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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D C 20548

July 30, 1984

U.S. OFFICE COMMUNITY
AND ECONOMIC DEVELOPMENT
DIVISION

B-215500



124791

The Honorable Elizabeth Hanford Dole
The Secretary of Transportation

Dear Madam Secretary:

Subject: Alcohol and Drug Use in the Railroad Industry--
More Information and Better Detection Methods
Are Needed (GAO/RCED-84-176)

On June 12, 1984, the Federal Railroad Administration (FRA) issued a notice of proposed rulemaking on the control of alcohol and drug use in railroad operations. FRA proposes to issue a final rule in September 1984 that would be effective on or about January 1, 1985.

We have completed a review of FRA's activities to identify and control alcohol and drug use in the railroad industry. We believe the results of our review will assist you in analyzing the comments you receive on the proposed rule and in your deliberation on the final rule.

We undertook our review because the Congress has shown growing interest in alcohol and drug use by employees of the railroad industry. Our work focused on the extent to which information is available on railroad employee alcohol and drug use, related railroad detection and control efforts, and FRA's actions in identifying the extent of alcohol and drug use and dealing with it. We reviewed records and held discussions with responsible officials at FRA, the National Transportation Safety Board (NTSB), selected railroad companies, and several railroad union offices. We also discussed alcohol and drug use in general with knowledgeable officials in organizations dealing with alcohol and drug use such as the National Institutes on Alcohol Abuse and Alcoholism and on Drug Abuse. Enclosure I provides details on our scope and methodology.

Briefly summarized, we found that FRA obtains limited information from railroads and from its own investigations of the extent of railroad employee alcohol use and drug use and their relationship to railroad accidents, fatalities, and injuries. We also found that railroad officials use observation

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as opposed to employee testing as the primary method of detecting alcohol or drug use by railroad employees, but this method has shortcomings. Based on the results of our review, we support FRA's efforts to develop a rule on railroad employee alcohol and drug use. We do, however, have some concern about the post-accident testing threshold of \$150,000 contained in the proposed rule.

INTRODUCTION

Railroads carry large amounts of freight and many passengers. For example, from 1978 through 1982, the nation's major railroads recorded 2.1 billion freight-train miles and 148.8 million passenger-train miles. Train accidents result in fatalities and injuries to railroad employees and the general public and millions of dollars in damage to track and equipment and nonrailroad property.

Train accidents also result in hazardous material spills. The Association of American Railroads estimated that from 1978 through 1982, about 5.1 million carloads of hazardous materials were transported in the United States. During this period, the railroads reported 3,551 train accidents to FRA involving cars carrying hazardous materials. These accidents resulted in 816 cars spilling their hazardous material cargoes and 94,835 people being evacuated from accident areas.

The Federal Railroad Safety Act of 1970 requires the Secretary of Transportation to prescribe rules as necessary for all areas of railroad safety. The Secretary delegated this responsibility to FRA. While FRA has sponsored research projects and conferences and other meetings relating to alcohol and drug use in the railroad industry, as of July 1984 it had not issued any final rule regarding alcohol and drug use by railroad employees.

Beginning in 1975, FRA, in cooperation with rail labor and management, conducted extensive research into the scope and seriousness of the problem of alcohol use on the nation's railroads. The final report of the FRA study, Prevalence, Costs, and Handling of Drinking Problems on Seven Railroads, was published in December 1979. Findings were based primarily on questionnaires received from railroad workers and interviews with rail labor and management officials. The report concluded that while there is evidence that employee drinking is an important contributing factor to railroad accidents, the connection between drinking and safety is not being adequately investigated. FRA concluded that the report findings clearly indicated that on-the-job intoxication is a significant problem in the railroad industry.

According to FRA officials, no comparable study has been done on employee drug use in the railroad industry. FRA funded

a study to determine whether the same methodology used with the above-mentioned alcohol study could be used to examine drug use by railroad employees. The study was completed in September 1983; however, FRA officials told us that because FRA questions the study methodology and findings, it does not plan to release the study results.

Virtually all railroads have a rule--called Rule G-- prohibiting alcohol and drug use by employees on duty and while subject to duty. Employees who violate this rule are subject to disciplinary action, including dismissal or suspension from work for varying periods of time. Some railroads have established rehabilitation programs for their employees with alcohol- and drug-related problems.

According to officials of federal alcohol and drug abuse agencies and the director of a state laboratory dealing with drug analysis and effects, small amounts of alcohol or drugs in the human body can present problems for the average person when performing physical and mental tasks. They said that alcohol or drug use affects such functions as color distinction, motor coordination, alertness, judgment, and emotions. Railroad officials told us that impairment of any of these functions could directly affect the safe movement of a train.

FRA HAS OBTAINED LIMITED INFORMATION ON THE EXTENT OF ALCOHOL AND DRUG USE

Knowledge of the extent of employee alcohol use and drug use and their relationship to railroad safety is necessary for FRA to evaluate conditions and to take the proper corrective actions. FRA reporting requirements, however, do not require the railroads to report all the information they may have on employee alcohol and drug use. In addition, while FRA obtains some additional information from its own and NTSB investigations, these additional sources have not been sufficient to determine the extent or the results of employee alcohol and drug use. FRA has recognized that there are problems with its reporting requirements and has proposed rules which would require the railroads to report additional information.

Overall, from 1975 through September 1983, a total of 59 alcohol- or drug-related events were identified by FRA, NTSB, and the railroads. These 59 events resulted in 46 fatalities and 71 injuries to railroad employees and others; \$16.3 million in damages to railroad property; and in one case, \$12.3 million in damages to nonrailroad property and the evacuation of about 3,000 people. These 59 events were compiled from accident, employee fatality, and incident reports.

Data reported by the railroads

Under its general railroad safety authority, FRA requires railroads to report alcohol and drug use by employees when the

railroads identify such use as the cause of a train accident. FRA also requires the railroads to report information on accidents, fatalities, and injuries that occur at rail-highway grade crossings and those that involve trespassers. According to FRA, most of these occurrences result from the negligence of persons other than railroad employees. In addition, FRA requires the railroads to report the results of inspections for compliance with railroad operating rules, including Rule G.

Accidents

FRA requires the railroads to report all train accidents with railroad property damages over \$4,500. This threshold has been increased every other year due to inflation. Railroads are to identify the primary and contributing causes of the accidents in the reports.

From 1975 through 1983, the railroads reported 67,977 train accidents to FRA and identified 17 as being caused by alcohol or drugs--11 as the primary cause and 6 as the contributing cause. However, the railroads are not required to provide FRA with any information in the accident report concerning alcohol and drug use if it was not determined by the railroads to be the primary or contributing cause of the accident. In addition, for all accidents, FRA does not require the railroads to report whether employees were tested for alcohol or drug use and what the test results showed. Data on employee testing, including results, would provide FRA with additional information for determining the extent of the problem, employees involved, and the degree of intoxication.

Fatalities and injuries

FRA requires the railroads to report all fatalities and certain injuries that do not result from reportable accidents as mentioned above. These injuries include those that generally require medical treatment, other than first aid, or cause the employee to miss 1 work day. However, FRA does not require the railroads to report any information on alcohol or drug involvement on the fatality or injury reports. From 1975 through 1983, the railroads reported to FRA that 788 railroad employees were killed on duty and 418,483 were injured on duty.

Operating rule inspections

FRA also requires the railroads to annually report results of inspections for compliance with railroad operating rules. Since Rule G is an operating rule, some information on alcohol and drug rule violations is obtained. Some railroads, however, do not specifically identify alcohol and drug rule violation information in their annual compliance inspection reports to FRA. In addition, FRA does not require the railroads to report other alcohol and drug rule violations detected at times other than during compliance inspections.

Data collected through FRA and
NTSB accident investigations

Both FRA and NTSB investigate selected railroad accidents. The data they collect provide additional information on alcohol and drug use by railroad employees.

FRA investigates Amtrak accidents, accidents that involve fatalities and hazardous material spills, selected accidents based on agency judgment, and most fatalities of on-duty railroad employees. From 1975 through 1983, FRA investigated 1,228 of the 67,977 accidents reported by the railroads and 721 of the 788 on-duty railroad employee fatalities reported by the railroads. From 1975 through September 1983, FRA's investigation reports showed that 15 accidents and 32 fatalities were alcohol and/or drug related. Six of the accidents and one fatality had been identified by the railroads as being caused by alcohol or drug use.

NTSB is a federal agency with statutory responsibility to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations. It has no authority to issue safety regulations. NTSB investigates selected train accidents that exceed \$150,000 in property damage or involve a passenger train, a railroad employee or passenger fatality, a hazardous material spill, or any other accident of special interest to NTSB. It also investigates performance-related incidents that could adversely affect safety but did not result in an accident, fatality, or injury. NTSB officials estimated that they investigated about 2,800 railroad accidents and incidents from 1975 through September 1983. For this period, NTSB determined that 17 accidents and 2 incidents involved alcohol and/or drug use. The 17 accidents had also been reported by the railroads or identified through FRA investigations as alcohol and/or drug caused or related.

FRA's opinion on reporting inadequacies

In its June 12, 1984, Notice of Proposed Rulemaking, FRA commented that many alcohol- and drug-related accidents and injuries are not recorded as such under the existing reporting system. FRA also noted that from available information, it appears highly probable that, because of the latitude in the system, the railroads either fail to detect or fail to report alcohol and drug involvement in a significant number of cases. FRA pointed out that of the 15 significant train accidents identified by FRA or NTSB investigations as involving alcohol or drug use, the respective railroads reported alcohol or drug involvement in only 6 accidents. FRA further noted that the underreporting of alcohol and drug involvement is likely to be even more pronounced in the vast majority of accidents which do not occasion a federal investigation.

FRA's proposed rulemaking also pointed out that FRA is convinced that alcohol- and drug-related employee fatalities in train accidents are at least twice as numerous as reflected in current statistics. In addition, FRA stated that although it has no data on the role of alcohol and drug use in the thousands of injuries in train accidents each year, it is likely that many are caused by alcohol- and drug-impaired employees.

RAILROAD EFFORTS TO DETECT ALCOHOL AND DRUG USE

Testing for the presence of alcohol or drugs is acknowledged by federal and state agency officials concerned with alcohol and drug use as the best method of detecting and verifying such use. Railroad officials, however, generally rely on observation as the primary method of detecting employee alcohol and drug use. This method has shortcomings. While testing is performed in certain cases, the railroads have experienced problems in carrying out such tests and in trying to expand their testing programs. If these problems were resolved, increased testing of railroad employees with results reported to FRA, would provide more definitive information on the extent of employee alcohol and drug use. In our opinion, a greater level of testing would be appropriate in the following circumstances: (1) after all FRA reportable accidents, excluding grade-crossing accidents, (2) after all fatalities of on-duty railroad employees and rail passengers, (3) when employees are suspected of alcohol and drug use, including after reportable injuries, and (4) during scheduled physical examinations.

Detection through observation

Railroad officials use observation as the primary method of detecting employee alcohol and drug use. This method usually involves supervisors seeing the actual use or detecting characteristics associated with alcohol and drug use. However, there are shortcomings associated with using observation as the primary method of detecting alcohol and drug use.

Federal and state agency officials concerned with alcohol and drug use told us that observation alone would not detect many alcohol and drug users. For example, observation may only raise a suspicion of use in cases of experienced drinkers who are adept at concealing obvious characteristics of alcohol use and some drug users who do not display obvious drug-related characteristics. Federal and state agency officials also told us that testing is the best method of verifying alcohol and drug use when such use is suspected.

Railroad testing efforts

Railroad officials told us they were reasonably confident that they could detect most alcohol users by observation alone,

but they expressed concern about their ability to detect drug users by observation. These officials told us that they can request employees to take alcohol and drug tests and to release test results to the railroads, but because of legal problems, they do not require employees to do so. Employees at times have refused to comply with requests for alcohol or drug testing. Some railroad officials believe testing is not necessary when the observable evidence is sufficient to show that an employee violated the railroad's alcohol or drug rule--for example, observation of actual consumption of alcohol by an employee on duty.

Our review of selected cases at six railroads we visited showed evidence that railroad officials requested testing in 84 of 197 cases of employees suspected of violating the railroads' alcohol and drug rules. We could not determine from railroad files whether testing was or was not requested for the remaining 113 cases. Of the 84 cases where testing was requested, railroad workers refused to take the test in 47 cases and refused to release the test results in 2 cases. In the remaining 35 cases, the railroads obtained the test results.

In September 1980, a railroad tried to implement testing of alcohol use by requiring employees to take breath tests on a random basis. Many employees objected to the railroad's unilateral implementation of the testing program, claiming it to be, among other things, a violation of the collective bargaining agreement. The resulting dispute between the railroad and a union was taken to arbitration before the National Railroad Adjustment Board (NRAB). The NRAB ruled that the testing program did violate the collective bargaining agreement and ordered the railroad to rescind the program. Because of this decision, other railroads have been reluctant to initiate the use of testing devices.

In its current rulemaking, FRA proposes to remove any barrier to testing, such as the one posed by the NRAB decision, for those situations where it is reasonable to require employees to provide breath and body fluid samples. FRA states in its rulemaking that the proposed rule would supersede collective bargaining restrictions. Employees would be deemed to have consented to testing under provisions of the proposed rule as a condition of employment.

Railroad officials told us they are not initiating further testing on their own in view of the possibility that FRA will require testing as part of the upcoming FRA rulemaking action. Railroad union officials in the past have been opposed to testing. However, in May 1984, we were advised by officials of two railroad unions and the Railroad Labor Executive Association that unions would generally support testing.

Testing during physical examinations

Some job applicants' and employees' use of alcohol or drugs is detected during preemployment and required employee physical examinations. These examinations generally do not include testing for alcohol or drug use, nor do the physicians specifically look for symptoms of alcohol or drug use. During the course of a physical examination, however, a physician may observe symptoms which indicate a reason to suspect alcohol or drug use.

FRA received information from 13 railroads which showed that all 13 require periodic physical examinations for some employees. Only one railroad, however, routinely used drug tests during physical examinations. Five other railroads used such tests only when drug use was suspected. Three of these six railroads reported to FRA that tests given during physical examinations when drug use was suspected disclosed a high number of positive test results. The remaining seven railroads did not use drug tests as part of their required physical examinations.

Two of the six railroads we visited used testing to detect drug use as part of their preemployment physical examinations. Information was not readily available at these railroads to determine the number of prospective employees who had positive drug test results.

DISCIPLINARY ACTIONS AND REHABILITATION
EFFORTS BY RAILROADS VARY

The manner in which railroads take disciplinary actions and/or offer rehabilitation programs for employees using alcohol or drugs varies. We found in our review of 197 selected cases at six railroads that disciplinary action taken ranged from 30 days probation with no lost pay to dismissal. We also found that most of the railroads visited either provided in-house rehabilitation programs or used nonrailroad treatment facilities for their employees who had alcohol and/or drug problems.

Most railroads have historically dismissed first offenders of Rule G. With respect to employees dismissed for violating alcohol and drug rules, we found that they often returned to work within several months as a result of railroad or appeal board decisions. Our case reviews showed that an employee's dismissal for alcohol and drug use is usually promptly appealed by the employee's union. If the union is unsuccessful in persuading the railroad to reinstate the employee, an appeal can be filed with an arbitration board.

As of June 5, 1984, FRA was unable to identify any major railroad that had in effect a policy forbidding the return to service of Rule G violators. FRA reported obtaining the following information from four railroads:

--One railroad sometimes uses initial sanctions short of dismissal but never less than a 6-month suspension.

--Two railroads reported that a clear majority of those dismissed for first offenses were returned to service on a leniency basis with an average of 5 months out of service.

--One railroad said that Rule G offenders were usually out of service for about 1 year.

Five of the six railroads we visited had rehabilitation programs for their employees who had alcohol and/or drug problems. Four of these five railroads used a combination of in-house counselors and nonrailroad treatment facilities. The remaining railroad did not have any in-house counselors at the time of our review and referred employees to nonrailroad treatment facilities. This railroad anticipates changing its program and hiring in-house counselors.

Most railroads require employees who observe their fellow employees violating the alcohol or drug rule to report this information to railroad officials. Railroad officials told us that, because alcohol or drug use warrants dismissal, employees have been reluctant to report fellow workers.

Two of the six railroads we visited have entered into agreements, commonly called bypass agreements, to encourage co-worker referral. One railroad entered into such an agreement in November 1980 covering part of the work force. This agreement allows an employee who is violating the railroad's alcohol and drug rule and is reported by a coworker to go to a rehabilitation program without being disciplined. However, information available at this railroad showed that the agreement had not resulted in a significant increase in the number of employees referred to the rehabilitation program by coworkers.

Under a similar agreement, another railroad suspends the disciplinary process, regardless of whether the employee who is violating an alcohol or drug rule was reported by a coworker or was caught by a railroad official, if the violating employee elects to enter a rehabilitation program. This agreement was initiated in May 1983 and sufficient data were not available to evaluate its results.

PROPOSED FEDERAL REGULATION OF ALCOHOL
AND DRUG USE BY RAILROAD EMPLOYEES

The Federal Railroad Safety Act of 1970 requires the Secretary of Transportation to prescribe rules as necessary for all areas of railroad safety. In March 1983, FRA submitted a draft proposed rule to the Office of Management and Budget (OMB) requiring train conductors or engineers to observe each train crew

member at the beginning and end of each tour of duty and certify in writing that, to the best of the observer's knowledge and belief, no crew members were in violation of the railroad's alcohol and drug rule. OMB questioned the effectiveness and the paperwork burden of the draft proposed rule. According to FRA officials, the draft proposed rule was withdrawn in April 1983 on the basis that FRA would examine the alcohol and drug use problem in the railroad industry and issue an advanced notice of proposed rulemaking which would cover all areas of alcohol and drug use.

NTSB, having no authority to issue safety regulations, made recommendations to FRA on establishing railroad alcohol and drug rules as early as 1974. NTSB proposed rules that would (1) prohibit alcohol and drug use by employees for specific time periods prior to reporting for work, (2) prohibit use while at work, (3) require testing of all train operating personnel involved in any accident that results in a fatality, an injury, release of hazardous materials, or substantial property damage, and (4) require reporting to FRA of railroad employee alcohol and drug involvement in accidents.

In July 1983, FRA issued an Advance Notice of Proposed Rulemaking listing seven options for possible FRA action. The earlier NTSB recommendations were included in the seven options. FRA invited public comment and held public hearings. After considering the comments received, on June 12, 1984, FRA issued a Notice of Proposed Rulemaking with an estimated effective date of January 1985. Public hearings will be held on the proposed rule at four locations during July 1984, and any written comments must be received not later than August 15, 1984. FRA anticipates issuing the rule in September 1984.

Under the current rulemaking, FRA proposes to (1) prohibit alcohol and drug use in railroad operations, (2) require employees to furnish blood and urine samples following major accidents and incidents which include any train accident that involves a fatality, a serious injury, damage to railroad property of \$150,000 or more, or a release of hazardous materials, (3) require preemployment drug urine screening for applicants for certain positions, (4) authorize the railroads to require employees to cooperate in breath and urine tests administered by and for the railroad in certain circumstances that would be deemed to constitute just cause for testing, (5) require the railroads to institute policies that will encourage identifying employees troubled by alcohol and drug abuse, and (6) institute improvements in the accident/incident reporting system that will assist in better documenting the extent of alcohol and drug involvement in train accidents. FRA stated that these measures are designed to facilitate the control of alcohol and drug use in railroad operations and thereby prevent accidents, injuries, and property damage.

We noted, however, that 14 of the 17 train accidents identified by the railroads and reported to FRA as being caused by alcohol or drugs from 1975 through September 1983 had railroad property damage of less than \$150,000. The damage in these 14 accidents ranged from about \$5,000 to about \$70,000. In addition, 7 of these 14 accidents would not have fallen within any of the other proposed rule testing and reporting requirements of a fatality, serious injury, or a release of hazardous materials.

CONCLUSIONS

Based upon our review, we believe that (1) more testing is needed to enable the railroads to better detect employees who use alcohol and drugs in violation of the railroads' existing and FRA's proposed rule and (2) improved railroad reporting to FRA is needed to provide more complete information so that FRA can better determine the extent of alcohol and drug use in the railroad industry. Therefore, we generally agree with the thrust of FRA's proposed rule, and when finalized and implemented, it should address the major issues we identified during our review.

Based on our review, however, we are concerned that the proposed \$150,000 railroad property damage threshold for mandatory post-accident testing and reporting may hamper FRA's efforts to identify the extent of alcohol and drug involvement in train accidents. By lowering the \$150,000 threshold, railroads would be required to test employees involved in accidents with less serious damages, thus increasing the deterrent effects, better identifying employees using alcohol or drugs, and possibly preventing an employee from being involved in a more serious train accident in the future. In addition, by lowering the threshold, FRA will obtain a wider range of information enabling it to better identify the extent of alcohol and drug use by railroad employees and to determine whether its proposed measures are controlling such use and preventing accidents, injuries, and property damages.

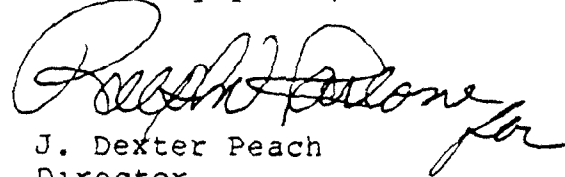
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Since FRA will be evaluating comments from many sources in arriving at a final rule, we are not making any formal recommendations. However, we do urge that you give consideration to lowering the proposed \$150,000 railroad property damage threshold in the final rule.

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We are sending copies of this report to the Senate Subcommittee on Surface Transportation; the House Subcommittee on Commerce, Transportation, and Tourism; and other interested parties.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. Dexter Peach".

J. Dexter Peach
Director

Enclosure

SCOPE AND METHODOLOGY

We visited 6 of the nation's 31 major¹ railroads. While at these railroads, we reviewed selected alcohol and drug rule violation cases and obtained information as to how railroads detect and deal with employees who violate alcohol and drug rules. The six railroads were the (1) Chessie System (Baltimore and Ohio Railroad and Chesapeake and Ohio Railway), (2) Florida East Coast Railway, (3) Illinois Central Gulf Railroad, (4) Norfolk Southern Corporation (Southern Railway System only), (5) Southern Pacific Transportation Company (Southern Pacific only), and (6) Union Pacific Corporation (Union Pacific Railroad only).

We obtained statistics from FRA on the number of accidents, fatalities, and injuries reported by all major railroads and those relating to alcohol and drugs. We examined FRA documents, including investigation reports dealing with accidents and fatalities where alcohol and drugs were involved. We also reviewed railroad accident and incident reports and related documents of alcohol- and drug-related events prepared by the NTSB. We did not verify the accuracy of these statistics and selected reports. Further, our review of these reports was not made on a scientific random basis; and in some cases, our selection was limited to those items the railroad companies and agency officials could readily identify and furnish to us.

We obtained a copy of the 1979 FRA-funded study report entitled Prevalence, Costs, and Handling of Drinking Problems on Seven Railroads. This report is also known as the Railroad Employee Assistance Project (REAP) report. The REAP report covered seven railroads which had 234,000 employees who represented about half of the employees working on the nation's major railroads at that time. The REAP report was based primarily on 5,704 questionnaires received from a sample of about 8,000 railroad employees and on 200 interviews with railroad officials and supervisors and general and local union chairmen. We did not evaluate the study's methodology or verify its accuracy.

We also interviewed officials and obtained documentation from FRA, NTSB, six railroads, the National Highway Traffic Safety Administration, the Association of American Railroads, the Railroad Labor Executive Association, the Brotherhood of Locomotive Engineers, the United Transportation Union, the National Institute on Drug Abuse, the National Institute on Alcohol Abuse and Alcoholism, the Toxicological Division of the Ohio Department of Health, and the Ohio State Highway Patrol.

¹A major railroad was classified by the Interstate Commerce Commission as one with over \$82 million annual revenues in 1982.

We did not obtain written agency comments, but we discussed our review results with officials of FRA and the Department of Transportation. In addition, FRA has issued a proposed rule and is holding public hearings on it during July 1984. Our report will be considered and addressed during FRA's rulemaking process.

Our review was conducted from July 1983 through May 1984 in accordance with generally accepted government auditing standards, except as noted above.