; and suggested actions Interior could and should have taken--as lessons learned. This information was outlined in a briefing document we used to discuss the results of our work and supplemented by considerable narrative information. As requested by your offices, we have added more details to the briefing document and included it as enclosure I to this report.

An integral part of our February 28, 1985, briefing was the discussion of the context in which we were providing our views on Interior's administration of this exchange. Specifically, we stated that although we evaluated--and identified needed improvements in the administration of--other exchanges in the past, 2 we were not prepared at this time to take an overall position on the broader issue of coal exchange administration. We explained that for the past year Interior's coal program has been undergoing major changes as a consequence of prior GAO, Linowes' Commission, and OTA recommendations and that we have not had an opportunity to evaluate the extent to which those changes address our prior concerns. We reasoned, therefore, that it would be inappropriate to recommend further changes, without first evaluating the merits of actions already taken. For this reason, we contended that the problems associated with Interior's administration of the Duck Nest Creek exchange and the actions that the Department could--and should--have taken to carry out the law are best viewed from the perspective of lessons learned. It was within this specific context, and with this particular perspective, that we presented and discussed them in briefing your offices on February 28, 1985. The following sections summarize the nature of our discussions with your offices.

Problems with Interior's exchange administration process

In November 1980, when Interior field experts first evaluated the Duck Nest Creek tract, they reported that it was a mine extension tract which—though large enough to support a new

²How Interior Should Handle Congressionally Authorized Federal Coal Lease Exchanges, EMD-81-87, Aug. 6, 1981. Coal Exchange Management Continues to Need Attention, GAO/RCED-83-58, Mar. 7, 1983.

mine--lacked competitive interest. This evaluation would have permitted the exchange of the northern portion of the tract under the criteria established in the authorizing legislation. In July 1981, however, the same field officials evaluated the tract as having competitive interest, which made it ineligible for exchange. In November 1981, different field officials evaluated the tract, concluding it was a noncompetitive tract and, therefore, once again eligible for exchange. On November 30, 1981, however, the BLM Director decided not to exchange it. In December 1981, when Interior headquarters officials evaluated the tract, they once again concluded it was a competitive tract and not eligible for exchange. After being briefed on the results of this evaluation, however, the BLM Director reversed his earlier decision and approved the exchange.

Thus, over the span of 14 months, Interior evaluated the Duck Nest Creek tract four times—each successive evaluation reaching the opposite conclusion of the one before it. Ironically, none of the evaluations properly considered the criteria established in the statute authorizing the exchange. We believe part of the problem may stem from the fact that no formal exchange procedures existed or were established and, in many cases, records of who did what, when, and why were not kept. In addition, we found that official accounts of what happened were often vague and conflicting. As a result, we have been able to chronicle what transpired, but have not been able to fully determine why it took place.

Based on our analysis of the actions Interior took to implement the authority provided in Public Law 96-401 (94 Stat. 1701), however, we identified several problems which seriously impaired the efficiency and effectiveness of the Department's administrative process. These problems were discussed in detail with your offices and are presented on page 5 of the enclosed briefing document.

In general, most of Interior's problems in administering the exchange were of a process nature. We found that the efforts of headquarters and field offices were disorganized and uncoordinated and the unsupported opinions of Interior officials were treated as if they were the product of factual analysis. For example, the July 1981 reevaluation concluding that the Duck Nest Creek tract had competitive interest was based solely on the opinion of Interior field officials. It was not the product of any technical analysis; yet it was not questioned—even though the basis for the prior evaluation with an opposite conclusion was not disproven or

otherwise refuted. In addition, the scope and depth of this and other analyses supporting subsequent opinions on whether Duck Nest Creek was a competitive tract were not determined in light of the specific criteria established in the enabling statute.

Actions Interior could and should have taken--as lessons learned

The Department could--and should--have approached the task of administering the exchange authority provided in Public Law 96-401 (94 Stat. 1701) through a formal, deliberative process. As discussed with your offices, several actions--presented beginning on page 5 of the enclosed briefing document--would have helped ensure a more efficient and effective exchange administration process.

Interior should have established procedures defining the Department's responsibilities and controlling how they would be discharged. Clear procedures would have provided a better framework for administering the exchange--even if only by the establishment of a definitive process and work schedule. With procedures established, Interior's different organizational units would have had a better understanding of their roles in administering the exchange as well as the form and substance of any analyses required of them. We recognize that the absence of procedures could not have, by itself, led to the inefficient and ineffective administration of the Duck Nest Creek exchange. But, in our judgment, it clearly fostered what evolved into an uncontrolled decision process.

We believe current and future exchanges may benefit from a more structured administrative approach featuring clear definitions of the Department's responsibilities and the means by which they will be discharged.

As requested by your offices, we did not obtain Department of the Interior comments on this report. However, we discussed the factual content of the report with responsible officials. In addition, we informed the Department of our plans to begin later this year a broader-based evaluation of other coal and solid mineral exchanges. Except for not obtaining the Department's comments on a draft of this report, our review was conducted in accordance with generally accepted government auditing standards.

We trust this report will be of assistance in your continuing oversight of the Federal Coal Management Program. As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time, we will send copies to the Director, Office of Management and Budget; the Secretary of the Interior; and other interested parties.

J. Dexter Peach

Director

Enclosure

Bigging and the State of the St

GAO STAFF BRIEFING DOCUMENT ON THE DUCK NEST CREEK COAL LEASE EXCHANGE

OVERVIEW

This document discusses the results of our evaluation of the Duck Nest Creek coal lease exchange. Though the exchange appeared highly questionable at the time of the request, GAO's legal and economic analyses demonstrate that the exchange satisfied the criteria established in the enabling legislation. GAO found, however, that the process Interior followed in the exchange was deficient. In focusing on Interior's process, the following sections cover what

- --criteria were established in enabling legislation;
- --actions Interior took to carry out the law;
- --problems rendered Interior's actions ineffective; and
- --actions Interior could and should have taken.

STATUTORY CRITERIA

- --Established in the Northern Cheyenne Settlement Act, Public Law 96-401, 94 Stat. 1701.
- --For coal companies to receive a noncompetitive lease(s) under the act, Interior had to determine that the proposed federally owned coal deposits involved were for the foreseeable future unlikely to be separately mined efficiently and economically, except by incorporation into an existing mining unit controlled by the company.
- -- Not the same as "bypass" 1 tracts.
 - --Legislation would have been redundant because Interior's Emergency Coal Leasing Program already covered bypass situations. That is, it would have offered to trade coal companies something they were already able to get--without trading--under another program.

공에 가는 그는 사람이 되었다. 그 가는 이 사는 그 變化한 사람들은 그 하는 생활하는데

¹A "bypass" tract is next to an existing mine and it can be economically mined around if no lease is awarded. If the coal it contains is not recovered by the existing mine, it will be "bypassed" or otherwise lost because cost of recovery at a later date would be too high to justify mining of the coal.

--More like "production maintenance" 2 tracts which generally are of interest to only one company.

--Criteria apply to entire Duck Nest Creek tract, not just the northern portion.

SEQUENCE OF ACTIONS INTERIOR TOOK

Our review showed that Interior took a series of conflicting actions over time. During the 14-month period from November 1980 through December 1981, Interior evaluated the Duck Nest Creek tract four times--each successive evaluation reaching the opposite conclusion of the one before it. The sequence of the actions taken by the Department is outlined below.

- --On November 2, 1980, the USGS tract delineation team in Casper, Wyoming, classified the entire Duck Nest Creek tract as a mine extension (production maintenance) tract.
 - --Despite the large amount of coal it contained (354 million tons) the tract was not considered a viable mining operation. That is, it was not--by itself--considered capable of supporting a new mine because the coal was very deep and would not be attractive to many companies. The team mining engineer thought that if the tract was not leased, then a coal bypass situation could exist.
 - --Although unknown to USGS at the time, Interior headquarters had already assured Amax that it could obtain the northern portion of the tract through the proposed exchange.
- --Prior to May 1981, Interior decided to administer the exchange as an adjunct to preparations for the April 28, 1982, Powder River Basin coal sale.
 - --Exchange considered a one-time job which did not require specific procedures.
- --Controversy over whether the entire Duck Nest Creek tract was a competitive lease tract surfaced at the May 21, 1981, meeting of the Powder River Basin Regional Coal Team (RCT).

²A "production maintenance" tract is one that is next to an ongoing mining operation, designed to extend production over the long term rather than increase annual production, and intentionally delineated to prevent future bypasses and shutdowns. Maintenance leasing differs from emergency coal leasing in that the latter only provides for an amount of coal sufficient to allow the company to maintain current production levels until the next regional coal sale.

--Due to a coordination problem, the RCT was not informed of Interior headquarters negotiations with the Amax Coal Company.

- --Concern was whether the entire Duck Nest Creek tract was a viable tract, with competitive interest.
- --On July 13, 1981, USGS tract delineation team reclassified the entire Duck Nest Creek tract as viable with competitive interest based on the presence of Mobil's mine abutting the southern border of the tract and Arco's state lease adjoining the western border.
 - -- The reclassification was made without additional data or analysis.
 - -- The tract delineation report was not revised, and initial findings were not refuted.
 - --Opinion of USGS tract delineation team was treated as factual analysis by BLM's Wyoming office.
- --October 2, 1981--Powder River Basin Regional Coal Team held fact-finding meeting.
 - --Amax argued its ownership of surrounding and intervening surface rights and coal would block any other company from mining the tract.
 - --USGS held that the tract was competitive and viable even considering Amax's surface and coal ownership.
 - -- The Governor of Wyoming urged that the entire tract be offered for sale in April 1982.
 - --Arco stated it would bid on the tract if it was offered for sale.
 - --Other companies argued the tract was noncompetitive.
- --November 16, 1981--USGS Economic Evaluation team in Casper, Wyoming, concluded Duck Nest Creek was a noncompetitive tract.
 - -- The team contended, however, that it was not given sufficient time nor independence to conduct an objective evaluation.
 - --Unrealistic mining assumptions caused a misuse of the Discounted Cash Flow (DCF) analysis technique.
- --November 30, 1981--BLM Director denied the exchange of the northern portion of Duck Nest Creek.

--Decision based on the recommendation of BLM's Wvoming State Office which treated the unsupportable opinion of the USGS tract delineation team as factual analysis.

- --December 7, 1981--Senior Interior officials disagreed with BLM Director's decision in memo to the Secretary.
 - --Memo signed by Assistant Secretaries for Energy and Minerals and Indian Affairs and by the Department's Solicitor.
 - --Disagreement was based on an Indian Affairs' allegation that BLM's Wyoming Office "manufactured" a competitive interest in Duck Nest Creek.
 - --Trust advisor to the Assistant Secretary of Indian Affairs questioned the basis for reclassifying Duck Nest Creek as a viable tract with competitive interest.
- --December 23, 1981--USGS Office of Programs in Reston, Virginia, concluded Duck Nest Creek was a competitive tract, but the northern portion of the tract was probably noncompetitive.
 - --Two USGS offices (Conservation Division and Office of Programs) disagreed on how this information should be communicated to the BLM Director.
 - --DCF analysis appears flawed because Interior's model assumed production within 6 years and a mine life of 25 years--both unreasonable assumptions.
- --December 23, 1981--BLM Director reversed his original decision and approved exchange of the northern portion of Duck Nest Creek.
 - -- New USGS information cited as basis for exchange.
 - --BLM Director not informed of all USGS results.
 - --Not clear what information was provided the BLM Director.
 - --December 24, 1981, USGS memo to BLM did not discuss the results of analysis of the entire tract.
 - --If this memo was the true basis, then the decision was based on partial information from a flawed analysis.

PROBLEMS WITH INTERIOR'S ACTIONS

--Too many organizations were given a voice in the exchange process.

- --Headquarters and field input was disorganized and unsystematic.
- -- Opinions were treated as if they were facts.
 - --Views of Interior field officials and industry representatives' views were not corroborated by objective analysis.
- -- Adequate and reliable analyses were not undertaken.
 - --Market and mining conditions never analyzed; potential competitors need for more coal not analyzed.
- -- The Discounted Cash Flow (DCF) analysis technique was misused.
 - --Faulty assumptions and model limitations made analyses highly questionable.
 - --DCF inappropriate because it made assumptions about the unforeseeable distant future--a period beyond the "foreseeable" time horizon specified in the enabling statute.
- -- The statutory criteria were not properly considered.
 - -- The foreseeable future and the likelihood of separate mining were never explicitly analyzed.
- -- The BLM Director was not provided adequate information on which to base a decision.
 - --November 30, 1981, decision based on opinion of USGS field staff.
 - --December 23, 1981, decision based on partial information from flawed DCF analysis.

ACTIONS INTERIOR COULD AND SHOULD HAVE TAKEN AND LESSONS LEARNED

- --Interior should have established procedures defining the Department's responsibilities and controlling how they would be discharged--specifically addressing the
 - --flow of work in the exchange administration process;
 - --roles of different Interior organizations at the headquarters and field levels;

- --procedures for coordination between organizations;
- --information upon which an exchange decision would be made, including the analyses needed by the decision maker;
- -- form in which the information should be provided:
- --dates by which the information should be developed; and
- --procedures for clarifying policy matters and settling technical disagreements.
- --Current and future exchanges may benefit from a more structured administrative approach featuring clear definitions of the Department's responsibilities and the means by which they will be discharged.

OTHER MATTERS

- --The position discussed above is consistent with those taken in our prior reports on the Utah Power and Light and Meridian exchanges (EMD-81-87, dated August 6, 1981, and GAO/RCED-83-58, dated March 7, 1983).
- --Over the past 3 years, the Federal Coal Management Program--including its procedures for administering coal exchanges--has undergone substantial revision as a consequence of GAO, Linowes' Commission, and OTA recommendations. We have not evaluated the sum and substance of the revisions.
- --GAO has included a broad-based evaluation of western coal and other mineral exchanges in its work plan and hopes to begin that work later this year.

The state of the state of