PIPELINE SAFETY FUND

Minimum Balance Was Not Reasonably Estimated
April 30, 2001

The Honorable Richard C. Shelby
Chairman
The Honorable Patty Murray
Ranking Member
Subcommittee on Transportation
Committee on Appropriations
United States Senate

The Honorable Harold Rogers
Chairman
The Honorable Martin Olav Sabo
Ranking Minority Member
Subcommittee on Transportation
Committee on Appropriations
House of Representatives

The Office of Pipeline Safety (OPS), a component of the Research and
Special Programs Administration (RSPA) of the Department of
Transportation (DOT), performs a variety of activities\(^1\) related to the safety
of natural gas (NG) and hazardous liquid (HL) pipelines and liquified
natural gas (LNG) storage facilities. OPS activities are funded primarily by
user fees assessed to pipeline and LNG storage facility operators and these
fees are deposited into the Pipeline Safety Fund (PSF).

The Senate Committee on Appropriations expressed an interest in
determining the minimum year-end balance necessary in the PSF to
maintain OPS operations until user fees are collected for the following
year. At September 30, 2000, the balance in the PSF was $16.8 million.
Senate Report 106-309 directed that (1) RSPA perform a detailed analysis
of the PSF in order to estimate the minimum year end balance that could
be maintained without triggering the Antideficiency Act and (2) we review
RSPA’s analysis. Specifically, as directed by Senate Report 106-309, we
reviewed RSPA’s analysis to determine if it was accurately prepared based
on RSPA/OPS financial records and Treasury reports and whether

\(^1\)Activities performed by OPS include tracking of operator and incident data, inspection and
enforcement, administration of the state pipeline safety grant program, and oil spill
preparedness and response.
improvements could be made to the billing and collection cycles that would support a more efficient use of these user fees.

Results in Brief

The analysis prepared by RSPA did not reasonably estimate the minimum balance required in the Pipeline Safety Fund. In designing the analysis, RSPA mistakenly assumed that the minimum required PSF balance had to cover the amount of obligations expected in the first two quarters of the fiscal year, without considering the amounts that are collected and become available for obligation during those two quarters. Further, although RSPA concluded that 36 percent of the annual user fee assessment should be maintained as a minimum balance in the PSF, we found that the use of a fixed percentage to calculate the estimated minimum PSF balance was not appropriate.

A better approach would be to compare the timing and amounts of expected collections to expected PSF obligations. The greatest difference, meaning the excess of obligations over current year cash collections, would define the minimum balance necessary in the fund. We also found that RSPA, in performing the calculations supporting its analysis, used inaccurate and/or unreliable data including understated available cash resources. In addition, OPS’ current practices to determine and assess user charges likely delay collections. Any delay in the collection of user fees results in the need for a larger PSF beginning balance to temporarily fund OPS operations.

RSPA has accelerated its billing dates over the past few years and has taken several actions that are likely to further expedite the billing process in the future. For example, RSPA is in the process of implementing an Internet-based system to allow pipeline operators to electronically enter pipeline mileage and other data in the system and to prepare and send assessments. The purpose of these actions, which are expected to be completed later in fiscal year 2001, is to help improve the timeliness and accuracy of user fee billings and collections.

We are making several recommendations intended to improve RSPA’s analysis methodology so that it will result in a reasonable estimate of the minimum balance needed in the PSF and to improve the data collection and billing processes.

DOT officials generally agreed with our findings, conclusions, and recommendations.
OPS is responsible for the safety oversight of NG and HL pipelines and LNG storage facilities. OPS operations are primarily funded from user fees assessed to approximately 750 pipeline and storage facility operators, with additional funding provided by the Oil Spill Liability Trust Fund (OSLTF). In addition, Congress has partially funded OPS operations by making a permanent reduction in the accumulated PSF balance carried over from the prior years.

User fees were first assessed to operators for fiscal years 1986 and 1987. User fees collected during those years were accumulated in the PSF to establish a beginning balance in the fund. For fiscal years 1986 and 1987, pipeline safety operations continued to be funded by general revenue appropriations. Beginning in fiscal year 1988, OPS operations were no longer funded by general revenues but instead were funded primarily by user fee assessments, which are billed after the fiscal year starts. For each fiscal year from 1988 forward, the accumulated balance in the PSF has been used to temporarily fund operations until the user fees are collected.

As indicated below, the annual appropriation prescribes funding levels and sources of funds for OPS operations. Therefore, the amount of the total fiscal year user fee assessment can only be determined after the appropriation is enacted due to the uncertainty of the components that constitute the appropriation and the total appropriation amount.

For fiscal year 2000, OPS’ appropriation was funded from the sources listed in table 1.

---

2Section 7005 of the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA 1985), Public Law 99-272 (codified at 49 U.S.C § 60301) directed the Secretary of Transportation to assess and collect annual fees from NG and HL pipeline operators and LNG storage facilities to finance the cost of the department’s pipeline safety programs.

Objectives, Scope, and Methodology

Our objectives were to determine (1) how RSPA’s analysis determined the required minimum reserve fund balance, (2) if the analysis was accurately prepared based on RSPA/OPS financial records and Treasury reports, (3) how OPS’ billing and collection cycles function, and (4) if changes in the way OPS assesses user fees and collects cash would result in a more efficient use of user fees.

To determine how RSPA calculated the required reserve fund balance, we conducted interviews with OPS officials who prepared and reviewed the analysis. We also obtained an understanding of how the analysis conclusion is linked to the analysis detail and identified assumptions made in the analysis.

To determine whether the analysis was accurate, we conducted interviews with OPS and RSPA officials who prepared and reviewed the analysis.

---

Table 1: Funding Sources for OPS’ Fiscal Year 2000 Appropriation

<table>
<thead>
<tr>
<th>Sources</th>
<th>Amounts (Dollars in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal year 2000 user fees*</td>
<td>$30.0</td>
</tr>
<tr>
<td>Permanent reduction of accumulated PSF balance</td>
<td>1.4</td>
</tr>
<tr>
<td>OSLTF</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>OPS’ total fiscal year 2000 appropriation</strong></td>
<td><strong>$36.9</strong></td>
</tr>
</tbody>
</table>

*User fee assessments are based on operator data as of the end of the previous year. For example, fiscal year 2000 assessments were based on operator data as of December 31, 1998.

identified and assessed the reasonableness of assumptions made, compared data presented in the analysis to data in RSPA’s financial systems and Treasury reports, and performed some recalculations of data. We did not perform any audit or review procedures that would allow us to attest to the accuracy of the historical data presented in the analysis.

To determine how OPS’ billing and collection cycles function, we obtained an understanding of those cycles as they pertain to the PSF through interviews with OPS officials and the review of OPS documentation.

Finally, to determine whether improvements could be made to OPS’ billing and collection cycles to support a more efficient use of user fees, we identified and discussed alternatives with OPS officials.

We received written comments on a draft of this report from the Department of Transportation. We also received several technical comments, which we incorporated as appropriate. A copy of DOT’s response is reprinted in appendix I.

We conducted our review from November 2000 through March 2001 in accordance with U.S. generally accepted government auditing standards.

Minimum Balance Was Not Reasonably Estimated

Significant flaws in RSPA’s financial analysis used to determine the estimated minimum balance for the PSF make the estimate unreasonable. Under current practices, the year-end balance in the PSF is used to fund certain operational expenses pending the receipt of user fee assessments from pipeline and storage facility operators for the following year. In its analysis report, RSPA concluded that at least 36 percent of the enacted appropriation in a given fiscal year should be maintained as a minimum balance in the PSF to cover obligations for the first two quarters of the fiscal year and avoid violation of the Antideficiency Act. However, our review indicated that the analysis was unreasonable due to (1) the use of an inappropriate key assumption, (2) the inappropriate use of a fixed percentage to estimate the minimum balance in the PSF, and (3) RSPA’s use of incorrect or unreliable financial data in performing its calculations.

5 An Antideficiency Act violation occurs, among other instances, when there is an obligation or expenditure of amounts in excess of or in advance of an appropriation. (31 U.S.C. 1341 (a)).
RSPA's Key Assumption Was Inappropriate

RSPA's methodology was based on the assumption that the minimum PSF balance at the end of the fiscal year must be sufficient to cover estimated obligations for the first two quarters (October through March) of the following fiscal year. Based on fiscal year 2000 historical data, the analysis projected the estimated future minimum PSF balance as a percentage that was calculated for fiscal year 2000 as follows (dollars in millions):

<table>
<thead>
<tr>
<th>Obligations – first two quarters</th>
<th>$ 10.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total obligations</td>
<td>$ 5.2</td>
</tr>
<tr>
<td>User fee assessment base</td>
<td>$ 29.7</td>
</tr>
</tbody>
</table>

\[ \frac{10.8}{29.7} = 0.364 \times 100\% = 36.4\% \]

a This is the percentage to be applied to future year’s User Fee Assessment Base to project the estimated minimum balance in the PSF. Although the formula in the analysis used “User Fee Assessment Base” as the denominator, in its report RSPA stated that “maintaining a balance in the PSF lower than 36 percent of an Enacted Appropriation would impede pipeline safety program continuity or risk violation of the Antideficiency Act.” RSPA officials told us that they intended the conclusion to be expressed as a percentage of the “User Fee Assessment Base” as shown above.

b The User Fee Assessment Base used in the RSPA analysis was determined by adjusting the user fee amount included in the enacted appropriation, $30 million, to reduce the assessment by $0.9 million for the over collection of prior year’s assessment, and increase the assessment for a RSPA administrative support charge of $0.6 million to arrive at a user fee assessment base of $29.7 million.

Source: RSPA analysis and interviews with OPS officials.

In designing the formula, RSPA staff advised us that they did not consider cash receipts for the first two quarters because they believed that the process of obtaining Treasury warrants, necessary to enter into obligations, would result in the majority of the funds being unavailable for obligation until halfway through the fiscal year. However, through interviews and reviewing warrant documentation, we noted that warrants authorizing the obligation of available balances could be obtained from Treasury in several days.

For fiscal year 2000, OPS data showed that $3.6 million of its user fees were received by the end of December 1999, and an additional $23.9 million of fees were received by the end of January 2000. In the RSPA analysis, none of these collections, totaling $27.5 million, were considered available for obligation in the first or second quarter. Per the analysis, total obligations incurred by OPS from October 1999 through January 2000 totaled only $5.2 million, while the beginning balance of the fund at October 1, 1999, was $15.9 million. OPS staff's misunderstanding of the warrant procedures, and hence the failure to consider available user...
fee collections in the analysis, significantly overstated the calculation of the estimated minimum balance required in the PSF.

Inappropriate Use of Fixed Percentage

RSPA’s analysis also incorrectly presumes that a fixed percentage of the user fee assessment base, as calculated using the fiscal year 2000 data, will result in a factor that can be used to calculate the minimum balance for the coming year. However, this assumes a direct and constant relationship between obligations and the user fee assessment base, which, based on RSPA’s own analysis for fiscal years 1998, 1999, and 2000, does not exist. Table 3 below shows that obligations in the first 6 months were a growing percentage of the user fee assessment base during the 3 years analyzed. Absent any such constant relationship, obligations as a percentage of the user fee assessment base cannot be used as a reliable predictor of the minimum balance needed in the PSF.

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>User fee assessment base</th>
<th>Cumulative obligations through 2nd quarter</th>
<th>Obligations as a percentage of the user fee assessment base</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>28.6</td>
<td>7.0</td>
<td>25</td>
</tr>
<tr>
<td>1999</td>
<td>28.9</td>
<td>8.8</td>
<td>30</td>
</tr>
<tr>
<td>2000</td>
<td>29.7</td>
<td>10.8</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: RSPA analysis.

Instead of a fixed percentage, the amount needed in the PSF depends on the timing and amounts of expected obligations and cash collections during the early part of the new fiscal year. The amount of obligations is affected by the level and types of program activities planned. From one year to the next, obligation patterns may change significantly, particularly if significant changes are made in the level and nature of OPS activities. For this reason, there is no assurance that a fixed percentage calculation of the assessment base, enacted appropriations, or any other base would generate an appropriate carryover balance.

Using hypothetical data, figure 1 below demonstrates that a comparison between expected cumulative PSF obligations and expected cumulative cash collections will identify the maximum expected shortfall in the early part of the fiscal year.
In this figure, obligations are assumed to start at the beginning of the year (time A) and cash collections some time later (time B). The shaded area shows the time during which cumulative year to date obligations exceed cumulative year to date cash collections. The widest point (time D) identifies the minimum beginning fund balance necessary in the PSF. In general, the later that fees are collected the larger the needed balance. At time E, cumulative cash collections equal cumulative obligations and the current year’s shortage is eliminated.

In order to ensure that the estimated minimum balance as calculated in this manner is adequate to cover the shortfall, this type of analysis would need to be completed each year. This annual reestimate, which could be adjusted to cover possible contingencies, would be particularly important.
given the fluctuations in levels of obligations that have occurred early in the year over the past several fiscal years.

RSPA Used Incorrect and/or Unreliable Data in Its Calculations

Notwithstanding the previously noted flaws in its approach, certain data included in RSPA’s analysis were incorrect and/or unreliable. For example, as permitted by law, OPS assessed additional fees\(^6\) of approximately $0.9 million to pipeline operators, but these fees were omitted from the analysis. Using RSPA’s data, we estimated that the omission of these additional fees from the analysis further overstated the minimum PSF balance.

RSPA also included in its analysis historical data, such as user fee cash receipts, and obligations that did not agree with either data in RSPA’s accounting system or other documentation, such as reports prepared for Treasury. For example, the cash receipts data for the first two quarters of fiscal year 2000 that were included in the analysis, were taken from a database that RSPA accounting provides OPS to account for assessments receivable. It was approximately $363,000 less than the cash receipts recorded in OPS’ accounting system. Since this and other differences were not reconciled by OPS, we were unable to determine the effect they may have on the estimated minimum PSF balance.

Further, the beginning PSF balance used by RSPA in its analysis was understated when compared to balances per Treasury, because certain transactions, such as cancellations of previously recorded obligations, were not recorded by RSPA accounting. These Treasury-initiated transactions were not considered in the analysis because OPS did not perform monthly reconciliations of the PSF book balance to the balance with Treasury. The cancellation of obligations increases the available PSF balance. For example, the beginning PSF balance in the analysis for fiscal year 2000 of $15.9 million was $1.1 million less than the Treasury balance of $17 million. This unreconciled difference could have a material impact on the recorded PSF balance or decisions regarding such balance.

Finally, we noted that the month-by-month data included in RSPA’s analysis contained obligation amounts that could be misleading. We found

\(^6\)Section 7005 of COBRA 1985 directs OPS to collect user fees from pipeline operators and LNG storage facilities sufficient to meet the costs of the authorized activities but not to exceed 105 percent of the annual appropriations for pipeline safety activities.
that the monthly amounts of obligations for the first 5 months of fiscal year 2000 included approximately $1 million of OSLTF-related obligations. During March 2000, however, these obligations were reimbursed by the OSLTF and were reversed in the analysis. Therefore, RSPA’s overall calculation was not affected.

OPS’ lengthy data collection and verification process, used to determine and bill user fees for 750 pipeline operators, contributed to a delay in billing and the subsequent collection of cash. If user fee assessments were mailed out sooner, then collection of cash receipts would likely be accelerated and the minimum required PSF balance would be lower. RSPA has efforts underway to improve this process, including planned implementation of an Internet-based data collection system and a new accounting system.

The collection and verification of data used for OPS’ fiscal year 2000 assessment extended over 11 months. For example, the December 31, 1998, data used for the fiscal year 2000 billing were not finalized until late November 1999. The majority of that time was used to update information for NG pipeline operators, one of three types of operators.

OPS maintains a database for assessing pipeline and storage facility operators as well as supporting its regulatory activities. Data are updated each year and that process begins with asking NG pipeline operators to complete annual reports, which contain, among other things, details on pipeline mileage that are needed to calculate assessments. After NG pipeline operators submit their annual reports, information is updated in the OPS database. Subsequently, NG pipeline operators, as well as HL pipeline operators and LNG storage facilities (neither of which have to prepare annual reports) are sent annual notices to verify information in the database, which is used for fee assessment purposes.

For the fiscal year 2000 assessment, annual report forms were sent to NG pipeline operators in mid-December 1998, and the completed annual reports were due to OPS by March 15, 1999. Later, notices to verify data in the database were sent to all operators in August 1999 with corrections due to OPS in 45 days. After the verification notice was sent, OPS employees responded to operator inquiries and corrections and further updated the database. This process was completed in late November. The extended data collection and verification process contributed to a delay in the mailing of user fee bills, which did not occur until mid-December 1999.
The timing of activities is summarized in table 4.

Table 4: Key Dates in OPS’ Data-Gathering, Verification, and Billing Process

<table>
<thead>
<tr>
<th>Operator</th>
<th>Annual report forms mailed</th>
<th>Annual reports due</th>
<th>Notices to verify data in database sent</th>
<th>Data verification due</th>
<th>FY 2000 appropriation enacted</th>
<th>Database finalized</th>
<th>User fee assessment for FY 2000 mailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL, LNG</td>
<td>n/a</td>
<td>n/a</td>
<td>8/99</td>
<td>9/99</td>
<td>10/99</td>
<td>11/30/99</td>
<td>12/15/99</td>
</tr>
</tbody>
</table>

Source: RSPA’s analysis and interviews with OPS officials.

Since operator assessments are calculated based on the annual appropriation, the calculation of individual user fee assessments can begin after the appropriation is enacted, which has been in the month of October for the last several years. In recent years, OPS’ operator billing has occurred considerably earlier in the fiscal year. For example, in fiscal year 1994, OPS assessed user fees in July 1994, whereas by fiscal year 1997, OPS was successful in moving the user fee assessment date up to December 1996. Since 1997, OPS has billed operators in mid-December of each fiscal year. However, since the user information on which bills are based is as of December 31 of the previous year, there is still room for improvement in OPS’ data collection and verification process. According to OPS officials, this delay is due to resource limitations.

Current Efforts to Improve Billing Procedures

RSPA is planning to improve its current billing procedures. For example, in the summer of 2001, an Internet-based system is scheduled to be implemented that will allow operators to electronically enter pipeline mileage, ownership, and other necessary information directly into the database. This will relieve OPS of a considerable amount of data input and reduce the amount of reconciliatory and investigative efforts for pipeline ownership and mileage. Based on information provided directly by pipeline operators, OPS would be able to generate and mail bills electronically, further reducing the time necessary to bill and collect fees.

In addition, in fiscal year 2001, RSPA implemented a new accounting system that includes features anticipated to improve OPS’ billing and collection process. These features include invoicing, payment tracking, maintaining individual customer account balances, and generating follow-up notices for delinquent balances. This should free up OPS resources so staff can concentrate on issuing user fee assessments earlier, which would
likely accelerate the collection of fees and reduce the minimum balance needed in the PSF.

Conclusion

The use of incorrect or unreliable data and inappropriate assumptions in RSPA's calculation of the minimum PSF balance resulted in RSPA overstating the necessary minimum balance. Crucial to a reasonable calculation of the PSF minimum balance is an analysis of expected receipts as compared to expected obligations. Until RSPA performs this type of analysis, it will not be able to provide a reasonable estimate of the required minimum PSF balance.

In addition, the timing of OPS' cash receipts is affected by OPS' untimely data collection and verification process. This process results in delayed billings and likely delays cash receipts, resulting in a larger required minimum PSF balance. OPS' current efforts to implement a new Internet-based data collection and billing system have the potential to shorten what is currently an extended billing process. Finalizing the operator data on which the fee assessments are based at an earlier date would allow billing to take place shortly after the agency received its appropriation for the fiscal year. Accordingly, fee revenue would likely be available for obligation in a more timely manner and help reduce the required minimum PSF balance.

Recommendations for Executive Action

In order to provide for a reasonable calculation of the minimum PSF balance and to improve the user fee billing process, we recommend that the Secretary of the Department of Transportation direct RSPA's Administrator to take the following actions:

- Base calculations for future years on an analysis of the timing and amounts of expected obligations and cash collections associated with the level and types of program activities planned.
- Annually calculate the expected minimum balance for the PSF to take into consideration changes in expected obligations and collections.
- Take steps, including reconciliation of conflicting data, to ensure that the financial information used in the analysis is accurate and that it includes all of the relevant revenue factors.
- Complete installation of the Internet-accessible database system allowing on-line input and verification of operator data and electronic mailing of bills.
Reengineer the operator data collection and verification processes so that all data on which bills will be based are finalized by October 1 annually to allow for timely billing.

 DOT generally agreed with our findings, conclusions, and recommendations. In addition, department officials provided technical comments on the draft report, which we have incorporated as appropriate.

We are sending copies of this report to congressional committees and subcommittees responsible for transportation safety issues; the Honorable Norman Y. Mineta, Secretary of Transportation; Edward Brigham, the Acting Deputy Administrator of RSPA; and other interested parties.

If you have any questions about this report, please contact me at (202) 512-9508 or John C. Fretwell, Assistant Director, at (202) 512-9382. Key contributors to this report were Richard Kusman, Tarunkant Mithani, and Maria Zacharias.

Linda M. Calbom
Director, Financial Management and Assurance
Appendix I: Comments From the Department of Transportation

April 16, 2001

Ms. Linda Calbom
Director, Financial Management and Assurance
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Ms. Calbom:

The Pipeline Safety Fund (PSF) reserve balance provides an important safety net that helps ensure that the Office of Pipeline Safety (OPS) has sufficient funding for contingencies to meet unforeseen cash needs and to fund emergency supplementals. As the Nation’s population continues to grow, and development impinges on major pipeline routes, the consequences of pipeline emergencies become increasingly dire.

We recognize that aspects of the OPS analysis can be fine-tuned, and that alternative approaches to the analysis can be considered. In response to a quick turn-around congressional request for information, OPS used a straightforward approach, based on real-world data that produced a conservative estimate of the funds necessary to avoid invoking the Antideficiency Act. The estimate was not intended to provide a definitive minimum balance evaluation for use in managing the fund. Rather, it used a simple methodology, comparing peak obligation periods with funding availability, to produce a conservative PSF minimum balance estimate.

The OPS takes its stewardship of the PSF seriously and would certainly complete an exhaustive analysis before initiating any action that would significantly modify PSF minimum balance requirements. OPS is taking action to ensure that the data used in its PSF analysis is as complete and accurate as possible, and also to ensure that its calculation methods are appropriate. To address its data needs, OPS is working with its accounting support organization, the Treasury Department, and the pipeline industry to refine the processes associated with PSF. OPS is also working to ensure that receipts are expeditiously and efficiently handled and that balances are fully reconciled. As for methodology, OPS recognizes that alternative methodologies could be used for estimating the minimum PSF balance and is prepared to work with GAO and others to evaluate alternative approaches and to consider the risks associated with each approach.

We appreciate the opportunity to comment on this draft report. If you have any questions, please contact Martin Gertel of my staff on (202) 366-5145.

Sincerely,

Melissa J. Allen
The first copy of each GAO report is free. Additional copies of reports are $2 each. A check or money order should be made out to the Superintendent of Documents. VISA and MasterCard credit cards are also accepted.

Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

**Orders by mail:**
U.S. General Accounting Office
P.O. Box 37050
Washington, DC  20013

**Orders by visiting:**
Room 1100
700 4th St., NW (corner of 4th and G Sts. NW)
Washington, DC  20013

**Orders by phone:**
(202) 512-6000
fax: (202) 512-6061
TDD (202) 512-2537

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

**Orders by Internet**
For information on how to access GAO reports on the Internet, send an e-mail message with “info” in the body to:

Info@www.gao.gov

or visit GAO’s World Wide Web home page at:

http://www.gao.gov

To Report Fraud, Waste, and Abuse in Federal Programs

**Contact one:**
- E-mail: fraudnet@gao.gov
- 1-800-424-5454 (automated answering system)