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

ENERGY AND MINERALS DIVISION

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RELEASED

September 29, 1981

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The Honorable Howard M. Metzenbaum
United States Senate

The Honorable Sam Gejdenson
House of Representatives

Subject: The Tertiary Incentive Program Was Poorly Designed and Administered (EMD-81-147)

In response to your letters of May 4, 1981, and May 22, 1981 (see app. II and app. III), we examined the Department of Energy's (DOE's) tertiary incentive program. As agreed with your offices, we addressed

--the number of certifications DOE received for tertiary recovery projects in total and during the 2 months prior to and 2 months following the President's January 28, 1981, decontrol order;

--the amount of expenses producers recouped during this 4 month period;

--the resources DOE allocated to monitor this program to ensure against abuse;

--the efforts DOE made to determine the costs and benefits of this program; and

--the ruling DOE issued concerning the impact of decontrol on the program.

Our findings and conclusions are summarized below. Detailed information is provided in Appendix I.

PROGRAM SIZE

From the start of the program on August 21, 1979, until its termination on March 31, 1981, DOE's Economic Regulatory Administration (ERA) received a total of 423 certifications for new tertiary oil recovery projects. DOE received 54 certifications during the 2 months prior to decontrol and 100 during the 2 months after decontrol. Thus, about 35 percent of all

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projects were certified in the last 4 months of the program. Producers could either self-certify the tertiary recovery technique used and expenses allowed or petition for an ERA certification. Generally, producers used the self-certification method. Of the 423 projects, producers certified 396.

PROGRAM COST

According to ERA, producers claimed $965 million of allowable expenses and recouped in total about $831 million from August 21, 1979, through March 31, 1981. About 20 percent of the total $965 million allowable expenses reported were attributed to new projects certified in the final 4 months of the incentive program. Although producers report their allowable expenses by individual projects, they do not report revenues received in the same manner. According to ERA, to reduce the reporting burden, producers were required to report monthly only the aggregate amount of revenues received for all tertiary projects.

Because of this lack of detail, ERA was unable to tell us the revenues received for the 154 specific projects certified after December 1, 1980. Of the total $831 million received through March 1981, ERA estimated all producers received $550 million between December 1, 1980, and March 31, 1981.

To determine the reliability of ERA's cost data, we compared the monthly expense reports for eight projects with ERA's automated information system. We found that ERA had not entered into its data base almost $1.5 million in allowable expenses claimed on three of the eight projects we reviewed.

We believe that a reliable automated information system is essential for ERA to help ensure compliance with program regulations. Because of the omissions we identified, it is questionable whether the information ERA provided us is accurate.

ERA'S EFFORTS TO ASSURE COMPLIANCE WITH THE PROGRAM'S REGULATIONS

The incentive program, as designed, made it difficult for ERA to assure compliance with the program's regulations. ERA has two compliance offices: Office of Special Counsel for Compliance (Special Counsel) and Office of Enforcement (Enforcement). The only real expression of concern about compliance we could find came from Special Counsel 10 months after the program began. Special Counsel requested that DOE's Energy Information Administration (EIA) set up a computerized information system which would help it to determine how producers complied with the program's regulations. In our opinion, work on design of this system should have begun when the program was initiated. EIA, however, did

not respond to Special Counsel's request and ERA apparently did not pursue EIA's lack of response very aggressively.

To date, EIA has not satisfied Special Counsel's request to develop the system or collect and process the data it wanted. According to an EIA official, EIA did not respond to Special Counsel's request because of other demands for data services. ERA did, however, hire a contractor in September 1980 to set up a limited automated system to provide data on allowable expenses and revenues received. According to ERA officials, the contract was for a different purpose than the system requested by Special Counsel.

An EIA official told us he expects to have a system by October 1981 to perform some of the checks requested by Special Counsel. EIA's efforts may be too late to be useful. Special Counsel has already scheduled its audit work for fiscal year 1982, and Enforcement officials stated that they plan to do no other tertiary audits.

ERA's Special Counsel and Enforcement Offices did not include the tertiary program in their audits of companies until as late as May 1981. Both these offices were enforcing pricing and crude oil reseller regulations which had a higher priority. As a result, the tertiary incentive program received no audit attention until after the program ended.

Since May 1981 both compliance offices opened a total of six audits which included the tertiary program but no audit reports have been issued. Special Counsel expects to report on two audits by the end of October 1981 and Enforcement does not plan to report on its completed audit because officials told us they found no violations. However, we found that Enforcement did not examine all the producer's tertiary investments. Thus, of the one audit Enforcement performed, there is no assurance that all investments were in compliance with the regulations.

Because of uncertainties concerning DOE's fiscal year 1982 budget and ERA's compliance offices' past emphasis on higher priority audits, it is questionable whether on-going audits will be completed or how much additional emphasis the tertiary program will receive. In addition, both Special Counsel and Enforcement have had and may continue to have staff reductions. Completion of audits and initiation of additional audits is dependent on their staffing situations.

DOE'S COST AND BENEFIT ANALYSIS

In July 1979, DOE issued its analysis of the potential costs and benefits of this program. DOE estimated that 40 to 60 projects would start each year; producers would recoup between

$400 million and $600 million each year; and the program's benefits would be an additional 8.9 billion to 16.1 billion barrels of crude oil through 1995 as a result of this program.

Although directed earlier by the Office of Management and Budget to address alternative methods of enforcing compliance with regulations, DOE in this July 1979 regulatory analysis did not do so. Thus, DOE's lack of attention to ensuring regulatory compliance can be traced all the way back to its analysis of the costs and benefits of initiating this program.

DOE'S RULING CONCERNING THE IMPACT OF DECONTROL ON THE PROGRAM

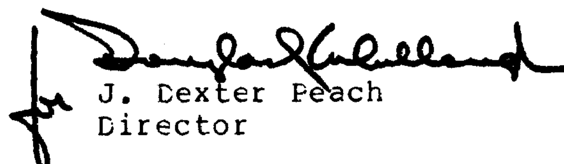
You also asked us to determine whether the decontrol order authorized DOE to continue the incentive program until March 31, 1981. Because DOE's ruling concerning the impact of decontrol on the program is under litigation, our discussion in Appendix I is limited to information concerning DOE's actions subsequent to the decontrol order and the major issues and status of the court cases.

SCOPE AND METHODOLOGY

We obtained information on the tertiary program from DOE officials within the Office of General Counsel and ERA's Office of Petroleum Operations, Office of Special Counsel for Compliance, and Office of Enforcement. We examined legislation, regulations, and the current litigation against DOE. ERA provided us information on the number of tertiary projects and allowable and recouped expenses. We performed a limited verification of the data ERA provided us by comparing the monthly expense reports for eight projects with ERA's computerized data.

Because of the reporting requirements of this request, we did not obtain official DOE comments. 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 its issuance. At that time, we will send copies to the Secretary of Energy and make copies available to others upon request.

Sincerely yours,



J. Dexter Peach
Director

Appendices - 3

BACKGROUND

Tertiary oil recovery refers to techniques used to recover oil left in the ground after primary natural pressure and secondary recovery efforts (generally the use of waterflooding) have been used. Tertiary recovery techniques generally involve (1) injecting steam, chemical solutions, carbon dioxide, or other fluids into an oil reservoir to thin or displace remaining oil and (2) injecting other fluids to force the oil toward producing wells. Of the 480 billion barrels of oil discovered in the United States (including tar sands), DOE estimated that 330 billion barrels will not be recovered by primary and secondary procedures. Although the amount of oil that can ultimately be recovered by tertiary oil recovery processes is uncertain, DOE estimates that between 18 billion and 52 billion barrels can be recovered.

In the late 1960s and early 1970s, recognition of the large amounts of oil left in the ground after primary and secondary recovery led to development of processes for recovering oil by tertiary techniques. Both industry and, to a lesser extent, Government participated in laboratory development of advanced processes. After the oil embargo of 1973, the Government started a program to develop field technology. This program, which included cost-shared pilot tests with industry, was designed to verify laboratory findings through field demonstrations. About 25 field demonstrations were initiated at a total cost of about $250 million with one-third of the cost paid by the Government. Tertiary oil recovery now accounts for only about 340,000 barrels per day of oil or about 5 percent of total domestic oil production.

In 1976, the Congress passed the Energy Conservation and Production Act (P.L. 94-385). This act authorized price incentives for tertiary recovery techniques and specified some high-cost technologies that would be uneconomical without price incentives, such as miscible fluid or gas injection; chemical, steam, or microemulsion flooding; in situ combustion; cyclic steam injection; and polymer or caustic flooding. The act also provided for the adjustment of crude oil costs as a means to encourage increased domestic production through the use of tertiary oil recovery techniques.

To meet this mandate, DOE's Economic Regulatory Administration (ERA) first established the tertiary incremental program on September 1, 1978. This program's requirements were more restrictive and did not generate as much industry interest as the incentive program which ERA subsequently established. One difference between the two programs was that under the incremental program companies had to wait until the projects produced oil before recouping any expenses incurred from starting these projects. Because it can take as long as 2 years before a

tertiary project produces oil, companies would not recoup revenues for 2 years to offset the expenses realized from starting these projects. Another difference was that under the incremental program ERA had to approve the techniques used for all projects. Between September 1, 1978, and August 21, 1979, ERA approved only six projects under the incremental program.

Because of this limited response to the incremental program, DOE added the incentive or "front end" program on August 21, 1979. The tertiary incentive program encouraged producers to undertake high-cost, high-risk technologies by allowing them to recoup at the front-end 75 percent of certain allowed expenses 1/ up to $20 million per property. The producer recouped these allowed expenses by selling price-controlled oil at market prices from any United States property in which it had an interest. For example, a company with a tertiary project in New Mexico could sell oil from a field in Texas at uncontrolled prices. In addition, the regulations provided that producers could either self-certify a project or petition for an ERA certification. ERA's regulations listed 10 approved tertiary recovery techniques which producers could use. 2/ If a producer used one of these 10 ERA-approved techniques, the producer self-certified the technique used and self-certified that the expenses incurred were allowable under the program's regulations. If a producer wanted to use a tertiary recovery technique not approved by ERA, the producer petitioned ERA to certify the project.

On January 28, 1981, President Reagan ordered the immediate decontrol of domestic crude oil prices and elimination of allocation controls on the remaining regulated refined petroleum products. DOE determined that the effect of the decontrol order did not terminate the regulations applicable to the incentive program. These regulations allowed producers to retroactively increase the price of crude oil sold--up to 60 days after the oil was

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1/Allowed expenses include environmental costs necessary to comply with State and Federal regulations as well as engineering and laboratory costs up to $1 million or 25 percent of the total allowed expenses, whichever is less. The total was not to exceed 75 percent of the expenses paid by the producer.

2/The 10 approved tertiary techniques are miscible fluid displacement, carbon dioxide miscible fluid displacement, conventional and unconventional steam drive injection, microemulsion flooding, in situ combustion, polymer augmented waterflooding, cyclic steam injection, alkaline (caustic) flooding, immiscible non-hydrocarbon gas displacement, and enhanced heavy oil recovery.

first sold--to cover the expenses incurred to start a tertiary project. Therefore, DOE concluded that producers could recover expenses through March 31, 1981, by recertifying crude oil sold in December 1980 and January 1981.

DOE issued Ruling 1981-1 on February 12, 1981, explaining the impact of the decontrol order on the tertiary program. According to that ruling, producers could certify new projects on or after January 28, 1981, and could recoup expenses from all projects through March 31, 1981. DOE received 100 certifications for new projects after the decontrol order. Because of the overwhelming response to the program after decontrol, DOE issued an advance notice of proposed rulemaking on March 17, 1981, stating its intention to terminate the incentive program as of March 19, 1981, and prohibiting producers from recouping expenses after that date. In proposing this action, DOE tentatively concluded that the program was no longer achieving its goal of promoting the start of tertiary projects that otherwise would not have been undertaken.

On April 28, 1981, DOE issued a notice of proposed rulemaking to end the incentive program as of March 19, 1981. ERA held public hearings on this proposal on May 19 and 20, 1981. On July 9, 1981, DOE issued a Notice of Determination which stated it did not intend to adopt the proposals set forth in the April 28 notice of proposed rulemaking. DOE concluded that the record established that its tentative conclusions were wrong. As a result of not adopting the April 28 proposed rulemaking, the incentive program ended on March 31, 1981, rather than on March 19, 1981. According to DOE officials, about six projects would not have been certified if the program ended on March 19, 1981.

Several oil companies brought lawsuits against DOE concerning its interpretation of the impact of the decontrol order on the incentive program as set out in Ruling 1981-1. The companies asked the courts to declare DOE's continuation of the tertiary program beyond decontrol unlawful. The lawsuits also highlight the relationship between the incentive program and

another of DOE's programs, the entitlements program. 1/ Currently, there has been no final judicial determination on the legality of Ruling 1981-1.

SCOPE, OBJECTIVES, AND METHODOLOGY

Senator Metzenbaum and Congressman Gejdenson asked us to obtain information concerning the tertiary incentive program and DOE's decision to continue the program beyond President Reagan's January 28, 1981, decontrol order. Specifically, the topics we addressed were (1) the number of certifications received for tertiary projects in total and during the 2 months prior to and 2 months following the January 28, 1981, decontrol order; (2) the amount of expenses recouped by producers during this 4-month period; (3) the resources DOE allocated to monitor this program to ensure against abuse, (4) DOE's efforts to determine the costs and benefits of this program; and (5) DOE's ruling concerning the impact of decontrol on the program.

We obtained information on the tertiary program from DOE officials within the Office of General Counsel and ERA's Office of Petroleum Operations, Office of Special Counsel for Compliance, and Office of Enforcement. We examined legislation, regulations, and the current litigation against DOE. ERA provided us information on the number of tertiary projects and allowable and recouped expenses. We also performed a limited verification of the data ERA provided us by comparing the monthly expense reports for eight projects with ERA's computerized data. We selected four projects that had been certified by major companies 2/ and four by independents. The number of investors in the projects ranged from 1 to 51.

1/The entitlements program was designed to distribute the benefits of price controls on domestic crude oil among refiners. An entitlement was the right to refine a barrel of price-controlled domestic oil. Refiners bought and sold entitlements at a price calculated monthly by DOE as the difference between the average price of controlled and uncontrolled oil adjusted by volume of each category of oil sold to permit them to process their monthly volume of controlled oil. Refiners generally bought entitlements to process more than the national average of controlled oil. Cash received in exchange for entitlements sold in effect reimbursed refiners who were selling entitlements for part of the higher purchase cost of uncontrolled oil.

2/DOE generally has identified 34 companies which it categorizes as major oil companies.

Since DOE's ruling concerning the impact of the decontrol order on the program is currently in litigation, we are providing only a summary of the major issues and the status of these court cases.

PROGRAM SIZE

Between August 21, 1979, and March 31, 1981, 423 projects were certified either by producers or ERA. Of these 423, 54 were certified between December 1, 1980, and January 27, 1981, approximately 2 months before decontrol; and 100 were certified between January 28, 1981, and March 31, 1981, approximately 2 months after decontrol. Of the 423 projects certified as of March 31, 1981, 396 were self-certified by producers; ERA certified 27. Of the 154 projects certified between December 1, 1980, and March 31, 1981, producers certified 152. ERA received almost 35 percent of the total certifications for new tertiary projects in the last 4 months of the program and producers generally used the self-certification method to start these projects.

PROGRAM COST

ERA required producers to report monthly the allowable expenses by individual project. From the start of the program on August 21, 1979, until March 31, 1981, producers reported $965 million in allowable expenses. Of this amount, ERA attributed $65 million to projects certified between December 1, 1980, and January 27, 1981, and $131 million to projects certified after decontrol. Therefore, about 20 percent of the total allowable expenses were attributed to new projects certified in the final 4 months of the incentive program.

Producers and all other investors in tertiary projects reported monthly the revenues received to offset allowable expenses. The monthly reports of amounts recouped were in aggregate form for all projects in which the producer or investor had an interest. While four of the major producers certified only one tertiary project, the others certified a number of projects. For example, one producer certified 48 projects, another 34, and still another 31. According to ERA officials, producers also invested in and recouped expenses from tertiary projects of other producers. Anticipating these types of multiple investment, ERA specifically designed the program to allow monthly aggregate reporting of revenues to reduce the reporting burden to producers.

Because recouped expenses are reported in the aggregate, ERA was unable to tell us the revenues received for the 154 specific projects certified after December 1, 1980. However, from the start of the program in August 1979 through March 31, 1981, all producers recouped about $831 million of the $965 million of allowable expenses reported. Of the total $831

million recouped through March 1981, $550 million was recouped between December 1, 1980, and March 31, 1981, according to ERA. The total revenues received will continue to increase because producers experience delays in receiving revenues after billing refiners for price-controlled oil which was subsequently recertified to the market price. For example, according to ERA, as of September 18, 1981, all producers recouped about $846 million.

To determine the reliability of ERA's cost data, we compared the monthly expense reports for eight projects with ERA's automated information system. We found that ERA had not entered into its data base almost $1.5 million in allowable expenses claimed on three of the eight projects we reviewed. On one project about $458,000 was omitted; on another about $229,000; and on another about $773,000. One of these omissions was from an amended expense report, and an ERA official stated that ERA made a policy decision not to update the information based on amended expense reports. Because we did not review the expense reports for all 423 projects, we do not know how often such omissions occurred. ERA officials acknowledged that errors existed in their data, and also indicated they do not know the extent of those errors. Because of the omissions we identified, it is questionable whether the information ERA provided us is accurate.

ERA'S EFFORTS TO ASSURE COMPLIANCE WITH THE PROGRAM'S REGULATIONS

The incentive program, as designed, made it difficult for ERA to assure compliance with the program's regulations. ERA has two compliance offices. The Office of Special Counsel for Compliance (Special Counsel) is responsible for compliance of major oil companies and the Office of Enforcement (Enforcement) is responsible for other oil companies.

In June 1980, 10 months after the program was initiated, Special Counsel requested the Energy Information Administration (EIA), DOE's independent information gathering and analysis arm, to make some comparisons which we believe should have been available from the beginning of the program. Specifically, Special Counsel wanted a system so that

--the amount of allowed expenses reported monthly could be tabulated and compared to the $20 million expenses allowed per project and the $1 million, or 25 percent of allowed expenses, limit for engineering and laboratory costs to determine if these limits had been exceeded;

--the amount of recouped expenses reported monthly could be tabulated and compared to the total amount the producer reported in prior months;

--the amount of recouped expenses could be compared to the amount allocated to each investor by the producer;

--the total allowed expenses could be compared with the total revenues received to determine if producers were exceeding the allowed expenses they report; and

--a record would be available showing the date certifications were received.

According to Special Counsel, with this computerized information DCE would have had the capability to conduct preliminary analyses to determine that (1) the claimed allowed expenses do not exceed the regulatory maximums, (2) the cumulative total of recouped expenses and cumulative total of revenue reported by the producer as having been received through the end of the month preceding the current month is reconciled with the amounts previously reported each month, (3) the recouped expenses claimed by each producer do not exceed the amount allocated to that producer, (4) the total incentive revenue received does not exceed the total expenses allowed, and (5) a producer does not receive revenue before that producer is eligible. We are not aware of any similar request by ERA's Office of Enforcement.

To date, EIA has not satisfied Special Counsel's request to develop the system or collect and process the data it wanted. According to an EIA official, EIA did not respond to Special Counsel's request because of other demands for data services. In order to respond to requests for specific program information, in September 1980, ERA hired a contractor to set up a limited automated information system to provided data on allowable expenses and revenues received. According to ERA officials, the contract was designed for a different purpose than the system requested by Special Counsel.

An EIA official told us that he is continuing on an intermittent basis to automate the information requested but as of September 23, 1981, EIA had not completed automating the information nor had it designed the system Special Counsel suggested to detect certain violations. The EIA official stated he expects to have a system by October 1981 which at a minimum would determine whether a company recouped more for its projects than the total allowable expenses they reported.

EIA's efforts may be too late to be useful. The information could have assisted Special Counsel and Enforcement in selecting and carrying out audits to determine program compliance. However, Special Counsel has already scheduled its audit work for fiscal year 1982 and Enforcement officials stated that they plan to do no other tertiary audits.

Under the incentive program, Special Counsel was responsible for monitoring the 280 projects certified by 23 major producers that participated in the program. These 280 projects account for about 69 percent of all expenses claimed under the program. Enforcement was responsible for auditing producers which certified the remaining 143 projects.

Until May 1981 both these offices spent their resources enforcing pricing and crude oil reseller regulations which had a higher priority than the incentive program. As a result, the tertiary incentive program received no enforcement attention until after the program ended. In May 1981, Special Counsel expanded its audits of major producers to include the incentive program as part of its audit of compliance with pricing regulations. Special Counsel tentatively plans to audit nine producers with tertiary projects. Officials believe these nine audits will provide them sufficient insight concerning how the major producers complied with the program's regulations because they represent about 42 percent of the total tertiary projects undertaken by all companies.

As of September 22, 1981, Special Counsel had completed about 95 percent of the field work on two of these audits. According to Special Counsel's Compliance Program Plan dated June 26, 1981, final reports are expected by the end of October 1981. The field work on three others is about 60 percent complete. An official stated he expects the field work on these to be completed by the end of November 1981 and final reports by the end of January 1982. Of the four remaining audits Special Council tentatively plans to do, one could start as early as the week of September 28, 1981, and two will not start until January 1982. Special Counsel could not estimate when the fourth planned audit will be initiated. Special Counsel had planned to open this audit in September 1981 but, according to officials, the producer's records concerning the incentive program were in such poor condition that Special Counsel is giving the producer time to get its records in order.

An official in Special Counsel told us that the completion date of two audits will be later than stated in the Compliance Program Plan. Further, three of the nine audits Special Counsel told us they were planning were not listed in the plan. According to an official, two were omitted because of a clerical error and one was scheduled after the plan had been prepared. Further, we noted that two of the audits initiated in May 1981 did not appear on the Compliance Program Plan for the period October 1, 1980, through June 15, 1981.

However, Special Counsel may not be able to complete all of its on-going and planned audits because of fiscal year 1982 budget uncertainties. On June 5, 1981, the Supplemental Appropriations and Rescissions Act of 1981 (P.L. 97-12) carried

over to fiscal year 1982 $38.2 million for all ERA activities from fiscal year 1981 funding. Congress is now in the process of reviewing the administration's fiscal year 1982 budget and Special Counsel officials do not know how much additional funding it will receive. In addition, we noted that Special Counsel's audit staff has been, and will continue to be reduced. In March 1981 there were 350 auditors nationwide. In September 1981 there were about 180, and a reduction to 150 is expected by December 1981.

Enforcement also in May 1981 began an audit of one independent producer. On September 3, 1981, the field work was completed. There will be no report issued on this audit because there were no findings of violations of regulations. According to an Enforcement official, the producer certified two projects but did not receive any revenues. However, the producer also invested in other projects but Enforcement did not examine anything related to these investments. Thus, of the one audit performed, there is still no assurance that any investments made and expenses recouped were in compliance with the program's regulations.

An Enforcement official explained he does not expect to audit any other producers because other activities such as the crude oil reseller program will receive priority attention. Enforcement expects that audits of these programs will result in greater dollar findings than audits of the incentive program. According to this official, if Enforcement found violations in all 143 tertiary projects for which it had responsibility, the total dollar impact would be about $267 million. However, potential violations from the crude oil reseller and other programs could amount to about $3.1 billion. Enforcement also expects a reduction in its staff as a result of budget cuts. Therefore, Enforcement plans to concentrate on those programs with the greatest potential dollar impact.

Officials in both Special Counsel and Enforcement told us that the manner in which the incentive program was designed makes it difficult to determine whether the revenues received by producers to offset expenses claimed would in fact be used to start or complete a tertiary project. Although the program's regulations require revenues recouped to be used for a tertiary project, they set no deadline for starting the project. Therefore, the auditors cannot determine that producers who received revenues by certifying a tertiary project will use them for the purpose stated. On one project, according to these officials, the producer claimed he paid $35 million for chemicals which will not be delivered until 1985 and on another, delivery of equipment from an affiliated company will not be made until 1988. The auditors, however, have no way of knowing whether producers will receive, use, or cancel their orders and request reimbursement at some future date. Compliance, therefore, in some instances cannot be determined until some time in the future.

DOE'S COST AND
BENEFIT ANALYSIS

In July 1979 DOE issued its "Regulatory Analysis" of the costs and benefits of initiating the tertiary incentive program.

The Regulatory Analysis considered several approaches to provide financial incentives for tertiary recovery techniques. For example, DOE considered (1) incentives for small producers only, (2) direct production subsidies, and (3) release from price controls of all production (including primary production) from a property on which a tertiary project is installed. The method DOE selected placed a $20 million maximum on what producers could recoup per property and allowed producers to recoup certain expenses immediately rather than waiting for actual tertiary production to begin.

DOE's analysis estimated that producers would recoup between $400 million and $600 million per year. DOE assumed that 40 to 60 new projects would be added each year and about $10 million would actually be recouped per project. DOE based its estimate of the number of projects on an Oil and Gas Journal (a trade publication) survey that showed that companies had started about 20 new tertiary projects each year since 1973. DOE concluded that the financial incentives provided by this program would double or triple this number.

The analysis estimated 8.9 billion to 16.1 billion barrels of crude oil would be recovered through 1995 as a result of this program. However, a more recent ERA compilation of producer estimates shows that 3.6 billion barrels of crude oil may ultimately be recovered from tertiary projects started under this program. ERA derived the recent estimate by obtaining a per-project ratio of the number of barrels of oil that producers estimated could be produced for 284 projects and extrapolating this figure to determine how much oil could be produced from the 423 projects. The analysis also included knowledge gained from an on-going, DOE research and development effort as a benefit of the incentive program. However, the benefits that resulted from a separate Federal research and development program should not have been included as benefits of the tertiary incentive program.

In addition, although directed by the Office of Management and Budget on November 21, 1978, to address in all regulatory analyses alternative methods of enforcing compliance with regulations, DOE in this July 1979 regulatory analysis did not do so. Thus, DOE's lack of attention to ensuring regulatory compliance can be traced all the way back to its analysis of the costs and benefits of initiating such a program.

CURRENT LITIGATION

You also asked us to determine whether the decontrol order authorized DOE to continue the incentive program until March 31, 1981. Because DOE's ruling concerning the impact of decontrol on the program is under litigation, our discussion is limited to information on DOE's actions subsequent to the decontrol order and the major issues and status of the court cases.

The January 28, 1981, decontrol order exempted all crude oil and the remaining regulated refined petroleum products from price and allocation controls. It directed the Secretary of Energy to revoke all price and allocation regulations made unnecessary by the decontrol order but stipulated that some regulatory programs would continue through March 31, 1981. DOE issued Ruling 1981-1 on February 12, 1981, explaining the impact of the decontrol order on the tertiary program. According to that ruling, producers could certify new projects on or after January 28, 1981, and could recoup expenses through March 31, 1981.

Several oil companies brought lawsuits 1/ against DOE concerning its interpretation of the impact of the decontrol order on the incentive program as set out in Ruling 1981-1. The companies asked the courts to declare DOE's continuation of the tertiary program beyond decontrol unlawful and to direct DOE to stop the program. Currently, there has been no final judicial determination about the legality of Ruling 1981-1.

In April 1981, the district court of Delaware denied a preliminary injunction in the Diamond Shamrock case. The court stated that DOE could continue enforcing the program until the court decided the merits of the case. This litigation is continuing, and it is not known when the court will issue its final decision.

Another lawsuit still pending was brought by Union Oil Company of California against DOE. In its complaint, Union Oil Company alleged that the portion of Ruling 1981-1 which allows producers to recoup expenses incurred or paid after January 27, 1981, was beyond DOE's authority. The Company argued that the

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1/Diamond Shamrock Corporation, et. al v. James B. Edwards, Secretary of Energy (Civ. No. 81-101) (District of Columbia); Union Oil Company of California v. DOE (Civ. No. 81-1961) (Central District of California). Other lawsuits concerning various aspects of Ruling 1981-1 are also pending against DOE.

tertiary program expired on January 28, 1981, when the President eliminated price controls on domestic oil. Therefore, no producer should recoup expenses unless those expenses were incurred and paid before January 28, 1981.

These lawsuits also highlight the relationship between the tertiary incentive program and another of DOE's programs, the entitlements program. The purpose of the entitlements program was generally to equalize U.S. refiners' crude oil costs by distributing the benefits of access to lower-priced domestic crude oil proportionately to all domestic refiners through a system of monetary rather than physical transfers. The incentive program allowed producers to start tertiary projects and pass through allowable expenses by retroactively increasing crude oil prices charged to refiners. If a refiner purchased price-controlled oil and the producer later certified a tertiary project, the producer recertified the controlled crude oil prices to the world market price and billed the refiner for the higher price. The refiner would then report this recertification to the entitlements program. The entitlements program would allow that refiner to be reimbursed for a portion of the increased cost of the tertiary oil through payments from other refiners who had more price-controlled oil. Thus, as a result of the recertifications, some refiners who previously bought entitlements might have to sell entitlements and vice versa.

SAM GEJDENSON
2d DISTRICT
CONNECTICUT

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

COMMITTEES:
FOREIGN AFFAIRS
INTERIOR

May 4, 1981

Mr. Milton Socolar
Acting Comptroller General
General Accounting Office
4th & G Streets
Room 7014
Washington, D.C. 20548

Dear Mr. Socolar:

Effective August, 1979, the Department of Energy adopted a tertiary incentive program in an attempt to encourage the production of additional domestic petroleum supplies.

Essentially, the tertiary incentive program allowed a producer of price-controlled domestic crude oil to raise the price of that crude to the market level, to the extent that the price was necessary to enable the producer to recover the expenses he incurred as a result of undertaking enhanced recovery projects.

It is certainly possible that the prospect of higher revenues caused producers to increase their investment in tertiary recovery efforts, and this might have led to an increase in crude oil production. The possibility also exists, however, that the ultimate effect of this program was to impose an unnecessary economic burden on consumers without a corresponding increase in petroleum supplies. The possibility of abuse, I believe, has been heightened by the fact that the Department of Energy relied on a program of self-certification by producers as a method for determining their eligibility for the tertiary incentive program. The Department seemed to admit as much in its recently released rulemaking, dated April 28, in which it terminated the tertiary program.

With this background in mind, I am taking this opportunity to ask the General Accounting Office to conduct a preliminary inquiry into the conduct and consequences of the tertiary incentive program. I am interested in obtaining answers to the following questions:

1. What kind of resources did the Department of Energy allocate to monitor this program to insure that it was not being abused?

2. What efforts has the Department made to determine the benefits and costs of this program to the public?

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3. Did some producers receive revenues for tertiary projects that they had planned before the program was adopted by the Department of Energy? In other words, did producers receive revenues for projects they would have likely undertaken anyway?

4. Are there examples of producers who certified their desire to undertake a tertiary recovery project without adequately demonstrating their intention to carry it out?

5. Were producers certified for projects that were not scheduled to begin for a considerable period of time? Did the Department allow additional revenue to flow to producers when it would have been reasonable for the Department to anticipate that circumstances might have arisen which would eliminate the need for additional financial support for the project?

I would most appreciate it if your staff would attempt to develop answers to these questions and compile their findings at the earliest possible date. At that time, I would welcome an opportunity to discuss these conclusions with the pertinent members of your staff.

If you have any questions or would like additional information on this matter, you may contact Ed Greelegs of my staff at 225-5004.

Thank you for your time and attention in this matter.

Sincerely,

Sam Gejdenson
Member of Congress

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United States Senate

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
WASHINGTON, D.C. 20510

May 22, 1981

The Honorable Milton J. Socolar
Acting Comptroller General
General Accounting Office
411 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Socolar:

On January 28th President Reagan signed an executive order decontrolling all crude oil and oil-based products still under price controls. A portion of that order directed the Secretary of Energy to take all actions necessary to ensure that DOE regulations comply with the terms of the order.

The Department of Energy, however, decided to continue the Tertiary Incentive Recovery Program until March 31. During this two month period, a number of major oil companies and independent producers were paid hundreds of millions of dollars for enhanced recovery projects, some of which will not even begin production until next year. Applications under this program increased so dramatically that DOE abruptly terminated the program twelve days early on March 31. Allegations have been made that total payments under this pre-decontrol program may reach one billion dollars for the two months.

I would like the GAO to research the following issues as soon as possible:

--Whether President Reagan's January 28 decontrol order authorized DOE to continue the Tertiary Incentive Program until March 31.

--How many applications have been made for Tertiary Recovery Projects during the two months prior to decontrol, as well as during the two months succeeding the order.

--How much money has been paid out to oil companies during these two periods, and whether any of these payments should have been made, in light of the fact that all oil is now decontrolled and many of the recovery projects will not begin production for many months.

--How much money this two month extension has cost the consumers.

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--To what degree any oil companies have benefited economically through this program during the past four months.

I look forward to receiveing your report on these issues as soon as possible. If you have any questions, please contact David Springer of my staff at 224-8920.

Very sincerely yours,

Howard M. Metzenbaum
United States Senator

HMM/esm

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