

CANADIAN RAILWAY OFFICE OF ARBITRATION

CASE NO. 2965

Heard in Montreal, Tuesday, 14 July 1998 and Wednesday, 12 August 1998

concerning

CANADIAN NATIONAL RAILWAY COMPANY

and

BROTHERHOOD OF MAINTENANCE OF WAY EMPLOYEES

EX PARTE

DISPUTE:

The unjust discharge of Mr. T. Ouellette for registering a positive reading on his October 6, 1997 medical.

BROTHERHOOD'S STATEMENT OF ISSUE:

The Brotherhood contends that: (1) The discipline of discharge is too severe. (2) Mr. Ouellette is not a user of drugs, socially, nor dependant on. (3) Mr. Ouellette was a victim of second hand smoke due to being at or near where cannabis was used on two occasions, just before being tested on October 6, 1997. (4) Mr. Ouellette's ng/mI immunoassay test was below the standard screening levels. (5) Mr. Ouellette tested negative in his previous medical and also tested negative in two subsequent tests taken shortly after his October 6, 1997 medical. (6) Mr. Ouellette was aware of the rules pertaining to the use of drugs, but not of the consequences of being around where cannabis was being used (smoked).

The Brotherhood requests that Mr. Ouellette be reinstated with full seniority and benefits, and full compensation for lost wages.

DISPUTE:

The discharge of Mr. T. Ouellette for registering a positive reading on his follow-up medical on 6 October 1997 in accordance with his reinstatement agreement dated July 28, 1997.

COMPANY'S STATEMENT OF ISSUE:

Mr. T. Ouellette was discharged from the Company on October 26, 1995. The Company and the Brotherhood met and agreed to reinstate Mr. Ouellette under a standard last-chance reinstatement contract which Mr. Ouellette signed effective July 28, 1997. In accordance with the reinstatement contract, Mr. Ouellette returned to service with CN and was subsequently

required to report for a follow-up/monitoring medical appointment on October 6, 1997.

Mr. Ouellette's urine sample was verified positive for cannabis. As a result, the Company held an employee investigation and Mr. Ouellette was discharged on November 3, 1997 for violating his reinstatement contract.

The Brotherhood contends that the assessment of discharge was excessive and unwarranted.

The Brotherhood requests that Mr. Ouellette be reinstated, with full seniority and benefits and compensation for all loss of wages.

The Company has denied the Brotherhood's contentions and declined the Brotherhood's request.

FOR THE BROTHERHOOD:

(SGD.) R. F. LIBERTY SYSTEM FEDERATION GENERAL CHAIRMAN

FOR THE COMPANY:

(SGD.) J. TORCHIA

FOR: SR. VICE-PRESIDENT. LINE OPERATIONS

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There appeared on behalf of the Company:

J. Coleman	- Counsel, Montreal
R. MacDougall	- Counsel, Montreal
Dr. E. Willette	- Witness
S. Blackmore	- Labour Relations Officer, Edmonton
J. Pasteria	- Manager, Labour Relations, Montreal

And on behalf of the Brotherhood:

R. F. Liberty	- System Federation General Chairman, Winnipeg
J. Dutra	- Federation General Chairman, Edmonton
D. Brown	- Sr. Counsel, Ottawa
P. Davidson	- Counsel, Ottawa
Dr. L. A. Pagliaro	- Witness, Edmonton
S. Crawford	- Local Chairman
J. Brar	- Local Chairman
Wm. J. Brehl	- Local Chairman
S. Northam	- Local Chain-nan

AWARD OF THE ARBITRATOR

This arbitration concerns a grievance against discharge for registering a positive drug test, an alleged violation of a "last chance" contract of re-employment following an earlier discharge of the grievor. The grievor, Mr. T. Ouellette, maintains that his positive drug test was caused by the passive inhalation of secondary marijuana smoke, and denies having smoked cannabis or otherwise violating the terms of his contract of

re-employment. The Brotherhood seeks the reinstatement of the grievor into his employment with full compensation for wages and benefits lost.

Mr. Ouellette was first employed by the Company in May of 1980. A resident of Edmonton, he worked in the Maintenance of Way forces of the Company in Alberta, and was employed on a project near Edson at the time of the incident giving rise to his discharge. At the time of his discharge he was under the terms of a re-employment contract signed following an earlier ten-nation. Mr. Ouellette had been previously discharged by the Company on October 26, 1995 for falsifying Company records, operating a Company vehicle without a valid driver's licence and causing damage to a Company vehicle. It does not appear disputed that the grievor's driver's permit had at that point been suspended as a result of impaired driving convictions.

As the grievor's initial discharge proceeded to arbitration the parties negotiated an agreement for his reinstatement. The terms of the reinstatement were reduced into a written contract dated July 28, 1997. That contract, agreed to by both the grievor and the Brotherhood, provides, in part, as follows:

- 1 . You must agree to be medically examined, including tests for drug/alcohol abuse prior to reinstatement. You must agree to unannounced tests for drug/alcohol use for a minimum of five years from the date of return to service.
2. If you do not pass the reinstatement medical, including drug/alcohol testing, you will no longer be considered for reinstatement and your file will be closed.
3. You must agree to monitoring as prescribed by MedCan and CHC for a minimum period of 5 years with release of information for the Chief Medical Officer of the Company to discuss ongoing progress.
4. At all times you will be expected to fully comply with the requirements of the policy to prevent workplace alcohol and drug problems and CROR General Rule G as a condition of employment including complete abstinence from alcohol and illicit drugs.
5. While employed by CN Rail, should you fail to abstain from drug and alcohol use, and/or fail to comply with the full conditions of this contract, you will be discharged from the Company and will not be considered for reinstatement.

Mr. Ouellette returned to service under the terms of the above contract effective August 3 1, 1997, after passing the required medical examinations. On October 3, 1997 he was instructed to report for a monitoring test with

MedCan on Monday, October 6, 1997. The grievor attended and provided a urine sample for analysis. The test was returned positive for cannabinoids. Measured by GC/MS the grievor's cannabinoid concentration was reported at 24.6 ng/ml (nanograms per millilitre).

During the course of the Company's disciplinary investigation Mr. Ouellette related that he believed that his positive drug test was the result of inhaling second-hand marijuana smoke. Specifically, he states that on the Friday evening of October 3, 1997, following his return to Edmonton from Edson, he drove two friends to a Rolling Stones concert, although he did not himself attend. He relates that each of them smoked a joint, one of marijuana and one of hashish, in the car on the way to the concert stadium. Secondly, he states that on the following evening, Saturday, October 4, 1997, he attended a party at a private residence where he estimates that of the approximately fifty people who attended the party, as many as one-third were smoking marijuana. He denies smoking marijuana on that occasion, but suggests that his positive drug reading would have been influenced by the passive inhalation of cannabis on that further occasion.

The Company refused to accept the grievor's explanation of his positive drug test. Rather, it accepts the explanation provided by its Chief Medical Officer, Dr. Ronald M. Dufresne. In an extensive letter of explanation in relation to Mr. Ouellette's positive drug test, Dr. Dufresne wrote to Company officers an opinion which reads, in part, as follows:

The most common explanation received by an MRO when an individual is informed of a positive result for marijuana is *second-hand smoke and rock concert*. This explanation was tested many times and unfortunately, does not stand the test of research, particularly for one good reason.

While most people are used to results of tests provided the amount of a given substance in a specimen analysed, with Drug Testing in the workplace done according to U.S. regulated standards, cut-off values render the eventuality of a positive workplace drug test impossible for a non-marijuana user. In fact, a test is always considered negative unless the substance which the test intends to find is present in two different types of test and at levels equal or above two concentrations: 50 ng/ml for the screening immunoassays test and 15 ng/ml for the confirmation GC/MS test. Therefore, when we say that someone tests negative, it does not mean that the specimen is without any of the searched substance. However, when a test is declared "verified positive" it means that there was more than the cut-off values in the specimen. These cut-off values were established, among other reasons, to eliminate the possibility of obtaining a positive result on an individual passively inhaling the smoke of marijuana

smokers in bars, homes, cars or rock concerts. To substantiate this last statement, I would like to propose an excerpt from a medical publication on reasons other than illicit drug for a positive drug test in the workplace:

It was concluded from these studies that although it is true that passive inhalation of marijuana smoke results in absorption of small amounts of cannabinoids in the body, the levels would not be enough to cause urine specimens from a non-marijuana user to test positive using a screening cutoff concentration of 50 ng/ml, which is currently mandated under the federal guidelines for a drug-free workplace.

In addition, passive inhalation under normal, realistic conditions cannot result in a urine concentration of 15 ng/ml of -THC-9-COOH metabolite using GC/MS as the confirmation technique. 2

2 Mahmoud A. ElSohly, Alan B. Jones: *Drug Testing in the Workplace: Could a Positive Test for One of the Mandated Drugs Be for Reasons Other Than Illicit Use of the Drug?*, Journal of Analytical Toxicology, Vol. 19, October 1995, P. 450-458

M. Ouellette's urine specimen of 6 October 1997, had a level of more than 20 ng/ml in this last test.

Conclusion:

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The test on the urine specimen provided by Mr. Ouellette on 6 October 1997 remains verified positive and is not due to passive inhaling.

In addition, as this individual tested negative on 01-VIII-1997, the consumption of Cannabinoids took place between this date and the date of 06 October 1907.

I am ready to support and make the necessary arrangements for the defense of this opinion even at the highest court in the Country, if it is necessary.

(original emphasis)

It appears that when Mr. Ouellette was made aware of his positive drug test, on October 10, 1997, he made personal arrangements for further drug testing to be performed. Subsequent drug tests were performed on Mr. Ouellette, albeit by a private medical laboratory not connected to the Company, on October 12, 1997, six days after his failed test, and on October 17, 1997 eleven days after his failed test. Both tests resulted in negative readings for cannabinoids.

The sole issue in this dispute is entirely factual. It is whether the grievor did in fact deliberately consume marijuana, contrary to the terms of his reinstatement contract of employment. If it should be established, on the balance of probabilities, that he did consume marijuana, he is plainly subject to discharge for violation of the terms of his reinstatement agreement. Given the importance of such arrangements as a final "last chance" instrument for disciplinary rehabilitation, arbitrators do not lightly interfere with the consequences of their violation, and I would not be disposed to do so in the instant case. (See **CROA** 2595, 2632, 2704, 2743 and 2753.) The issue then becomes whether the positive drug test reading registered for Mr. Ouellette can be viewed as equally consistent with passive or second-hand smoke inhalation, or whether, on the balance of probabilities, the positive drug reading is more consistent with conscious and deliberate direct consumption of cannabis on his part.

The Arbitrator was presented with extensive expert testimony relating to drug testing and passive smoke inhalation. Dr. Robert E. Willette, President of Duo Research Inc., testified on behalf of the Company. A doctor in pharmaceutical chemistry, Dr. Willette has extensive experience as a researcher and consultant in the field of drug testing in the United States. As chief of the Research and Technology branch, Division of Research of the National Institute on Drug Abuse from 1975 to 1981, Dr. Willette was involved in the earliest immuno-assay tests developed for drug detection. He was also involved as a consultant in establishing drug testing standards for the U.S. Navy, standards which substantially influenced the drug testing standards eventually adopted by the U.S. federal government for general application. He is also acknowledged as a contributing consultant in at least one major clinical study of the passive inhalation of marijuana smoke.

The expert witness called by the Brotherhood is Dr. Louis Anthony Pagliaro. Dr. Pagliaro has doctorates in both pharmacy and educational psychology, and is currently a tenured professor of pharma-psychology in the pharmacology department of the University of Alberta.

The difference in the expert opinions provided by the parties relates, obviously, to the conclusions to be drawn from the positive drug test registered by Mr. Ouellette, combined with his account of the circumstances surrounding what he alleges was the passive inhalation of cannabis smoke. Dr. Willette maintains that the facts disclosed, measured against the standards of scientific tests conducted with respect to the passive inhalation of marijuana, amply support the conclusion of the Company that Mr. Ouellette in fact consumed marijuana directly, and that his positive drug test is not the result of passive inhalation. Dr. Pagliaro, on the other hand, stresses that the same scientific data relied upon by the Company's expert witness confirms that the passive inhalation of cannabis smoke can result in readable levels of cannabinoids in urine samples, and that in fact a positive drug test does not, in any event, disclose anything about the origins or method of travel into the body's

system of the cannabinoids which are the basis of a particular test reading.

The following two paragraphs, taken from the brief filed at the hearing by the Brotherhood, fairly outline the nature of the drug testing procedure for cannabinoids, and narrow the issue in the instant case, by eliminating any questions as to the accuracy of the drug test and any questions relating to the chain of custody of the grievor's urine samples:

The drug testing procedure for carinabinoids involves two separate procedures. The first test is known as an immunoassay test and is a preliminary screening test. It is designed to identify the presence of cannabinoids or their metabolites and uses a cut-off threshold of 50 ng/ml. A positive reading on this test may indicate the presence of cannabinoids but may also be caused by other

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chemicals. Thus a second and more precise test is utilized to either verify or discount a positive reading from the immunoassay test. The second test is known as a "Gas Chromatography with Mass Spectrometry" (GC/MS) test. The cut-off level for this test is the more familiar 15 ng/ml standard. For both tests standard collection and signing procedures are employed to ensure integrity in the chain of custody.

As noted above, Mr. Ouellette's GC/MS test result was 24.6 ng/ml. The Brotherhood does not dispute the accuracy of the GC/MS test result from October 6, 1997 nor do we raise any chain of custody issues. Rather, the Brotherhood disputes the accuracy of the Company's assumption that the only possible explanation for this test result is the grievor's direct and willful consumption of illicit drugs.

There is little dispute as to which are the most important recognized studies in the area of drug testing and second-hand marijuana smoke. The following research papers were filed before the Arbitrator and spoken to, in varying degrees, by the expert witnesses:

Perez-Reyes, DiGuisseppi, Mason, & Davis: *Passive Inhalation of Maryuana Smoke and Urinary Excretion of Cannabinoids* (Vol. 34 No. 1, Clin. Pharma. Thera., July 1983)

Law, Mason, Moffat, King & Marks: *Passive Inhalation of Cannabis Smoke Q. Pharm. Pharmacol.* 1984, 36:578-58 1)

Morland, Bugge, Skuterud, Steen, Wethe & I(jeldsen: *Cannabinoids in Blood and Urine After Passive Inhalation of Cannabis Smoke* (Journal of Forensic Science, JFSCA, Vol. 30, No. 4, Oct. 1995, pp 997-1002)

Cone & Johnson: *Contact Highs and Urinary Cannabinoid Excretion After*

Passive Exposure to Marijuana Smoke (Clinical Pharmacology Therapeutics, Vol. 40, No. 3, September 1986)

Cone, Johnson, Darwin Yousefjad, Mell, Paul & Mitchell: *Passive Inhalation of Marijuana Smoke: Urinalysis and Room Air Levels of Delta-9-Tetrahydrocannabinol* (Journal of Analytical Toxicology, Vol. 11, May-June 1987)

Mul6, Lomax & Gross: *Active and Realistic Passive Marijuana Exposure Tested by Three Immunoassays and GCIMS in Urine* (Journal of Analytical Toxicology, vol. 12, May/June 1988)

Dr. Willette spoke to the methods utilized and conclusions drawn from the above-noted studies. It does not appear disputed that the study most generally recognized as authoritative in the field is the final experiment performed by Dr. Cone, and others, under the sponsorship of the Addiction Research Center and the Navy Drug Screening Laboratory, the study in which Dr. Willette is acknowledged for his advice and consultation.

The most recent Cone study involved seven subjects, five of whom were drug-free males with a history of marijuana use and two of whom were drug-free males with no history of marijuana use. In part, the first five subjects were exposed under double-blind conditions to the smoke of sixteen marijuana cigarettes for one hour per day for six days, in a small confined room, described as the equivalent of a bathroom. A second exposure study was then performed using four marijuana cigarettes for six days under the same conditions, with one day of placebo marijuana smoke exposure preceding and following the actual exposure. The third exposure study was performed on the two subjects with no drug use history. They were exposed to the smoke of sixteen marijuana cigarettes in a small enclosed room, under similar conditions, over a period of six days. Room level concentrations of delta-9tetrahydrocannabinol (THC), the major psycho-active constituent of marijuana smoke, were monitored throughout the experiments. The experiment was conducted on one occasion with the door of the room being open, while on all other occasions it was closed. The strength of marijuana used was described as 2.8% THC.

As can be determined from the Cone study, passive exposure to the smoke of sixteen marijuana cigarettes in a small enclosed area did, in some instances, result in positive drug tests. As Dr. Willette stresses, however, none of the subjects in the Cone study registered positive for cannabinoids two days after their last exposure to the passive marijuana smoke. In other words, all of the subjects showed cannabinoids below the first screening level of 50 ng/ml within 48 hours of their exposure to the sixteen cigarettes burned in a bathroom-sized sealed room. Dr. Willette compares that situation to the grievor's, who did score over 50 ng/ml in the screening test, and 24 ng/ml in the GC/MS test, which exceeds the 15 ng/ml threshold for a positive test, and submits that the level of cannabinoids

found in Mr. Ouellette, after a day and a half from the supposed consumption, is indicative of direct consumption and inconsistent with passive inhalation.

Dr. Willette also points to the fact that substantial drops in ambient THC levels were recorded during the Cone experiment when the door to the room was opened. Dr. Willette stresses that in the Cone Study leaving the door of the experimental room open caused a dramatic reduction in THC concentrations in the air in the room, said to be in the order of a 90% drop. The Cone study demonstrates that when two persons smoked four marijuana cigarettes in the room with the door open, in the presence of three passive inhalers, **the room air THC content, and the estimated** THC inhaled by the subjects could only be read at negligible amounts. After fifteen minutes with the door open the THC content in the air of the room was registered at 0.03 units, as compared to 1.168 with the door closed. Those observations, according to Dr. Willette, are significant in the instant case given that the grievor testified that the front and back doors of the house were open during the party he attended on the Saturday night, and that at least one window of the car in which he transported the two individuals on the Friday night was also open.

Dr. Pagliaro does not take issue with the studies relied upon by Dr. Willette, although he cautions that they do tend to confirm that second hand smoke can yield positive test results under certain circumstances, and that in the opinion of the researchers themselves caution is advised when dealing with the results of drug tests in attempting to determine whether they are the result of passive or direct inhalation. He also stresses the personal variables among the subjects in the experiment performed by Dr. Cone, noting the varying impact of such factors as the overall size, weight, body fat content, liver function and lung function of the subjects, as well as the specific gravity of their urine.

Dr. Pagliaro argues that there is an area in which it is impossible to decipher the difference between a nonsmoker who has absorbed passive marijuana smoke and an active smoker, based on positive drug tests. By way of explanation, he produced a drawing of two inverted bell curves, one representing non-marijuana smokers, and the other representing marijuana smokers, with the horizontal axis representing the positive GC/MS cannabinoid readings in the range of 20 to 800 ng/ml. He submits that there is a point at which the bell curves intersect, and that within that area it is difficult to determine whether a reading, for example, in the range of 20 ng/ml can reliably be seen as the high end level of passive exposure of a non-smoker or the low end level of direct exposure of an active smoker.

Dr. Pagliaro also stresses the factor of THC concentration as it might impact on the value of the Cone experiment. He notes that in most of the

older studies, including the Cone study, the THC levels utilized were in the .order of 1% to 3%. Based on his understanding, gained in part from police laboratories with which he is in occasional contact, marijuana now available on the streets is believed to have a THC content ranging from 8 to 20 per cent, and that hashish can be in the range of a 20 to 60 per cent THC content.

Under cross-examination Dr. Pagliaro did not dispute the suggestion that if the window of the car in which Mr. Ouellette found himself was open, that would significantly reduce the amount THC in the ambient air of the vehicle.

Called in reply testimony, Dr. Willette took strong issue with the double bell curve theory advanced by Dr. Pagliaro, stating that in his opinion the two bell curves would not in fact overlap. Stressing that the house described by the grievor, of which the doors were open during the Saturday night party, is some sixteen times larger than the bathroom-sized room utilized in the Cone study, Dr. Willette reaffirmed his rejection of the theory of passive inhalation advanced by Mr. Ouellette. Noting that when sixteen cigarettes were burned within the sealed bathroom sized room only one of five subjects tested positive for part of one day, he questions how much passive smoke the grievor could have inhaled to remain positive almost two days after the events he maintains caused his condition.

It is clear from the testimony of the two experts, as well as from the studies which they placed before the Arbitrator, that there can be circumstances in which the passive inhalation of marijuana smoke can yield a positive drug test result. Such a circumstance is, however, apparently quite exceptional. Such studies as do exist would indicate that a non-smoker exposed to passive marijuana smoke can test positive on a GCIMS test for a period of up to two days following the ingestion of passive smoke, but only where the conditions of ingestion have been extreme, as for example exposure within the sealed bathroom-sized chamber utilized in the experiment of Dr. Cone, and the enclosed small car which was used in the study done by Morland. Against the background of the experimental data, and with all due allowance for the possible increased THC content of present day marijuana, it becomes necessary to carefully consider the objective facts related by Mr. Ouellette, in considering the value of the 24.6 ng/ml reading which was recorded on his GC/MS test.

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What, then, does the evidence disclose? Firstly, there is **considerable reason to be concerned about the overall** credibility of Mr. Ouellette's testimony. During his evidence in chief he indicated that he proceeded from Edson to Edmonton at the end of his work day on Friday, October 3, 1997. Under cross-examination by counsel for the Company, however, he admitted that in fact he left work early that day, as he was compelled to be in court in Edmonton at 2:00 p.m. on a charge of driving while his licence was under suspension. He further admitted that he was in fact

convicted that day of that specific offence. Notwithstanding, by his own admission, he operated a friend's car to drive his companions to the rock concert only a few hours following his conviction. Now, it is arguable that the foregoing only demonstrates that the grievor is an unrepentant scofflaw with little respect for the rules governing the lawful operation of vehicles. Unfortunately, however, his blatant willingness to drive while under suspension, and to arguably mislead this hearing at least to some extent with respect to the course of events on October 3, 1997, leave open to question his appreciation of the importance of general integrity and the respect of rules. On that basis alone, his overall credibility is not of the highest standard.

As touched upon above, the grievor's own evidence of his activities on the evening of Friday, October 3 and Saturday, October 4, 1997 bears close examination, for the purposes of applying the known scientific data to an informed interpretation of his positive drug test reading. Mr. Ouellette relates that on the evening the 3rd he encountered a friend at a pub who offered him tickets to the Rolling Stones concert that evening. As the grievor could not afford the tickets he declined and the tickets were then sold to the friend's brother-in-law. Mr. Ouellette relates that after eating some pizza and consuming soft drinks at the pub he drove the two gentlemen to the rock concert in the friend's automobile, which Mr. Ouellette later parked at his home for the night. As they approached the concert stadium in the car the brother-in-law suggested that the two of them should get high, whereupon one marijuana cigarette and one cigarette containing hashish were produced. According to Mr. Ouellette, each of the individuals smoked one of the cigarettes, while the grievor declined the offer of the brother-in-law to share in their consumption. The grievor initially described the car as being a two-door vehicle, with the windows rolled partially down. By his estimate it took the individuals some three to four minutes to smoke their joints, and that they did so as they were within five minutes of the stadium. In fact some distance from the stadium they opened the car door and left, judging that they could proceed more quickly on foot, as the traffic was somewhat congested. According to Mr. Ouellette's evidence as he proceeded onwards in the vicinity of 11th Street and Stadium Road in Edmonton, he decided to roll up the driver's side window, as he could see police directing traffic in the area, and he had concerns about the marijuana smoke possibly being detected.

With respect to the events of Saturday, October 4, 1997 Mr. Ouellette relates that he attended a party, apparently involving a pool league, at a residence described as being east of the Coliseum in Edmonton. He states that when he arrived there were some twenty people there, although approximately fifty people eventually attended. He states that he was there some two and a half hours, and that the front and back door of the relatively small house were open at all times. According to his account he spent some time in the house and also in the yard, socializing with guests, approximately one-third of whom he estimated were smoking marijuana at various points in time.

During the course of the grievor's cross-examination he admitted that on the evening of the Friday he was in fact driving while his licence was disqualified, a matter in relation to which he had attended court on the same day. He also admitted that he had previous convictions against his record for driving while disqualified, including one in May of 1997.

During the course of his testimony the grievor stated that a letter which he provided to the Brotherhood, which gave an approximated square foot measurement of the house where the party was located was prompted, in part, by a request from his union representative. When pressed as to whether the letter he prepared was drafted in the knowledge of certain of things contained within the report of Dr. Pagliaro, Mr. Ouellette simply responded that he did not know the details of Dr. Pagliaro's report, but that he had been advised to provide such estimates by his union representative, Mr. John Dutra. However, under oath Mr. Dutra stated that while he did request a letter from the grievor relating the events of both the car incident and the house party, he did not at any time ask Mr. Ouellette to provide specifics as to the size of the car or of the house, contrary to the grievor's own testimony.

Apart from the problem of Mr. Ouellette's credibility, even if one accepts his testimony, in light of such scientific knowledge as is available the probability of passive marijuana inhalation as an explanation for his reading of 24.6 ng/ml on the drug test conducted two days following the Saturday night party becomes highly questionable. By his own account, the automobile in which he was driving his two friends to the rock concert had at least one window open, and perhaps two. At one point in his testimony he stated that "the windows" were partially open. At another point he indicates that he closed the driver's side window as he approached an area where there were police

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officers. It is not disputed, in any event, that one of the doors of the car was opened when the two friends left to walk the balance of the distance to the rock concert. There was, in the circumstances of the moving car, an obvious element of ventilation which, based on the Cone study, would suggest the great likelihood of drastically reduced THC levels in the car and, correspondingly, lower ng/ml readings on a GC/MS test conducted two to three days after the fact.

The same is true with respect to the house party. As the circumstances were described by Mr. Ouellette, both the front and back door of a relatively small house were at all times open during the course of the party. It is difficult to compare that situation to the "sealed bathroom" scenario described in the experiment of Dr. Cone. Even allowing for the higher concentration of THC in current day marijuana, the factor of ventilation in both the house party and the automobile call into serious question the theory advanced by Mr. Ouellette to explain his positive drug test.

The Arbitrator was not referred to any Canadian arbitral authorities dealing with the issue of the passive inhalation of second hand marijuana smoke. Two American arbitration awards are referred to by the parties, however. In **Kerrville Bus Co. Inc. and International Brotherhood of Teamsters, Local No. I 110**, an arbitration award of Arbitrator E.W. Bankston, dated January 19, 1995 (Louisiana) involved the discharge of a bus driver for a positive drug test. In that case the Arbitrator accepted the grievor's explanation that his drug test was caused by the passive inhalation of marijuana smoke, where it was established that his roommate smoked considerable amounts of marijuana for medical reasons. Although it does not appear that expert testimony was called in that case, the Arbitrator referred to the cautionary notes contained in some of the scientific literature with respect to the fact that in some circumstances passive inhalation can cause positive readings, and sustained the grievance.

The second case referred to is **South Eastern Pennsylvania Transportation Authority and Transport Workers Union, Local 234**, an award of a board of arbitration chaired by Arbitrator Barbara Zausner Tener, dated November 15, 1988. In that case, with the assistance of expert testimony, the majority of the board of arbitration concluded that a train operator's positive drug test of 14 ng/ml on a CG/MS test was consistent with his theory of having passively inhaled marijuana smoke. Although the award does not greatly elaborate, it appears that in that case the suggestion was that the grievor could have ingested second hand marijuana smoke generated by passengers on his subway train.

In approaching this matter the Arbitrator does consider it important to respect the cautionary statements of the researchers in the field. As Cone comments, in part, in the conclusion of his first cited report:

... Our present results suggest caution both to individuals who might be passively exposed to heavy marijuana smoke and to those who interpret marijuana screening data, because with sufficient time and high marijuana smoke exposure conditions, it becomes difficult to distinguish between active smoking and passive inhalation.

As noted above, it would also appear that there remain considerable unknowns with respect to the absorption capacity of specific individuals, having regard to factors such as their size, weight, body fat content and liver, renal and pulmonary functions as well as the specific gravity of their urine.

Notwithstanding these considerations, however, it would appear to the Arbitrator that there are certain compelling bench marks which can reliably be drawn from the research literature. Perhaps most significant, for the purposes of the instant dispute, is the fact that none of the experimental data would appear to disprove the finding of the Cone research to the effect that, even in the cases of the most extreme exposure to intense levels of THC in ambient air, ventilation by the

opening of a door had an immediate and dramatic effect, reducing the concentrations of THC to less than 10% of their prior values. Dr. Pagliaro, whom the Arbitrator judges to be a careful and responsible witness, readily agreed that the fact that the car windows were open on the evening of the drive to the rock concert could have a substantial impact.

it appears to the Arbitrator that, in the face of a positive drug test whose technical accuracy is not contested, there is a certain onus upon an individual who seeks to advance the defence of passive smoke inhalation. At a minimum, such a defence should contain an account of facts, preferably supported by competent medical opinion concerning the grievor's own physical condition, such as to bring the test results of the individual employee within some reasonable relationship with those positive tests encountered in the generally accepted clinical studies of passive inhalation of marijuana smoke. In making comparisons, it is important to appreciate that there are apparently no clinical studies which support the theory of a positive test for cannabinoids by passive inhalation in a ventilated setting. Such studies as exist suggest that ventilation at the point of exposure to secondhand smoke is a significant factor tending to discount passive inhalation as an explanation for a positive test reading.

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When the objective facts of ventilation, both in respect of the vehicle and the house party are coupled with the Arbitrator's previously expressed concerns about the overall credibility of the grievor, the strength of the Brotherhood's case declines considerably. The grievor's theory of passive inhalation is substantially undermined by his own account of events, involving significant ventilation occasioned by open windows in the car on the way to the rock concert, and the open doors at the front and back of the house where he attended the party on the Saturday evening. In the circumstances, in light of the state of scientific knowledge and the expert testimony adduced, the Arbitrator is compelled to the conclusion, on the balance of probabilities, that the grievor's explanation for his positive drug test is not plausible, and is substantially less probable than the contrary inference, which is that he caused the positive drug reading by his own active consumption of cannabis.

The evidence in the case at hand, quite apart from the grievor's own doubtful credibility, brings the grievor well outside the ambit of all of the accepted clinical studies, and renders his explanation incredible. It should be stressed that if there are any shortcomings in the evidence, they must lie at the feet of the grievor, and not of his bargaining agent, whose representatives and counsel provided him the most thorough and informed representation possible.

For all of the foregoing reasons the grievance is dismissed.

September 10, 1998

(signed) MICHEL G. PICHER
ARBITRATOR