UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, and TOBACCO-FREE KIDS ACTION FUND, AMERICAN CANCER SOCIETY, AMERICAN HEART ASSOCIATION, AMERICAN LUNG ASSOCIATION, AMERICANS FOR NONSMOKERS' RIGHTS, and NATIONAL AFRICAN AMERICAN TOBACCO PREVENTION NETWORK Intervenors, v. PHILIP MORRIS INCORPORATED, et al. Defendants.	Civil Action No. 99-CV-02496 (GK) Next scheduled court appearance: (none scheduled) **REDACTED FOR PUBLIC FILING**[1]

UNITED STATES' FINAL PROPOSED FINDINGS OF FACT
(Incorporating Errata of August 16, 2005)

[1]Information designated by Defendants as "Confidential" pursuant to Order #7, Order #36, and Order #638 in the above-captioned action has been redacted. Order #7 allows each Defendant to designate as "Confidential" such information, document or material that it in good faith believes "derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure and use; and is the subject of efforts that are reasonable under the circumstances to maintain its secrecy;" or information otherwise entitled to protection under Rule 26(c) of the Federal Rules of Civil Procedure. Order #36 allows each Defendant to designate as "Confidential" information that is entitled to protection pursuant to Order #7 and meets the further requirement that it is "so proprietary or competitively sensitive that its disclosure to a competitor would cause irreparable competitive injury." Order #638 supplements and adds to the provisions of Orders #7 and #36 and sets forth procedures for "any party wishing to make confidentiality designations for Information and/or Designated Prior Testimony."

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GLOSSARY OF ABBREVIATIONS

The following abbreviations are used throughout the United States' Post-Trial Proposed Findings of Fact for citations to the trial record:

United States' Post-Trial Proposed Findings of Fact	US FF
Witness Written Direct Testimony	WD
Witness Trial Testimony	TT
Designated Prior Deposition Testimony	PD
Designated Prior Trial Testimony	PT
Exhibit Admitted During Trial	(A)
Exhibit Offered During Trial	(O)

EXECUTIVE SUMMARY

In the course of trial that began in September 2004 and lasted nearly nine months, the United States established facts that prove that each of the Defendants in this action has committed violations of Sections 1962(c) and 1962(d) of the Racketeer Influenced and Corrupt Organizations Act ("RICO"), 18 U.S.C. §§ 1961-1968, as alleged in Counts 3 and 4 of the United States' First Amended Complaint. The evidence introduced by the United States – presented through 58 live witnesses, over 10,000 documents, and testimony of 120 witnesses appearing by prior designation – proves that Defendants have engaged in a massive 50-year scheme to defraud the American public, including consumers of cigarettes, and that Defendants' past and ongoing conduct establishes a reasonable likelihood of future violations. Accordingly, the totality of the evidence compels a finding that Defendants have violated RICO and warrants imposition of equitable relief to prevent and restrain Defendants from committing ongoing and future violations. The evidence supporting these findings is set forth in the United States' Post-Trial Proposed Findings of Fact.

In the course of the trial, the Court had the opportunity to observe the many witnesses proffered by both sides, and to assess their credibility in its role as finder of fact. The experts proffered by the United States were all highly qualified to assist the Court in the areas in which they testified. The United States' experts testified on topics that extended naturally from their own professional work, reached conclusions that find widespread support in the relevant fields or disciplines and that rested on the broadest range of relevant evidence; therefore, the United States' experts were highly credible. Many of these witnesses – Dr. Jonathan Samet, Dr. Allan Brandt, Dr. Neal Benowitz, Dr. Jack Henningfield, Dr. Jeffrey Harris, Dr. Paul Slovic, Dr. Neil Weinstein, Dr. David Burns, Dr. Frank Chaloupka, Dr. Michael Fiore, Dr. Michael Eriksen, Dr.

Anthony Biglan, and Dr. Max Bazerman – are widely recognized as among the world's preeminent experts on the precise subjects on which they offered testimony. Thus, their testimony rested – in addition to materials reviewed for this particular case – upon years of education, training, and personal research and experience on the matters on which they were called to testfy. Many had dozens, in some cases hundreds, of peer-review publications on smoking and health issues in their respective field of expertise, and several have been selected as editors or senior editors on Reports of the Surgeon General or other consensus-based reports of scientific and public health bodies on smoking and health topics.

By contrast, Defendants' experts – and their scientific experts in particular – were markedly less credentialed and accomplished in the particular areas for which they were called to testify. In contrast to the United States' experts, many of Defendants' experts – including Edwin Bradley, Peter Rowell, James Langenfeld, Richard Semenik, James Heckman, Donald Rubin, Daniel Fischel, William Wecker, Roman Weil, and Dennis Carlton – have few or no peer-reviewed publications on smoking and health issues. In addition, some of these experts, including Langenfeld and Semenik, offered opinions about Defendants' conduct without reviewing tobacco company documents directly relevant to the subject matter of their testimony. While many had expertise in a particular field, that field was tangential or marginally related to the actual subjects on which they testified to this Court. For most of these witnesses, their involvement with the subject matter of their testimony began when they were recruited by Defense counsel for consulting or expert witness work, and their work in the area has been confined to lucrative service as expert witnesses or consultants for these Defendants in smoking and health litigation.

Additionally, Defendants' fact witnesses – including adverse fact witnesses called by the

United States during its case-in-chief – were handsomely paid current and former employees who repeatedly offered or embraced strained readings of documents, often basing testimony on single documents that were not representative of the weight of the evidence on a particular topic. In other instances, Defendants' witnesses offered post hoc explanations for conduct that were directly contradicted and impeached by documents created contemporaneously with the events. Thus, the testimony of Defendants' witnesses, on the main, was less well grounded in documentary support, more effectively impeached during cross-examination, and thus less credible.

Cigarette Smoking, Disease and Death

Cigarette smoking and exposure to secondhand smoke kills nearly 440,000 Americans every year. The annual number of deaths due to cigarette smoking is substantially greater than the annual number of deaths due to illegal drug use, alcohol consumption, automobile accidents, fires, homicides, suicides and AIDS combined. Approximately one out of every five deaths that occur in the United States is caused by cigarette smoking, which adversely effects almost every organ in the body. Among the major diseases caused by smoking are lung cancer, atherosclerosis, cerebrovascular disease, chronic obstructive pulmonary disease, cardiovascular disease, including myocardial infarction and coronary heart disease, esophageal cancer, kidney cancer, laryngeal cancer, and oral cancer. The Reports on Smoking and Health prepared by the Office of the Surgeon General since 1964 have detailed smoking's role in causing death and disease. The 2004 Surgeon's General Report offers an effective compilation of the consensus conclusions of the scientific and medical communities as to the list of diseases caused by smoking.

As cogently explained at trial through the testimony of Dr. Samet, Chair of the

Epidemiology Department at Johns Hopkins Bloomberg School of Public Health, and Dr. Brandt, who occupies an endowed chair as a Professor of the History of Medicine at Harvard Medical School and is Chairman of the Department of the History of Science at Harvard University, the focus on smoking as a possible cause of disease began in the middle of the twentieth century. Physicians and public health officials in the United States had widely noted an alarming increase in numbers of cases of lung cancer. Virtually unknown as a cause of death in 1900, by 1935 there were an estimated 4,000 deaths annually. A decade later, the annual death toll from lung cancer had nearly tripled. The meteoric rise in lung cancers followed the dramatic increase in cigarette consumption that had begun early in the twentieth century. Annual per capita consumption of cigarettes in 1900 stood at approximately forty-nine cigarettes; by 1930, annual per capita consumption was over 1,300; by 1950, it was over 3,000. Population studies showed that the increases in lung cancer cases and deaths, though they lagged in time behind this increase in cigarette use, closely tracked the spike in cigarette smoking. This apparent association led to considerable speculation about the relationship between cigarette smoking and ill health. The initial speculation was confirmed by scientific study.

By late 1953, there had been at least five published epidemiologic investigations, as well as others identifying and examining carcinogenic components in tobacco smoke and their effects. The researchers conducting these studies had come to a categorical understanding of the link between smoking and lung cancer. This understanding was both broader and deeper than that obtained from the case studies and preliminary statistical findings earlier in the century. While some of the epidemiological methods were innovative, the scientists using them were careful to approach them in a thorough manner; these methods were completely consistent with established scientific procedure and process. Epidemiology was not just based on statistics, but also was an

interdisciplinary, applied field. The studies substantially transformed the scientific knowledge base concerning the harms of cigarette use. Unlike earlier anecdotal and clinical assessments, these studies offered new and pathbreaking approaches to investigating and resolving causal relationships.

The Formation of the Enterprise and the Launch of the Scheme to Defraud

In response to this growing body of evidence that smoking caused lung cancer, Defendants and their agents joined together and launched their coordinated scheme in the early 1950s. Defendants developed and implemented a unified strategy that sought to reassure the public that there was no evidence that smoking causes disease. At the end of 1953, at the urging of the chief executive of the leading cigarette manufacturer at the time, American Tobacco, the chief executives of the five major cigarette manufacturers in the United States – Philip Morris, R.J. Reynolds, Brown & Williamson, Lorillard, and American – met at the Plaza Hotel in New York City with representatives of the public relations firm Hill & Knowlton and agreed to jointly conduct a long term public relations campaign to counter the growing evidence linking smoking as a cause of serious diseases. The series of meetings at the Plaza Hotel spawned an association-in-fact enterprise ("Enterprise") to execute a fraudulent scheme in furtherance of their overriding common objective – to preserve and enhance the tobacco industry's profits by maximizing the numbers of smokers and number of cigarettes smoked and to avoid adverse liability judgments and adverse publicity. The fraudulent scheme would continue for the next five decades.

As a result of the Plaza Hotel meetings, the companies launched their public relations campaign by issuing the "Frank Statement to Cigarette Smokers," a full page announcement published in 448 newspapers across the United States in January 1954. The Frank Statement included two statements that lay at the heart of Defendants' fraudulent scheme – first, that there

was "no proof" that smoking was a cause of any disease; and second, that the industry would jointly sponsor and disclose the results of "independent" research aimed at uncovering the health effects of smoking through the new industry-funded Tobacco Industry Research Committee ("TIRC"), later renamed the Council for Tobacco Research ("CTR"). At the same time that Defendants told the public that "we accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business," they established a sophisticated public relations apparatus in the form of TIRC – based on the "cover" of conducting research – to deny the harms of smoking or to claim that the issue of whether smoking causes disease remained an "open controversy." Defendants' two pronged approach was designed both to reassure smokers that they could keep smoking because proof of smoking's harms was lacking, and to reassure the public that they were responsible companies that were most interested in discovering the answers.

As Dr. Brandt concluded after extensive historical study of both the developing body of scientific evidence and Defendants' conduct, the "controversy" over the question of smoking and health did not exist in the scientific world. Defendants' contention that through the 1950s and 1960s eminent scientists equally and independently lined up on both sides of a "controversy" about the harms of smoking, is not supported by evidence. Instead, Defendants developed and effectuated **public relations** strategies to attempt to maintain and foment controversy in the face of new research, ever-mounting evidence, and emerging scientific consensus. And once they had organized and set in motion the essential strategy of generating "controversy" surrounding the scientific findings linking smoking to disease, Defendants stuck to this essential approach, without wavering, for the next half-century.

Over time, other entities joined and actively participated in the affairs of the ongoing

Enterprise and conspiracy, including Defendants Liggett and BATCo, Brown & Williamson's affiliate. Much of the evidence proving the existence of the Enterprise – and each Defendants' association with it and participation in its affairs – exists in documents and prior designated testimony submitted to the Court record. In 1958, the members of TIRC formed Defendant The Tobacco Institute, Inc. ("Tobacco Institute"), to assume many of TIRC's public relations functions. After its incorporation in 1985, Philip Morris Companies joined the Enterprise, becoming a direct parent to Philip Morris as well as to Philip Morris International, which had previously been a division of Philip Morris.[1] The Enterprise operated through both formal structures, including jointly funded and directed entities such as TIRC/CTR and the Tobacco Institute, and other less formal means, including scientific and legal committees, and direct contacts among and between Defendants, to communicate, advance, and maintain a united front, and to ensure lockstep adherence to achieve their shared aims. Defendants developed and used this extensive and interlocking web because they recognized that any departure from the industry-wide approach to the content of public statements made anywhere in the world, or the nature of research would have severe adverse consequences for the entire industry. To coordinate and further their fraudulent scheme, Defendants made, and caused to be made and received, innumerable mail and electronic transmissions from the 1950s through present.

Evidence introduced by the United States through witnesses and documents proves that Defendants' fraudulent scheme to publicly deny that smoking was a proven cause of disease occurred on the massive scale and for the duration that it did only because individuals both

[1] In January 2003, Defendant Philip Morris Inc. changed its name to Philip Morris USA Inc., and Defendant Philip Morris Companies Inc. changed its name to Altria Group, Inc. These Post-Trial Findings of Fact refer to Philip Morris USA as "Philip Morris" and "Philip Morris USA" interchangeably, and refer to Altria as "Philip Morris Companies" and "Altria" interchangeably.

employed by and associated with Defendants acted intentionally and specifically in furtherance of that scheme. The same is true for all other components of the overarching scheme to defraud as well. The record is replete with documented instances of Defendants' employees choosing courses of conduct with explicit acknowledgment that the conduct was motivated not by the "merits," but by the commitment to protect and further Defendants' scheme. In addition to express evidence of Defendants' fraudulent intent in the Court record, the evidence in the case offers powerful circumstantial evidence of Defendants' intent to defraud the American public.

The Role of TIRC/CTR and the Tobacco Institute in Defendants' Decades-Long Campaign to Deny and Distort the Health Effects of Smoking

From the outset, the dual functions of TIRC/CTR, public relations and scientific research, were intertwined. Rather than carefully and critically assessing the emerging scientific data concerning the harms of smoking, TIRC/CTR focused its energies and resources in two areas. First, in its public relations capacity, it repeatedly attacked scientific studies that demonstrated the harms of cigarette smoke and worked to reassure smokers about cigarettes. Defendants' control of CTR meant it could never and would never conclude that smoking causes any disease, and in its 46 years of existence ending in 2000, it never did. Second, it developed and funded a research program that concentrated on basic processes of disease and that was distant from, if not completely irrelevant to, evaluating the immediate and fundamental questions of the risks and harms associated with smoking. Dr. Brandt testified that CTR "never developed an approach to carcinogenesis and tobacco that could resolve the question of the harms induced by cigarette smoking."

From its establishment in 1958, the Tobacco Institute became the main public voice of Defendants. The Tobacco Institute employed numerous means of communication – issue statements, advertisements, pamphlets, testimony, and television spokespersons – to advance

Defendants' jointly formulated positions on smoking and health issues, including denying that smoking cigarettes causes diseases, and supporting the false claim that the link between smoking cigarettes (and exposure to secondhand smoke) and adverse health effects remained a legitimate "open question." In this way, the functions (public relations and research) of these two entities were integrally related – by Defendants' intentional design, both organizations were fully committed to Defendants' goals of denying and discrediting the substantial scientific evidence of smoking's harms and convincing the public (especially smokers and potential smokers) that smoking was not harmful to health.

Defendants repeatedly represented to the public that they were sponsoring independent research aimed at discovering the health effects of smoking. Indeed, Defendants told the public that they created TIRC/CTR to administer this effort. These statements were misleading and deceptive half-truths, because in fact, as shown through the testimony of numerous documents and witnesses – both those appearing live and by prior designation – the Cigarette Company Defendants[2] used TIRC/CTR to serve as a "front" organization to advance their public relations and litigation defense objectives. Through CTR, the Cigarette Company Defendants funded "Special Projects" – research projects conceived and directed by committees of industry representatives, including lawyers, to support scientists who had shown a willingness and ability to generate information and provide testimony that could bolster the industry's litigation defenses before courts and governmental bodies and cast doubt on the scientific evidence that smoking caused cancer and other diseases. Similarly, Defendants also sponsored jointly funded research

[2]As used here and throughout the United States' Post-Trial Findings of Fact, "Cigarette Company Defendants" refers to Defendants American Tobacco, British American Tobacco (Investments) Limited ("BATCo"), Brown & Williamson, Liggett, Lorillard, Philip Morris, and R.J. Reynolds.

through lawyer-administered "Special Accounts" – to recruit and support industry-friendly researchers to serve as expert witnesses in litigation and to represent the industry's scientific position in legislative and regulatory proceedings.

Within the individual Cigarette Company Defendants, high-ranking scientists and executives recognized the legitimacy of the scientific consensus, and the limited amount of internal research that their scientists did perform was wholly consistent with the results of mainstream scientific study. The Court heard unchallenged testimony from Dr. William Farone, a physical chemist who Philip Morris hired in 1976 to oversee its development of potentially less hazardous cigarettes, that it was "well accepted" within Philip Morris during his eight years there that smoking causes disease. Dr. Farone's testimony was buttressed by similar testimony from Jerry Whidby, a scientist for 26 years at Philip Morris, who admitted that when he began at Philip Morris in 1972, he already believed smoking to be a cause of disease.

Yet Defendants' executives and lawyers, as well as outside lawyers representing the companies, also recognized that any public disclosure or acknowledgment of this internal understanding that cigarettes cause disease would jeopardize their unified public relations position, would threaten industry profits, and would expose not just individual companies, but the entire industry, to legal liability and product regulation. Thus, numerous exhibits discuss and explain a particular Defendant's conduct by overt references to what is good for the "industry" as a whole, and the need to maintain "industry cooperation" or "coordination."

The starting point for evaluating whether Defendants' public statements on the health effects of smoking were fraudulent is the statements themselves, and what Defendants intended the public to take away from those statements. It is clear that the actual public statements issued by organizations like TIRC/CTR, the Tobacco Institute, and Cigarette Company Defendants

themselves, were flatly inconsistent with Defendants' actual understanding of the causal link between smoking and disease. For example, when Defendants assured the public through their "Frank Statement" that "there is **no proof** that cigarette smoking is one of the causes [of cancer]" (emphasis added), citing approvingly to unnamed "authorities," that was not true at the time, and Defendants knew it. Defendants' internal documents acknowledge that their public denial that smoking cigarettes causes disease both was contrary to the overwhelming medical and scientific consensus – established through extensive epidemiological and other scientific investigation by the early 1950s – and was intended to convince smokers and potential smokers that there remained genuine scientific "controversy" about whether smoking caused disease. Indeed, some internal documents state explicitly that Defendants' public statements were false, contrary to the overwhelming weight of scientific evidence, and not scientifically defensible.

In short, the evidence before the Court demonstrates that Defendants' public statements denying that smoking causes adverse health effects were knowingly false, deceptive, misleading, or otherwise fraudulent when made.

The Agreement Not to Compete on Health Claims or to Perform Certain Biological Research

Defendants' joint commitment to publicly deny that any marketed cigarettes were a proven cause of disease had profound effects on all aspects of their business, including their marketing and research activities. For example, documentary evidence as selected and explained at trial by Dr. Jeffrey Harris, an economist from M.I.T., proves that Defendants recognized that there was a substantial market for a cigarette that could be marketed as potentially less hazardous, but that they collectively agreed not to do anything in the marketing and development of cigarettes that would jeopardize the public relations position at the core of the scheme to defraud: the denial that any commercially sold cigarettes were a proven cause of disease. In his

trial testimony, Dr. Farone confirmed that he personally learned of these agreed-upon limitations on marketing and research conduct while at Philip Morris, and that the agreement imposed actual restrictions on the type of research Philip Morris would conduct on cigarettes in their United States' laboratories. And Dr. Harris's testimony explained the basis for his conclusion that Defendants' behavior in this area has evidenced overt economic collusion among Defendants rather than vigorous competition.

Defendants made public statements proclaiming their commitment – and ability – to develop potentially less hazardous cigarettes, but always with the caveat that such actions were unnecessary unless and until cigarettes were proven to cause disease. For example:

- In 1964, Bowman Gray, Chairman of the Board of R.J. Reynolds, stated publicly on behalf of R.J. Reynolds, Philip Morris, Brown & Williamson, Lorillard, Liggett, and American, that "[i]f it is proven that cigarettes are harmful, we want to do something about it regardless of what somebody else tells us to do. And we would do our level best. This is just being human."

- In the January 24, 1972 issue of the *Wall Street Journal*, Philip Morris Senior Vice President James Bowling declared that "[i]f our product is harmful . . . we'll stop making it. We now know enough that we can take anything out of our product, but we don't know what ingredients to take out." Bowling further stated that "[w]e don't know if smoking is harmful to health, and we think somebody ought to find out."

- In June 1978, a Tobacco Institute Vice President, in the magazine *Business Horizons*, reflected the industry's public stance that cigarettes need not be made safer because they were already safe: "A question often asked of the tobacco industry is whether researchers are developing a 'safe' cigarette. . . . The tobacco industry is convinced that no cigarette has been proved unsafe. Therefore, they regard any suggestion of a 'safe' or 'safer' cigarette as tortured logic."

As explained by Dr. Farone and supported by documentary evidence going back to the Plaza Hotel meetings in December 1953, this restriction on their business activity had two related components. First, Defendants agreed not to compete on smoking and health issues in the

marketing of cigarettes, because any suggestion that one brand was less harmful than another begged the implicit recognition that others were more hazardous – an implication that contradicted Defendants' public stance that no cigarettes were unsafe.

Accordingly, when a Defendant designed a cigarette – or developed a cigarette component – intended to potentially reduce the delivery of harmful smoke constituents to the smoker, the Defendant intentionally chose not to provide such information to the consumer, even if they believed it to be truthful scientific information. As an RJR lawyer told officials at the Food and Drug Administration and other federal health agencies in 1987, when discussing the "Premier" cigarette that RJR believed to be less hazardous, Reynolds would not make health-related marketing claims about Premier because the tobacco industry maintained that "conventional cigarettes are not unsafe, and that it would never reverse this position." Promoting one cigarette as "safer" than others "would be an indictment of the tobacco industry and its long standing position that conventional cigarettes are not unsafe."

In another instance, Defendant Liggett spent twelve years and $15 million developing a cigarette – the XA – that its research showed to be significantly less carcinogenic than its conventional cigarettes. However, Liggett killed the entire project before marketing the cigarette to consumers after B&W threatened Liggett's "very existence" if it marketed the cigarette. B&W also threatened to freeze Liggett out of joint defense agreements and exclude Liggett from the Tobacco Institute. Delivered through B&W's representative on the Tobacco Institute's Committee of Counsel, the threat was based on B&W's view that selling XA would be an admission against the interest of all Cigarette Company Defendants.

The second part of this agreement, the so-called "Gentleman's Agreement," was a joint commitment not to perform certain types of biological tests using commercially sold cigarettes in

their domestic research facilities. This research restriction was intended to prevent Defendants from generating internal evidence that could, if ever disclosed, suggest that the companies believed there was any need to examine whether a causative link existed between smoking and disease, let alone generate scientific information that confirmed such a link. While Defendants did undertake product development research in their labs, the evidence shows it was of a defensive nature, to be prepared should the agreement not to compete break down.

At trial, Defendants proffered an expert, Dr. Langenfeld, to suggest another reason for Defendants' failure to compete in this area – the threat of FTC regulation or enforcement actions. However, this expert did not look at Defendants' internal documents, and thus was unable to opine credibly about Defendants' state of mind. In fact, as Dr. Harris and Dr. Farone explained, supported by internal contemporaneous documents, it was the joint commitment to the fraud – not the FTC – that motivated Defendants' actions.

Secondhand Smoke

Evidence indicting passive smoking (also called secondhand smoke, environmental tobacco smoke, or "ETS") as a health hazard grew in the 1970s and 1980s. In 1986, the volume and strength of that scientific evidence prompted the Surgeon General, the National Research Council, and the International Agency for Research on Cancer to conclude that passive smoking causes lung cancer. In addition, passive exposure of infants and children adversely affects respiratory health, increasing the risk for severe lower respiratory infections, middle ear disease (otitis media), chronic respiratory symptoms, asthma, and sudden infant death syndrome, as well as reducing the rate of lung function growth during childhood. At trial, the testimony of United States' experts Dr. Jonathan Samet, who has contributed to several of the major consensus reports by public health bodies evaluating the evidence on secondhand smoke, and Dr. David Burns,

who has been a senior scientific editors of multiple Surgeon General's Reports, was consistent with this scientific consensus.

The consensus scientific conclusion that secondhand smoke causes disease and other adverse health effects rests on several grounds, including knowledge of the health risks of active smoking, the carcinogenicity and toxicity of components of mainstream and sidestream smoke, the evidence of the absorption by nonsmokers of disease-causing components of tobacco smoke, the absence of a threshold level for carcinogenic effects, and epidemiological studies that have assessed the association of passive exposure with disease outcomes.

During the 1970s, as the scientific evidence suggesting that passive exposure was hazardous began to grow and public health authorities began to warn of a potential health risks, Defendants recognized a major threat to their profits through smoking restrictions a general decrease in the social acceptability of smoking. In 1974, Tobacco Institute Chairman Horace Kornegay warned that smoking restrictions not only impacted sales but also "could lead to the virtual elimination of cigarette smoking." Reynolds CEO Ed Horrigan wrote Lorillard executives in 1982: "We all know that probably the biggest threat to our industry is the issue of passive smoking." A 1986 BATCo document recorded: "The world tobacco industry sees the ETS issue as the most serious threat to our whole business." Philip Morris Companies Vice Chairman Bill Murray was advised in 1987: "The situation can't get any worse. Sales are down, can't be attributed to taxes or price increases. ETS is the link between smokers and non-smokers and is, thus, the anti's silver bullet."

In response, Defendants crafted and implemented a broad-based "open question" strategy that echoed the fraudulent approach Defendants had taken with respect to what referred to as the "primary issue" – the adverse health effects for smokers themselves. The heart of Defendants'

strategy lay in their sustained, coordinated efforts to attack and distort the evidence indicting passive smoking as a health hazard. Defendants' objective was to deceive the public, government officials, and scientists into believing that an independent "controversy" existed as to the health risks of passive smoking.

As the testimony and documentary evidence established at trial, Defendants' initiatives went far beyond making false and deceptive public statements denying and distorting ETS's known health risks. Defendants have covertly funded favorable research through front organizations, secretly recruiting and training a network of consultants to parrot the industry's position worldwide. While John Rupp, a longtime industry counsel personally involved in these efforts, attempted to portray these activities in a benign light, his testimony was directly undermined and impeached by the contemporaneous documentary evidence. The Court also heard, during the examination of Reynolds scientist Michael Ogden, how Defendants' scientists and lawyers ghostwrote scientific articles published under the names of consultants, and directed "symposia" to get the consultants' industry-favorable papers and opinions into the scientific literature. Similarly, the trial testimony of Rupp and Reynolds' lawyer Mary Ward, and prior designations of Shook Hardy & Bacon's Donald Hoel, revealed the intense management of ETS scientific projects by lawyers – including these three witnesses – to maximize the use of the data and conclusions they generated. All of these initiatives were carried out as Defendants, including Tobacco Institute spokesperson Brennan Dawson, told the public that they would seek the truth and conduct objective research, and in spite of internal research confirming that secondhand smoke was a health hazard.

As part of Defendant's strategy, Philip Morris, Lorillard, and Reynolds created the Center for Indoor Air Research ("CIAR") in 1988. B&W formally joined CIAR in 1995, and BATCo

participated in the funding and management of certain CIAR "sponsored" projects. In the words of Philip Morris's Tom Osdene, CIAR's main purpose was intended to provide the industry with "ammunition" on the ETS "battlefield." CIAR took over the research responsibilities of the industry committee that had previously operated under the direction of Defendants' law firms Shook, Hardy & Bacon and Covington & Burling. Through the trial testimony of Max Eisenberg, who was hired to administer CIAR, the United States established that Defendants controlled CIAR and sought to conceal that control and instead portray CIAR as an "independent" research funding organization. BATCO's Chris Proctor viewed CIAR as a "buffer" that would give the industry's ETS projects legitimacy while still allowing "strong control of the projects." CIAR counsel John Rupp wrote in March 1993: "In sum, while one might wish it otherwise, the value of CIAR depends on the industry's playing an active role (1) in identifying research projects likely to be of value and (2) working to make sure that the findings of funded research are brought to the attention of decision makers in an appropriate and timely manner."

CIAR funded over $21 million in "Applied Projects" around the world to undermine the scientific consensus that ETS was a health hazard, while Defendants hid their management of scientific projects behind a facade of scientific independence. The CIAR Board of Directors, composed of executives and top scientists from the cigarette manufacturer members, had exclusive funding authority. Applied Projects were funded with no review by the organization's Scientific Advisory Board for scientific merit. Once funded, Applied Projects were closely managed by Board members and industry attorneys. The data and conclusions from the Applied Studies were then used by Defendants with the media, public health authorities, and government officials to dispute the known health risks of ETS. Thus, CIAR allowed Defendants a means to

create the perception of an independent "scientific controversy" surrounding the health effects of ETS exposure, for the purpose of opposing smoking restrictions and make smoking more publicly acceptable.

Similarly, as acknowledged by BATCo's Sharon Blackie at trial, Defendants developed an ETS Consultancy Program as an extension and amplification of domestic initiatives by industry law firms to counter ever-mounting evidence of secondhand smoke's harms. Through this global program, Defendants worked to covertly identify, "educate," and pay scientists in every world market to make public statements, author scientific papers, pen letters to scientific journals, and plan and attend scientific conferences. Defendants' explicit intent was to influence three particular audiences: "the scientific community, regulatory authorities, and the general public." BATCo's Blackie wrote: "If independent scientists back up our position, it becomes more credible, not only to the general public and the media, but to politicians and other decision-makers." For this reason, Defendants created a facade of independence by making contact with consultants only through the lawyers, having the consultants bill the law firms instead of the companies for their work, founding new organizations that consultants could point to publicly as their source, and omitting attribution to the companies in their public statements. Like CIAR, the overarching goal of the consultancy program was to create the false impression of a legitimate scientific controversy in order to forestall smoking restrictions and make smoking more publicly acceptable. B&W attorney Kendrick Wells called the consultancy program a "public relations program, not a scientific research operation." And, in the words of John Rupp, using the law firm "buffer" had the added benefit of protecting documents behind privilege.

Defendants' conduct with respect to passive smoking continues to this day. Currently, no Defendant publicly accepts the overwhelming scientific consensus that passive exposure to

cigarette smoke causes disease and other adverse health effects.

Addiction and the Manipulation of Nicotine Levels in Cigarettes

Cigarette smoking is an addictive behavior, a drug dependency characterized by compulsive use, psychoactive effects, and drug-reinforced behavior. Underlying the smoking behavior and its remarkable intractability to cessation is the drug nicotine. Nicotine is the primary component of cigarettes that creates and sustains addiction to cigarettes. This was established through the testimony of the United States' addiction experts – Dr. Neal Benowitz and Dr. Jack Henningfield, among the world's leading experts in their particular fields – and bolstered by the admissions of Defendants' sole nicotine expert, Dr. Peter Rowell.

At trial, Defendants offered little to no evidence to counter the documentary evidence and witness testimony demonstrating that the specific public statements that Defendants have made on the subject of addiction were intentionally false, misleading, or otherwise fraudulent when made.

Defendants have studied nicotine and its effects intensively since the 1950s. The trial record is replete with documents describing Defendants' examination and knowledge of nicotine's pharmacological effects on smokers, whether they characterized that effect as "addictive," "dependence-producing" or "habituating." The testimony of numerous witnesses, including former Philip Morris scientists Drs. Farone, Victor DeNoble, and Paul Mele, former Brown & Williamson Vice President Jeffrey Wigand, and Dr. Henningfield, demonstrates unequivocally that this focus on nicotine stemmed from Defendants' understanding of the central role nicotine plays in keeping smokers smoking, and thus its critical importance to the continued profitability, and very existence, of their industry. Indeed, witness testimony and trial exhibits show that Defendants purposefully designed and sold products that delivered a

pharmacologically effective dose of nicotine in order to create and sustain nicotine addiction in smokers. For example, an internal document drafted by high-level Philip Morris scientist Helmut Wakeham in 1969 recognized:

> We share the conviction with others that it is the pharmacological effect of inhaled smoke which mediates the smoking habit. . . .
>
> We have then as our first premise, that the primary motivation for smoking is to obtain the pharmacological effect of nicotine.
>
> In the past we at R & D have said that we're not in the cigarette business, we're in the smoke business. It might be more pointed to observe that the cigarette is the vehicle of smoke, smoke is the vehicle of nicotine, and nicotine is the agent of a pleasurable body response.
>
> This primary incentive to smoking gets obscured by the overlay secondary incentives, which have been superimposed upon the habit. Psychoanalysts have speculated about the importance of the sucking behavior, describing it as oral regression. Psychologists have proposed that the smoker is projecting and ego-image with puffing and his halo of smoke. One frequently hears "I have to have something to do with my hands" as a reason. All are perhaps operative motives, but we hold that none are adequate to sustain the habit in the absence of nicotine.
>
> We are not suggesting that the effect of nicotine is responsible for the initiation of the habit. To the contrary. The first cigarette is a noxious experience to the noviate. To account for the fact that the beginning smoker will tolerate the unpleasantness, we must invoke a psychosocial motive. Smoking for the beginner is a symbolic act. The smoker is telling the world, "This is the kind of person I am. . . ."
>
> As the force from the psychosocial symbolism subsides, the pharmacological effect takes over to sustain the habit . . . .

Similarly, R. J. Reynolds researcher Claude Teague acknowledged in an internal 1972 report, "Thus a tobacco product is, in essence, a vehicle for delivery of nicotine, designed to deliver the nicotine in a generally acceptable and attractive form. Our industry is then based upon design, manufacture and sale of attractive dosage forms of nicotine."

In March 1982, the National Institute on Drug Abuse noted that "five major national and

international reviews of this question, which have involved the most knowledgeable and experienced authorities in the area, have all reached the same conclusion: cigarette smoking is an addiction." Dr. Henningfield explained that in 1988, the Surgeon General's Report on "The Health Consequences of Smoking: Nicotine Addiction" affirmed this existing scientific and medical consensus. Dr. Rowell, Defendants' expert, agreed with the definition of "drug dependence" in that report, and agreed that nicotine is a drug of dependence.

Yet beginning in 1982, Defendants made numerous public statements that:

- Smoking cigarettes is not addictive because some smokers can, and have, quit smoking on their own;
- Smoking cigarettes is not addictive because it does not lead to physical "dependence";
- Smoking cigarettes is not addictive because it does not lead to "intoxication"; and
- Smoking cigarettes is not addictive because cigarettes are not like other addictive drugs, but rather smoking cigarettes is merely a "habit" like playing tennis, jogging, eating candy or listening to rock music.

At trial, not a single Defense witness – including Brennan Dawson, a former Tobacco Institute spokesperson who made many such statements on Defendants' behalf, and Dr. Rowell, Defendants' expert on nicotine – could provide any support for the proposition that any drug-taking behavior, including smoking, is not addictive if users can quit. Similarly, Dr. Rowell also readily testified that it is wrong as a matter of science to say that a drug is not addictive because it does not cause intoxication or physical dependence (as marked by withdrawal), and agreed that some addictive drugs, like cocaine and metamphetamine, have withdrawal of a severity comparable to nicotine; moreover, Dr. Rowell testified that at the time Defendants made these

statements, there was evidence that smoking cigarettes does in fact cause physical dependence. Dr. Rowell also agreed with the United States' experts that, as an addiction, smoking cigarettes involves a drug and is **not** comparable to non-drug "habits" like nailbiting, jogging, or playing tennis; and that nicotine the drug plays an essential role in cigarette use. Under questioning from his own counsel, Dr. Rowell testified to similarities between cigarette use and "hard" drug use, and he stated unambiguously, "there is clearly addiction for cigarette smoking."

To this day, Defendant cigarette manufacturers omit material information by failing to inform smokers about the addictiveness of the drug nicotine in cigarettes. At trial, Defendants' witnesses – including Philip Morris's current General Counsel and Senior Vice President, Denise Keane – admitted that the fact that nicotine is a drug and primarily responsible for addiction is important, material information for a smoker. Yet no Defendant has publicly admitted that nicotine delivered by cigarettes is addictive. Defendants' current public statements on addiction – including statements on their respective corporate Internet websites that acknowledge, to varying degrees, that smoking is addictive – avoid any mention of nicotine, let alone its role in addiction. Dr. Henningfield and Dr. Michael Eriksen, former director of the CDC's Office on Smoking and Health, both testified that Defendants' current statements about addiction omit material information by failing to inform smokers that smoking is addictive because cigarettes deliver the addictive drug nicotine.

Defendants have intentionally maintained and coordinated their fraudulent position on addiction and nicotine as an important part of their overall efforts to influence public opinion and persuade people that smoking was not dangerous. In this way, Defendants have kept more smokers smoking, recruited more new smokers, and maintained or increased profits. Additionally, Defendants have sought to discredit proof of addiction in order to preserve their

"smoking is a free choice" arguments in smoking and health litigation.

As part of Defendants' focused study of nicotine and its effects on the smoker, Defendants dedicated substantial resources to devise techniques to modify and manipulate the amount of nicotine that their products deliver. Dr. Farone, testifying from his personal experience and as an undisputed expert in cigarette design, and Dr. Henningfield, based on extensive review of Defendants' documents, testified that Defendants have studied extensively how every characteristic of every component of cigarettes – including the tobacco blend, the paper, the filter, and the manufacturing process – impacts nicotine delivery, and have utilized that understanding in designing their cigarettes on the market. In light of Defendants' recognition that "no one has ever become a cigarette smoker by smoking cigarettes without nicotine," Cigarette Company Defendants have designed their cigarettes with a central overriding objective – to ensure that smokers can obtain enough nicotine to create and sustain addiction.

As a necessary corollary to Defendants' fraudulent denial that smoking and nicotine are addictive, Defendants have publicly and fraudulently denied that they manipulate nicotine. The evidence shows that Defendants' particular statements denying manipulation of nicotine have been intentionally deceptive, misleading, or otherwise fraudulent when made. Through these and other false statements, Defendants have furthered their common efforts to deceive the public and carry out their fraudulent scheme.

Light and Low Tar Cigarettes

The Cigarette Company Defendants have designed and marketed so-called "low tar/low nicotine" in a manner intentionally designed to serve and further the fraudulent objectives of the Enterprise by keeping people smoking. As explained by several of the United States' experts, particularly Dr. David Burns, Dr. Benowitz, Dr. Henningfield, and Dr. Farone, and supported by

a extensive documentary record, Defendants developed cigarettes that would register lower yields on the standardized machine-smoking test whose results were reported by the FTC beginning in 1967 ("FTC test"), but that allow human smokers to obtain higher doses of nicotine needed to sustain their addiction. Defendants engaged in massive, sustained, and highly sophisticated marketing and promotional campaigns intended to portray these "health reassurance" brands – cigarettes with low FTC tar and nicotine ratings – as less harmful than regular cigarettes, and thus an acceptable alternative to quitting, while at the same time carefully avoiding any admission that any negative health impacts from smoking had been proven. However, Defendants knew that because the cigarette design itself influenced how people would smoke, their "low tar" or "light" cigarettes were unlikely to present any meaningful harm reduction over cigarettes with higher FTC tar yields.

As awareness and concern about the adverse health risks associated with smoking began to grow in the early 1950s, Defendants began developing cigarettes they internally referred to as "health reassurance" brands in an effort to keep smokers in the market. Initially, Defendants explicitly marketed and promoted these brands as safer as the result of an added filter which purportedly protected smokers from the harmful tar in cigarette smoke. Having established the link in the minds of consumers between low tar/filtration and reduced harm through use of explicit – but baseless – health claims, Defendants' later advertisements contained implied health claims that built on their earlier advertisements, but avoided alerting consumers explicitly to the adverse health effects of smoking. As Dr. Robert Dolan testified, for several decades Defendants have marketed and promoted their so-called "low tar/nicotine" cigarettes using brand descriptors like "Light," "Ultralight," "Mild" and "Medium" and claims of "low tar and nicotine" to suggest to consumers that these products are safer than regular, higher tar cigarettes.

Defendants made, and continue to make, implied health benefit claims regarding filtered and low tar cigarettes when they either lacked evidence to substantiate the claims or knew that they were false. Internal industry research documents show that Defendants never had adequate support for their claims of reduced health risk from low tar cigarettes, but rather confirm Defendants' awareness by the late 1960s–early 1970s that low tar cigarettes were unlikely to provide any health benefit to smokers compared to full flavor cigarettes. Drs. Samet, Benowitz, and Burns testified that it was not until 2001 that the public health and scientific communities generally recognized what Defendants have long known internally: there is no meaningful reduction in disease risk in smoking low tar cigarettes as opposed to smoking regular cigarettes.

Defendants' longtime internal understanding stemmed from their knowledge that their low tar cigarettes, as designed, do not actually deliver to human smokers the low FTC test tar and nicotine yields reported by the FTC and exploited by Defendants in their product labeling and marketing. Defendants have long known that to obtain an amount of nicotine sufficient to satisfy their addiction, smokers of low tar cigarettes modify their smoking behavior, or "compensate," for the reduced yields by inhaling smoke more deeply, holding smoke in their lungs longer, covering cigarette ventilation holes with fingers or lips, and/or smoking more cigarettes. As a result of this nicotine-driven smoker behavior, smokers of light cigarettes concurrently boost their intake of tar, thus negating what Defendants have long promoted as a primary health-related benefit of light cigarettes: lower tar intake.

As Dr. Farone, Dr. Burns, Dr. Henningfield, and Dr. Wigand testified, Defendants have affirmatively exploited their understanding of nicotine-driven compensation by deliberately designing "low tar" cigarettes that facilitate a smoker's ability to compensate to ensure adequate delivery of nicotine to create and sustain addiction. Even as they did this, and despite having

evidence that low tar cigarettes provide no health benefits and may in fact deter people from quitting, Defendants have withheld and suppressed such evidence from public dissemination. Indeed, in the late 1980s Philip Morris even referred internally to ex-smokers and potential quitters as a "textbook marketing opportunity."

Extensive evidence shows that Defendants used terms such as "Light" and "Low Tar" intentionally to convey their false "health reassurance" message rather than just a "taste" message, because their research showed that people smoked low tar products despite, not because of, the taste. Accordingly, Defendants' marketing themes repeatedly tried to convince smokers that their brands could provide the main claimed benefit of light cigarettes – increased safety – without sacrificing "taste." Further, Defendants used both verbal and non-verbal communications to convey their health reassurance message, employing colors and imagery that their research indicated people associated with healthier products. And Defendants conducted and sponsored market research that showed, again and again, that their use of descriptors and other marketing approaches has worked – substantial percentages of smokers interpreted Defendants' brand descriptors as communicating messages of relative safety. Dr. Neil Weinstein presented expert testimony on this topic, testifying based on his own research and the relevant published scientific literature that a significant percentage of smokers believe that "low tar" cigarettes are safer than full tar cigarettes.

Defendants' campaign of deception has impacted Americans' decisions to smoke. As a result of Defendants' conduct, health concerned smokers have switched from regular cigarettes to those with lower reported tar yields rather than quitting smoking altogether. Smokers of "light" and "ultra light" cigarettes are less likely to quit smoking than are smokers of regular cigarettes. Additionally, as a result of Defendants' fraudulent marketing and deceptive design of "light" and

"ultra light" cigarettes, many smokers of these cigarettes consume more cigarettes than do smokers of regular cigarettes. Defendants' conduct relating to low tar cigarettes furthers the aims of the Enterprise and the scheme to defraud by providing a false sense of reassurance to smokers that weakens their resolve to quit smoking, and serves to draw ex-smokers back into the market. In short, Defendants' concerted campaign of deception regarding low tar cigarettes has been a calculated – and extremely successful – scheme to increase their profits at the expense of the health of the American public.

Defendants claim that they have "come clean" on compensation and "light" cigarettes in the last few years, because some Defendants have included a line in advertisements telling smokers that the amount of tar and nicotine they receive depends upon how they smoke the cigarette, and Defendants' Internet websites contain certain information about "light" cigarettes and brand descriptors. These tepid disclosures fail to meaningfully inform consumers of what Defendants themselves have long known, and exploited: that as a result of smokers' addiction to **nicotine**, and the compensatory smoking behaviors undertaken to satisfy the need for nicotine, smokers generally receive doses that far exceed the FTC ratings.

Youth Marketing

Cigarette smoking, particularly that begun by young people, continues to be the leading cause of preventable disease and premature mortality in the United States. Of children and adolescents who are regular smokers, one out of three will die of smoking-related disease. As part of the scheme to defraud, Defendants have intentionally marketed cigarettes to youth while falsely denying that they have done and continue to do so. Defendants' own documents in the trial record demonstrate that Defendants have long recognized that the continued profitability of the industry depends upon new smokers entering the "franchise" as current smokers die from

smoking-related diseases or quit. Defendants have similarly known that an overwhelming majority of regular smokers begin smoking before age eighteen and remain loyal to their initial brand choice of cigarettes.

In 1964, under public pressure for their marketing practices, Defendants adopted a voluntary advertising code, and publicly promised that under the advertising code they would not market to young people. Just as Defendants publicly promoted their joint support for allegedly "independent" smoking and health research to show that they were concerned about the welfare of smokers and to support their (false) claim that they were not selling a product they knew to be harmful, so Defendants touted the voluntary advertising code to reassure the public – also falsely – that they were not corporate exploiters preying on America's youth for profit.

After establishing the voluntary advertising code as a collective umbrella to defuse public concern about their marketing activities, Defendants continued unabated their efforts to capture as much of the youth market as possible, effectively ignoring the code's provisions and eliminating its enforcement mechanisms entirely within a few years of the code's adoption.

And just as Defendants enlisted the Tobacco Institute to be their lead public voice denying that cigarettes were harmful and proclaiming their commitment to "independent" research, they enlisted the Tobacco Institute to tell the public that they did not market to youth, that their marketing was only aimed at adult smokers, and that their marketing had no impact on youth smoking. Individual Defendants made these public statements as well. These public statements were false and misleading. Dr. Robert Dolan, a marketing expert and Dean of the University of Michigan Business School, testified after reviewing Defendants' internal marketing plans and documents that, contrary to Defendants' public statements, the Defendant Cigarette Companies' marketing practices were intended to impact the number of people who began

smoking (as well as to decrease the likelihood that people would quit smoking and to increase consumption).

The Court received evidence from many sources that established that Defendants have long known that the majority of smokers begin smoking as youth and develop brand loyalty as youths. The evidence further proved that cigarette marketing particularly attracts young people, and that persons who begin smoking when they are teenagers are very likely to become addicted and remain lifetime smokers. For example:

- A March 31, 1981 report conducted by the Philip Morris Research Center entitled "Young Smokers Prevalence, Trends, Implications, and Related Demographic Trends" stated that "Today's teenager is tomorrow's potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens . . . it is during the teenage years that the initial brand choice is made."

- A September 22, 1989 report prepared for Philip Morris by its main advertising agency, Leo Burnett U.S.A., described Philip Morris's marketing's target audience as a "moving target in transition from adolescence to young adulthood."

- An August 30, 1978 Lorillard memorandum stated: "The success of NEWPORT has been fantastic during the past few years. . . . [T]he base of our business is the high school student. Newport in the 1970s is turning into the Marlboro of the 1960s and 1970s."

- A July 9, 1984 report circulated to the heads of B&W's Marketing and Research Development departments stated "[o]ur future business depends on the size of [the] starter population."

- In a November 26, 1974 memorandum entitled "R.J. Reynolds Tobacco Company Domestic Operating Goals, R.J. Reynolds stated its "[p]rimary goal in 1975 and ensuing years is to reestablish R.J. Reynolds's share of growth in the domestic cigarette industry," by targeting the "14-24 age group" who, "[a]s they mature, will account for key share of cigarette volume for next 25 years. Winston has 14% of this franchise, while Marlboro has 33%. - SALEM has 9%--Kool has 17%." The memorandum indicated that R.J. Reynolds "will direct advertising appeal to this young adult group without alienating the brand's current franchise."

- A September 27, 1982 memorandum written by Diane Burrows, R.J.

> Reynolds Market Research Department, and circulated to L.W. Hall, Jr. Vice President of R.J. Reynolds Marketing Department, stated: "The loss of younger adult males and teenagers is more important to the long term, drying up the supply of new smokers to replace the old. This is not a fixed loss to the industry: its importance increases with time. In ten years, increased rate per day would have been expected to raise this group's consumption by more than 50%."

Defendants targeted young people with their marketing efforts and allocated substantial resources researching the habits and preferences of the youth market to inform that marketing. For instance, a 1976 Brown & Williamson document containing information drawn from a study of smokers stated that "[t]he 16-25 age group has consistently accounted for the highest level of starters." In 1980, the R.J. Reynolds Marketing Development Department issued a series of internal reports entitled "Teenage Smokers (14-17) and New Adult Smokers and Quitters" which surveyed the smoking habits of fourteen to seventeen year olds.

Knowing that advertising and promotion stimulated the demand for cigarettes, the Cigarette Company Defendants used their knowledge of young people's vulnerabilities gained in this research in order to create marketing campaigns (including advertising and promotion) that would and did appeal to youth, in order to foster youth smoking initiation and ensure that young smokers would choose their brands. As presented in the extensive testimony of United States' experts Dr. Anthony Biglan, an expert in adolescent psychology at the Oregon Research Institute and a preeminent prevention science expert, and Dr. Dean Krugman, a mass communication and marketing communications expert from the University of Georgia, and through the cross-examination of Defendants' witnesses, including Lorillard marketing executive Victor Lindsley and former B&W CEO Susan Ivey, Defendants designed marketing campaigns and promotional activities that appeal to the psychological needs of adolescents. These campaigns have intentionally exploited adolescents' vulnerability to imagery utilizing themes that are, to this day,

the same as they have been for decades: masculinity, independence, attractiveness, adventurousness, glamour, athleticism, social inclusion, sexual attractiveness, thinness, popularity, rebelliousness, and being "cool." Dr. Paul Slovic, one of the world's leading experts on risk perception and decision making, explained that young people's decision-making is driven by emotion rather than reason, and that Defendants' communications downplayed the perceived health risks associated with smoking; and Dr. Slovic and Dr. Neil Weinstein, another leading researcher in the field of risk perception, testified that people – and smokers in particular – underestimate the adverse health effects they are likely to personally face from smoking. The testimony of Defendants' expert on this topic, Kip Viscusi, was less credible than that of Drs. Slovic and Weinstein because Viscusi's opinions rested on the results of three questions asked in four surveys, three of which were funded by the tobacco industry and conducted for use in litigation, and the fourth of which was a small survey conducted by Viscusi after he began his long term consulting affiliation with Defendants and their lawyers.

At trial, the United States called Dr. Frank Chaloupka, a health economist who is a preeminent expert on the relationship between cigarette price and smoking initiation and continuation. Dr. Chaloupka offered well supported testimony, not disputed by any of Defendants' own expert witnesses, that teenage smoking behavior is two to three times more sensitive to price than smoking among adults and that Defendants know that smoking behavior among teenagers is particularly price sensitive. Dr. Chaloupka further explained that teenage smoking behavior is specifically sensitive to changes in the price of Marlboro, Newport and Camel, that Defendants understand the impact of changes in cigarette prices of these brands on youth smoking, and that Defendants use their knowledge in developing and implementing their price-related marketing strategies. Drs. Chaloupka, Dolan, Krugman, and Biglan testified that

Cigarette Company Defendants continue to advertise in youth-oriented publications; employ imagery and messages that they know are appealing to teenagers; increasingly concentrate their marketing in places where they know youths will frequent such as convenience stores; engage in strategic pricing to attract youths; increase their marketing at point-of-sale locations with promotions, self-service displays, and other materials; sponsor sporting and entertainment events, many of which are televised or otherwise broadcast and draw large youth audiences; and engage in a host of other activities which are designed to attract youth to begin and continue smoking. Defendants continue to spend more than 12 billion dollars a year on cigarette brand marketing. As Dr. Krugman concluded, "the tobacco companies' cigarette advertising and promotion expenditures, historically and currently, remain high on an absolute basis and relative to other industries."

Notwithstanding the magnitude of Defendants' efforts to appeal to the youth market, Defendants even throughout this trial publicly deny their efforts to appeal to the youth market. The Court also saw extensive evidence that Defendants continue to falsely claim that their cigarette marketing does not affect youth smoking initiation and continuation. Yet, independent scientific studies published in reputable scientific journals and in official government reports, have confirmed that Defendants' marketing contributes to the primary demand for and continuing use of cigarettes. Defendants' internal documents in the trial record indicate that their understanding of marketing's impact underlay and has informed Defendants's marketing strategies. Over the past ten years, there have been a number of comprehensive reviews of the scientific evidence concerning the effects of cigarette marketing, including advertising and promotion, on smoking decisions by young people. As the Court heard from Dr. Eriksen, a foremost expert in public health, the weight of all available evidence, including survey data,

scientific studies and experiments, behavioral studies, and econometric studies, supports the conclusion that cigarette marketing is a causal factor that substantially contributes to the decision of young people to begin smoking and the decision to continue smoking.

Concealment and Suppression of Information

From at least 1954 to the present, Defendants engaged in parallel efforts to destroy and conceal documents and information in furtherance of the Enterprise's goals of (1) preventing the public from learning the truth about smoking's adverse impact on health; (2) preventing the public from learning the truth about the addictiveness of nicotine; (3) avoiding or, at a minimum, limiting liability for smoking and health related claims in litigation; and (4) avoiding statutory and regulatory limitations on the cigarette industry, including limitations on advertising. These activities occurred despite the promises of Defendants that (a) they did not conceal, suppress or destroy evidence, and that (b) they shared with the American people all pertinent information regarding the true health effects of smoking, including research findings related to smoking and health.

Indeed, even in this case the Court has found certain Defendants to have flouted their document preservation obligations. For example, this Court found Philip Morris to have engaged in spoliation of evidence, because high-level scientists and executives failed to preserve emails in violation of the Court's document preservation order and Philip Morris's own document retention requirements.

Indeed, as recently as 1996, Martin Broughton, Chief Executive of BAT Industries, the then ultimate parent company of BATCo and Brown & Williamson, made a statement to the *Wall Street Journal* denying that BAT Industries and its subsidiaries had concealed research linking smoking and disease. Broughton stated: "We haven't concealed, we do not conceal and

we will never conceal. We have no internal research which proves that smoking causes lung cancer or other diseases or, indeed, that smoking is addictive." However, at trial, the United States introduced testimonial and documentary evidence, such as through Dr. Wigand, establishing that BAT and its subsidiaries, including BATCo and (until very recently) B&W, have undertaken extensive, systematic efforts intended to conceal potentially damaging documents and information from disclosure or discovery by the public and litigation adversaries.

The Court also received additional evidence of Philip Morris's suppression-related conduct, ranging from directives to limit direct contact between Philip Morris and its overseas labs doing sensitive smoking and health research, to repeated steps to successfully prevent publication of research conducted by Drs. DeNoble and Mele in the early 1980s that confirmed intravenous self-administration of nicotine by rats, a hallmark of addiction.

There Is a Reasonable Likelihood of Ongoing and Future Violations

The evidence presented in the United States' Post-Trial Findings of Fact compels the conclusion that, absent relief, there is a reasonable likelihood that Defendants will continue to engage in conduct unlawful under RICO. Defendants' unlawful conduct has not occurred in isolated events, but rather has been part of a far-reaching, decades-long coordinated and intentional scheme to defraud. Philip Morris, Reynolds, Lorillard, Liggett, and BATCo continue to exist and to manufacture and market cigarettes. Contrary to Defendants' claims at trial, Defendants have not fundamentally changed in recent years; Philip Morris Companies, Philip Morris, Reynolds, and Lorillard continue to be led by people who have worked at the companies for an average of 24, 15-20, 24, and 22 years, respectively, and some of the senior leadership of these Defendants have been personally involved in Defendants' fraud.

There is no evidence in the record that any Defendant has affirmatively withdrawn from

the RICO Enterprise or conspiracy. Moreover, while there is less evidence proving explicit coordination among Defendants currently and in the recent past – because Defendants have made concerted efforts to limit written documentation of certain matters – there is still considerable evidence demonstrating that Defendants continue to approach certain smoking and health issues in ways that are fully consistent with past approaches that evidence established was done in coordinated fashion.

As but a few examples, Defendants generally claim that they are aligned with the public health community on the issue of addiction, but to this day not a single Joint Defendant publicly recognizes a critical component of that public health consensus on addiction: smoking is a **drug** addiction primarily caused by nicotine; and not a single Defendant publicly agrees that nicotine delivered by cigarettes is addictive. In the area of cigarette marketing, Defendants continue to market certain cigarettes with brand descriptors like "light" and "low tar/low nicotine." Defendants know that a substantial percentage of smokers believe that "light" cigarettes are less harmful, because Defendants have spent decades fostering and encouraged that belief, even though Defendants themselves have long been aware that such cigarettes are not likely to be any less hazardous than their full tar counterparts.

Even on the issue of causation, no Defendant admitted directly that smoking causes disease until the punitive damage phase of the Engle case in 2000, well after this case was underway. On the stand in this case, Andrew Schindler, Reynolds's former CEO and current Chairman of its new parent Reynolds American, would not admit directly that smoking causes disease. Reynolds's current website continues to hedge on the same point, stating that smoking can only cause disease in some individuals "in combination with other factors."

In the area of ETS, even during the course of this litigation, Defendants have continued to

refuse to agree with the overwhelming medical and scientific consensus that secondhand smoke causes disease and other adverse health effects, and have continued to support research designed to undermine that conclusion.

And Defendants continue to market their cigarettes in ways they know and intend to appeal to adolescents and teenagers.

Remedies Sought by the United States Will Prevent and Restrain Future Unlawful Conduct by Defendants

In short, Defendants' scheme to defraud permeated and influenced all facets of Defendants' conduct – research, product development, advertising, marketing, legal, public relations, and communications – in a manner that has resulted in extraordinary profits for the past half-century, but has had devastating consequences for the public's health.

As the United States' Post-Tiral Findings of Fact demonstrate, the United States is entitled to the equitable relief sought under RICO. The United States has produced substantial evidence that the Defendants' scheme to defraud had damaging and wide-ranging implications, including influence on initiation and continued smoking for people of all ages. All of Defendants' sales of cigarettes to all consumers from 1954 to 2001 were inextricably intertwined with this massive scheme to defraud the public.

The equitable relief sought by the United States is necessary and appropriate to prevent and restrain Defendants from continuing to engage in conduct unlawful under RICO.[3] The evidence – particularly the testimony and documents introduced through Surgeon General Carmona, Dr. Jonathan Gruber, Dr. Timothy Wyant, Dr. Max Bazerman, Dr. Michael Eriksen,

[3] On July 18, 2005, the United States filed a petition for certiorari with the United States Supreme Court, seeking review and reversal of the D.C. Circuit's February 2005 decision on the availability of disgorgement under RICO's civil provisions, 18 U.S.C. § 1964.

Dr. Michael Fiore, Dr. Cheryl Healton, and Matthew Myers – supports the imposition of the following interdependent, integrated set of remedies as described more specifically in the body of the document: a comprehensive, well-promoted smoking cessation program funded but not controlled or administered by Defendants; a counter-marketing campaign funded but not controlled or administered by Defendants; a results-oriented Youth Smoking Reduction Remedy that establishes target youth smoking rates for Defendants to reach will therefore restrain Defendants from marketing in ways that appeal to youth; the requirement that Defendants issue corrective communications on smoking and health issues in the same fora they have made fraudulent public statements on such issues, with the content of such communications to be ordered or approved by the Court; disclosure of documents, disaggregated marketing data, and health and safety risks; independent review and oversight of Defendants' business practices through the use of Court-appointed monitors; prohibiting distortions and misrepresentations about smoking and health issues; restrictions on the use of brand descriptors; and restrictions on Defendants's ability to use youth-appealing techniques and imagery in marketing.