



*An Online PDH Course
brought to you by
CEDengineering.com*

Engineering Ethics - Case Studies in Theft through Fraud

Course No: LE2-018
Credit: 2 PDH

Mark Rossow, P.E., PhD.



Continuing Education and Development, Inc.

P: (877) 322-5800
info@cedengineering.com

www.cedengineering.com

TABLE OF CONTENTS

Introduction	1
Case No.1	2
Case No.2	5
Case No. 3	6
Case No. 4	8
Case No. 5	9
Case No. 6	12
Violations of Standards of Conduct	14
Appendix A. Standards of Conduct for State A	16
Appendix B. Standards of Conduct for State B.....	20

Introduction

This course examines the engineering-ethics aspects of theft through fraud in light of standards of conduct expected of professional engineers.

The concept of “theft through fraud” requires some explanation. Theft has been defined as “the generic term for all crimes in which a person intentionally and fraudulently takes personal property of another without permission or consent and with the intent to convert it to the taker’s use (including potential sale)” [Dictionary at Law.com]. There are different kinds of theft. Theft involving taking by force is called robbery, taking by entering unlawfully is called burglary, taking from an employer is called embezzlement, and taking by deception is called fraud. Thus if “theft” is the generic term for the crime of taking property of another without permission, then “theft through fraud” narrows the type of theft to one that involves deceiving the victim. Of course, if the deceived victim is also the employer, then crimes of both embezzlement and fraud have been committed.

The purpose of this course is to widen the professional engineer’s understanding of engineering ethics through consideration of six case studies of theft though fraud committed by engineers. The studies describe actual cases that have been successfully prosecuted by agencies of the U.S. federal government. The ethical—rather than legal—aspects of the cases are developed by identifying specific passages in published standards of conduct for professional engineers that were violated by the engineers who were found guilty of theft.

Case No.1

EMI Owner Sentenced to Five Years in Prison for Multi-Million Dollar Fraud Scheme

Monday, August 10, 2015

U.S. Attorney's Office, Central District of Illinois

Springfield, Ill. – U.S. District Judge Sue E. Myerscough today sentenced Michael R. Keebler, owner of Environmental Management of Illinois, Inc. (EMI), Springfield, Ill., to serve five years in federal prison for a scheme that defrauded the Illinois Environmental Protection Agency of millions of dollars. The scheme, over a period of 12 years, from 2001 to 2013, swindled money from a fund administered by Illinois EPA to clean up sites contaminated by leaking underground storage tanks.

Judge Myerscough allowed Keebler to remain on bond pending his report to the federal Bureau of Prisons no later than Sept. 24, 2015. Keebler was ordered to remain on supervised release for a period of three years following his release from prison.

Keebler, of Sherman, Ill., was also ordered to pay restitution of no more than \$13,363,665 to the Illinois EPA. Restitution will be ordered to be paid jointly and severally with Keebler's co-defendants, EMI founder, Eric M. Andrews, of Springfield, and his brother, Joel T. Andrews, of New Berlin, Ill. Each pled guilty on Mar. 2, 2015, to one count of conspiracy to commit mail fraud. Sentencing for the Andrews brothers is scheduled on Oct. 2, 2015. Keebler entered pleas of guilty on Feb. 27, 2015, to two counts of conspiracy to commit mail fraud.

The U.S. EPA has a cooperative agreement with the State of Illinois to administer the UST (underground storage tanks) program. IEPA and the Illinois Office of the State Fire Marshal share administration of the UST fund which assists tank owners and operators with the cleanup costs of petroleum leaks from USTs. The State Fire Marshal administers the preventative and permitting aspects of the program. If there is a spill or leak, IEPA is responsible for oversight of the cleanup investigation and the corrective action, in order to clear the property for use again. State taxes and fees paid on the purchase of gasoline fund the Leaking UST (LUST) program.

Joel Andrews founded EMI in 1997 and served as president, and Eric Andrews joined in 1999 as vice-president. In April of 2001, professional engineer Michael Keebler joined the firm. In 2006, the firm was sold to Michael Keebler, who has remained as the firm's principal owner and president. EMI is located at 1154 N. Bradfordton Road, Springfield. The environmental consulting firm worked with property owners to clean up property contaminated by petroleum leaks, spills, or overfills from underground storage tanks. The firm then sought reimbursement of its costs to remediate the land from a fund administered by a designated section within Illinois EPA.

According to plea agreements filed by the parties, Michael Keebler, and Eric and Joel Andrews each admitted that they conspired to defraud the LUST fund by artificially inflating expenses they incurred in remediating property. For example, as principals of EMI, they admitted they reached agreements with their vendors to submit two invoices for certain services: one invoice listed the real costs of the service provided and the payment to be made by EMI, and a second invoice which inflated the amount of work performed and supplies used, the amount charged for the work, or both. The inflated invoice would then be provided to Illinois EPA for reimbursement. Keebler and the Andrews would also pay certain vendors a reduced rate, but misrepresent to the Illinois IEPA that they had paid full price. At other times they would simply create or modify an existing invoice to reflect a higher charge than was actually paid and would submit that to IEPA for reimbursement.

In a separate but related case, Michael Keebler's brothers, Duane T. Keebler, of Maryland Heights, Mo., and Joseph R. Keebler, of Carbondale, Ill., each pled guilty on Feb. 20, to one count of conspiracy to commit mail fraud. Both Duane and Joseph Keebler have agreed to a loss amount in their cases, and will pay restitution in the total amount of \$179,438. They are scheduled to be sentenced on Aug. 24, 2015.

Another defendant, Jeremy L. VanScyoc, of Springfield, was an engineer for EMI and participated in the fraud. He waived indictment on Mar. 10, 2014, and pled guilty to one count of conspiracy to commit mail fraud. VanScyoc admitted that after he joined EMI, he agreed to engage in the fraud scheme by inflating subcontractor invoices. On June 11, 2015, VanScyoc was sentenced to one day in prison; two years supervised release; and was ordered to pay restitution in the amount of \$262,032.

The case is being prosecuted by Assistant U.S. Attorneys Patrick D. Hansen and John E. Childress. The charges are the result of a two-year investigation by the Federal Bureau of Investigation and the U.S. Environmental Protection Agency, Criminal Investigation Division.

Updated August 10, 2015

Case No.2

Oak Park Man Sentenced for Defrauding Cisco Systems

October 31, 2016

U.S. Attorney's Office, Eastern District of Michigan

An Oak Park engineer was sentenced yesterday to 21 months in prison for illegally obtaining \$400,000 in computer equipment in a wire fraud scheme, U.S. Attorney Barbara L. McQuade announced.

McQuade was joined in the announcement by David P. Gelios, Special Agent in Charge of the Detroit Field Office of the Federal Bureau of Investigation.

U.S. District Judge Robert H. Cleland imposed sentence on Lahai Charles, 36, former employee of Federal-Mogul Corporation. Judge Cleland also imposed a two-year term of supervised release and ordered Charles to pay \$414,000 in restitution to Cisco Systems, Inc. and \$3,100 to Federal-Mogul. Charles pleaded guilty to one count of wire fraud in June.

According to court records, Charles was employed in Southfield by Federal-Mogul Corporation as an IT networking engineer. Federal-Mogul is a supplier of parts to businesses in the automotive industry and other sectors. Charles managed network switches for a number of Federal-Mogul offices in North America and South America. Cisco Systems, Inc., a computer technology company based in San Jose, California, provided computer equipment and support services to Federal-Mogul's IT operations. During a 15-month period, Charles used his position at Federal-Mogul to exploit Cisco's programs to provide IT support services to its large corporate customers. He obtained Cisco IT equipment through a series of false statements to Cisco and then sold the equipment to third parties through a secondary market broker. He did this to enrich himself, spending some of the funds on several personal trips to South America.

The case was investigated by the FBI, with assistance from Cisco Systems and Federal-Mogul, and prosecuted by Assistant U.S. Attorney Stephen Hiyama.

Updated October 31, 2016

Case No. 3

Dallas Technology Company's Former Lead Systems Engineer Pleads Guilty to Mail Fraud and Money Laundering Charges

June 6, 2017

U.S. Attorney's Office, Northern District of Texas

DALLAS — Albert Shih-Der Chang, the former Lead Systems Engineer for a Dallas technology company known as One Technologies, appeared in federal court this morning and pleaded guilty, before U.S. Magistrate Judge Paul D. Stickney, to one count of mail fraud and one count of money laundering. The announcement was made today by U.S. Attorney John Parker of the Northern District of Texas.

Chang, 36, of Fairview, Texas, will remain on bond pending sentencing. The date for the sentencing hearing has not yet been set. Chang faces a maximum statutory penalty of 30 years imprisonment for the mail fraud count and 10 years imprisonment for the money laundering count. Each count provides for the possibility of a fine of up to \$250,000. An order of restitution is mandatory under the law, and will be determined at sentencing. The indictment also included a forfeiture allegation that would require the defendant, upon conviction, to forfeit any property that constitutes or was derived from proceeds traceable to the fraud, including his residence in Fairview.

In his Plea Agreement, Chang also agreed to relinquish any ownership interest in property seized from his residence in July 2016, to include several dozen devices such as hard drives, laptops, thumb drives, servers, and cell phones.

According to the plea documents, from approximately October 4, 2004, through August 15, 2014, Chang worked for One Technologies, initially as its Network/Systems Administrator and later as its Lead Systems Engineer. From approximately July 2008 through August 2014, Chang devised and ran a scheme to defraud One Technologies by causing the company to pay more than \$2.4 million as a result of his false and fraudulent pretenses, representations and promises. Chang caused One Technologies to transfer funds, based on material representations, to financial accounts he controlled, and Chang caused One Technologies to purchase products, purportedly for the company's use, that Chang later converted to his own use.

To carry out his scheme, Chang allegedly created fictitious companies for which he opened bank accounts or PayPal accounts. He rented mailboxes and contracted for virtual offices with

mail forwarding services for the fictitious companies. He also created and submitted fictitious purchase requisitions, orders, invoices, and receipts that One Technologies paid.

According to plea documents, Chang acknowledged that the government could prove that he directly caused a loss of at least \$2,152,035.60. Also, from approximately April 15, 2013, until May 30, 2013, Chang wired-transferred nearly \$300,000 from his joint account at Chase Bank to a title company to purchase a residence on Stone Hinge Drive in Fairview, and that funds transfer involved the proceeds of the fraud.

The FBI was in charge of the investigation and the Fairview Police Department assisted with the arrest. Assistant U.S. Attorney C.S. Heath is in charge of the prosecution.

Updated June 6, 2017

Case No. 4

Former 3M Engineer Pleads Guilty to Embezzling More Than \$5.6 Million from Company

December 13, 2010

U.S. Attorney's Office, District of South Dakota

U.S. Attorney Brendan V. Johnson announced that on December 10, 2010, a Brookings, South Dakota man appeared before U.S. District Judge Roberto A. Lange and pled guilty to an information charging mail fraud. Former 3M engineer David Beulke, age 62, admitted to devising an embezzlement scheme that lasted over 15 years and resulted in a total theft from 3M of \$5,610,563.

Court documents detail Beulke's scheme, in which he created fraudulent businesses and held them out to 3M as legitimate vendors of specialized parts. Beulke would then cause 3M to place orders for supposed parts with those fake businesses, knowing those orders were fraudulent. When 3M would send money for those phony parts orders, Beulke would receive and keep the money. Pleadings indicate that \$2,479,690.72 was seized from various investment and retirement accounts that Beulke funded with stolen money.

"This was a large-scale scheme that was highly orchestrated and went undetected for many years." U.S. Attorney Johnson said. "I am encouraged by our ability to initially recover a large sum of the stolen money, and I hope this prosecution will deter others."

The maximum penalty for mail fraud is 20 years in prison, up to a \$250,000 fine, and three years of supervised release. Beulke will also be ordered to pay restitution. He was released pending sentencing which is scheduled for April 1, 2011.

This case was investigated by the FBI. Assistant U.S. Attorney Kevin Koliner is prosecuting the case.

Case No. 5

Former Navy Engineer Pleads Guilty to Organizing and Managing Multi-Million-Dollar Fraud Scheme, Associate Admits to Stealing Government Funds

May 30, 2013

U.S. Attorney's Office, District of Rhode Island

PROVIDENCE, RI—Ralph M. Mariano, of Warwick, Rhode Island, a former senior systems engineer with the U.S. Navy's Naval Sea Systems Command (NAVSEA) in Newport, Rhode Island, and Washington, D.C., pleaded guilty in U.S. District Court in Providence, Rhode Island, today to conspiracy and to defrauding the U.S. government of between \$7 million and \$20 million by directing co-conspirators to bill the navy for work that was never performed, announced Peter F. Neronha, U.S. Attorney for the District of Rhode Island.

Mariano admitted to the court that from 1999 to 2011, he used his position at NAVSEA to direct Russell Spencer, of Portsmouth, Rhode Island, a computer software specialist, to submit millions of dollars in fraudulent invoices to navy contractor Advanced Solutions for Tomorrow (ASFT), a Georgia and Middletown, Rhode Island company. Mariano admitted to the court that he directed ASFT to pay Spencer the full amount of the false invoices with money ASFT received from the Navy. Mariano admitted that the total amount of government money falsely obtained and paid to Spencer was approximately \$17,957,000. The invoices were processed by Patrick Nagle, chief financial officer of ASFT.

At the time of his guilty plea, Mariano admitted to the court that he used a system of codes to direct Spencer to distribute the government funds to Mariano and individuals close to Mariano. Mariano admitted that he himself received \$3,081,671 of navy funds by checks from Spencer. In addition, Mariano admitted to receiving bi-weekly \$3,500 cash payments of navy funds from Spencer from 2004 to January 2011.

Mariano admitted to the court that little or no work was ever performed by Spencer in exchange for the government funds Spencer received and distributed at his direction. According to information provided to the court, Spencer provided ASFT and its subcontractors with numerous documents that purported to be work product over the years. Spencer typically provided ASFT with documents that he had taken from his employer, Electric Boat, without its consent. Spencer made cosmetic changes to the documents before submitting them to ASFT.

Despite the fact that Spencer spent very little time making cosmetic changes to these documents, he billed ASFT upwards of \$200,000 per month.

Mariano admitted to the court that at his direction, \$2,567,028 was paid to his father, Ralph Mariano, Jr., of North Providence, Rhode Island; \$1,692,650 was paid to his brother, Joseph Mariano, and to his companies; \$207,900 was paid to a veterinary laboratory company controlled by his sister, Michelle Mariano; \$2,446,445 was paid to private entities controlled by Anjan Dutta-Gupta, of Roswell, Georgia, chief executive officer of now-defunct ASFT.

In addition, Mariano admitted to the court that \$478,880 in government funds fraudulently obtained was paid to a company owned by Attorney Mary O'Rourke, of Warwick, Rhode Island. O'Rourke pleaded guilty in U.S. District Court today to one count of theft of government property. O'Rourke admitted to the court that she submitted false invoices to Spencer from 2005 to 2011 and that she was paid with government funds for work that was never performed.

In addition to pleading guilty to conspiracy and theft of government funds, Ralph Mariano pleaded guilty today to one count of tax evasion. Mariano admitted to the court that from 2006 to 2009, he failed to report \$1,864,910 in income he received from Russell Spencer. Mariano admitted that he owes the IRS \$726,650.

Ralph Mariano and Mary O'Rourke are scheduled to be sentenced on September 5, 2013, by U.S. District Court Chief Judge Mary M. Lisi, who presided over today's change-of-plea hearings.

Anjan Dutta-Gupta, who pleaded guilty on April 28, 2011, to one count of bribery, is scheduled to be sentenced on July 25, 2013, by U.S District Court Chief Judge Mary M. Lisi.

Russell Spencer, who pleaded guilty on July 25, 2012, to one count of conspiracy to commit bribery and on April 19, 2012, to one count of lying to the FBI, is scheduled to be sentenced on July 25, 2013, by U.S District Court Chief Judge Mary M. Lisi.

Patrick Nagle, who pleaded guilty on September 13, 2011, to one count of conspiracy to commit bribery, is scheduled to be sentenced on July 26, 2013, by U.S District Court Chief Judge Mary M. Lisi.

Ralph Mariano, Jr., who pleaded guilty on May 15, 2013 to four counts of tax evasion, is scheduled to be sentenced on August 16, 2013, by U.S. District Court Chief Judge Mary M. Lisi.

The cases are being prosecuted by Assistant United States Attorneys Lee H. Vilker, Terrence P. Donnelly and Dulce Donovan.

This matter was investigated by agents from the Defense Criminal Services, Naval Criminal Investigative Service; FBI; and Internal Revenue Service-Criminal Investigations.

This law enforcement action is part of President Barack Obama's Financial Fraud Enforcement Task Force. The President established the interagency Financial Fraud Enforcement Task Force to wage an aggressive, coordinated, and proactive effort to investigate and prosecute financial crimes. The task force includes representatives from a broad range of federal agencies, regulatory authorities, inspectors general, and state and local law enforcement who, working together, bring to bear a powerful array of criminal and civil enforcement resources.

The task force is working to improve efforts across the federal executive branch and, with state and local partners, to investigate and prosecute significant financial crimes, ensure just and effective punishment for those who perpetrate financial crimes, combat discrimination in the lending and financial markets, and recover proceeds for victims of financial crimes.

Case No. 6

Former Verizon Wireless Network Engineer Sentenced to Federal Prison for Multi-Million-Dollar Fraud Scheme

October 03, 2012

U.S. Attorney's Office, Northern District of Georgia

ATLANTA—Michael W. Baxter, 62, of Ball Ground, Georgia, was sentenced today by Senior United States District Judge J. Owen Forrester to serve four years in federal prison on charges of wire fraud in connection with a scheme to steal millions of dollars in high-value network communications equipment from Cisco Systems Inc. and his employer, Verizon Wireless, while employed as a network engineer for Verizon between 2000 and 2010.

“Telecommunications networks are a vital part of our infrastructure, supporting governments, health and emergency services, and businesses throughout this nation and the world,” said United States Attorney Sally Quillian Yates. “To accomplish his fraud, this defendant exploited a program designed to keep this critical infrastructure running uninterrupted: Cisco’s program for replacing expensive equipment on a moment’s notice. He also abused his insider access to Verizon’s procurement system. He funded a lavish lifestyle with his stolen funds and has now earned himself several years in a federal prison.”

Baxter was sentenced to four years in prison, to be followed by three years of supervised release, and ordered to pay \$2,333,241.18 in restitution to Cisco Systems and \$462,828.00 in restitution to Verizon. Baxter was indicted on the charges on December 6, 2011, and convicted on February 16, 2012, upon his plea of guilty.

According to United States Attorney Yates, the charges, and other information presented in court: Between 1994 and 2010, Baxter was employed in Alpharetta, Georgia, as a network engineer at the southeastern regional headquarters of Verizon Wireless and its predecessor. During that time, Verizon Wireless purchased extended warranty contracts from Cisco Systems Inc., the San Jose, California-based network communications and information technology equipment manufacturer, on certain network communications equipment that Verizon Wireless had purchased from Cisco Systems, such as processors and cards. Some of the parts were valued at as much as \$40,000 per item. If a part malfunctioned, the warranty contracts required Cisco Systems to service the part or, if necessary, replace it in advance of receiving the malfunctioning part from Verizon Wireless, to avoid potential interruptions in Verizon

Wireless' network. Authorized Verizon Wireless employees could make service requests and order replacement parts through Cisco Systems' online customer service database.

Beginning at least as early as 2001 and continuing until he was terminated by Verizon Wireless in May 2010, Baxter submitted hundreds of fraudulent service requests on behalf of Verizon Wireless via Cisco Systems' online customer service database. In response, Cisco Systems shipped millions of dollars in parts to Baxter at Verizon Wireless from various Cisco Systems distribution centers throughout the United States. The service requests were fraudulent in that no parts needed to be replaced. Instead of placing the replacement parts into service in Verizon Wireless' network, Baxter simply took them home and sold them to third-party re-sellers for his own profit. The investigation also revealed that, apart from the Cisco Systems product warranty program, between 2000 and 2009, Baxter fraudulently caused Verizon Wireless to purchase nearly a half-million dollars in expensive network communications equipment from Cisco Systems outright, which Baxter also took home and sold to third-party re-sellers for his own profit. Baxter then used the illicit proceeds from the sale of this equipment to buy jewelry, cars, extravagant international travel, and other personal luxury goods and services, including multiple cosmetic surgeries for his girlfriend.

This case was investigated by Special Agents of the Federal Bureau of Investigation.

Assistant United States Attorney David M. Chaiken prosecuted the case.

Violations of Standards of Conduct

U.S. States and territories have laws and regulations, including standards of conduct, that cover engineering practice. These standards vary from state to state. For the purposes of the present course, the standards of two states were selected and are given in Appendices A and B. Taken together, these two standards address most of the issues present in the standards of all states and in the ethical codes of many professional societies.

In the discussion below, the Standards of Conduct shall be assumed to apply to those engineering employees committing theft as if they were licensed as professional engineers, even though no information is available about their actual registration status.

Examination of the Standards of Conduct of both State A and State B reveal what at first might seem a surprising fact: the word “theft” does not occur. The closest one gets to a condemnation of theft is State A Standard (6)(i), which states that a professional engineer shall not use his engineering expertise to commit a felony, and State B Standard (3)(C), which states that an engineer shall not knowingly violate any state or federal criminal law.

Upon further reflection, the absence of explicit mention of “theft” can be explained by noting that explicitly listing all the possible felonies to be avoided would be impractical, given that the number of felonies could number in the thousands. Standards (6)(i) and (3)(C) are adequate to describe felonies of all types. In particular, the thefts described in Case Nos. 1-6 are clearly violations of these Standards.

Similar to the observation that “theft” does not occur in the Standards, “fraud” also does not occur. In this case, several related terms occur: fraudulent, deceptive, deceived, and untruthful. “Fraudulent” and “deceptive” appear in State A Standards (2), (3), in reference to advertising and practicing under a deceptive name —actions for which none of the engineers in Case Nos. 1-6 were charged.

“Fraudulent” also occurs in State A Standard (6)(k), which forbids knowingly associating with anyone engaging in business of a fraudulent or dishonest nature. All of the Cases involving more than one individual were in violation of this Standard.

Failing to disclose a conflict of interest (between loyalty to the employer and truthfulness to the regulating agency) would be a deceptive act according to Section (6)(f) of State A and (3)(J) of State B, and all Cases would be in violation of this Standard.

Being “deceptive” in reports is forbidden by State A Standard (6)(b), and all Cases involved deceptive reporting to hide their thefts.

Finally, all Cases involved violating State A Standard (6)(m), which says that if an engineer has knowledge or reason to believe that any person or firm is guilty of violating any of the rules of professional conduct the engineer must immediately present this information to the board of professional engineering. The convicted engineers knew that their own actions violated rules of professional conduct, but they, for obvious reasons, did not present this information to the board. Similarly, they violated State B Standard (4), which requires engineers having knowledge of any violation of the State Standards to cooperate with the proper authorities in furnishing information or assistance as may be required.

Appendix A. Standards of Conduct for State A

(1) Pursuant to State statute, the board hereby specifies that the following acts or omissions are grounds for disciplinary proceedings.

(2) A professional engineer shall not advertise in a false, fraudulent, deceptive or misleading manner. As used in State statutes, the term “advertising goods or services in a manner which is fraudulent, false, deceptive, or misleading in form or content” shall include without limitation a false, fraudulent, misleading, or deceptive statement or claim which:

- (a) Contains a material misrepresentation of facts;
- (b) Omits to state any material fact necessary to make the statement in the light of all circumstances not misleading;
- (c) Is intended or is likely to create an unjustified expectation;
- (d) States or implies that an engineer is a certified specialist in any area outside of his field of expertise;
- (e) Contains a representation or implication that is likely to cause an ordinary prudent person to misunderstand or be deceived or fails to contain reasonable warnings or disclaimers necessary to make a representation or implication not deceptive;
- (f) Falsifies or misrepresents the extent of his education, training or experience to any person or to the public at large, tending to establish or imply qualification for selection for engineering employment, advancement, or professional engagement. A professional engineer shall not misrepresent or exaggerate his degree of responsibility in or for the subject matter of prior assignments;
- (g) In any brochure or other presentation made to any person or to the public at large, incident to the solicitation of an engineering employment, misrepresents pertinent facts concerning a professional engineer’s employer, employees, associates, joint ventures, or his or their past accomplishments with the intent and purpose of enhancing his qualifications and his works.

(3) A professional engineer, corporation or partnership, or other qualified business organization (“firm”) shall not practice engineering under an assumed, fictitious or corporate name that is misleading as to the identity, responsibility or status of those practicing thereunder or is otherwise false, fraudulent, misleading or deceptive within the meaning of State Administrative Code. When a qualified business organization or individual is practicing engineering as a sole proprietor under a combination of his own given name, and terms such as “engineering,” “and associates” or “and company,” then said person or qualified business organization is practicing engineering under a fictitious name, and must be qualified by a State professional engineer.

(4) A professional engineer shall not be negligent in the practice of engineering. The term negligence set forth in State statutes, is herein defined as the failure by a professional engineer to utilize due care in performing in an engineering capacity or failing to have due regard for acceptable standards of engineering principles. Professional engineers shall approve and seal only those documents that conform to acceptable engineering standards and safeguard the life, health, property and welfare of the public.

Failure to comply with the procedures set forth in the Responsibility Rules as adopted by the board of Professional Engineers shall be considered as non-compliance with this section unless the deviation or departures therefrom are justified by the specific circumstances of the project in question and the sound professional judgment of the professional engineer.

(5) A professional engineer shall not be incompetent to practice engineering. Incompetence in the practice of engineering as set forth in State statutes, shall mean the physical or mental incapacity or inability of a professional engineer to perform the duties normally required of the professional engineer.

(6) A professional engineer shall not commit misconduct in the practice of engineering. Misconduct in the practice of engineering as set forth in State statutes, shall include, but not be limited to:

- (a) Expressing an opinion publicly on an engineering subject without being informed as to the facts relating thereto and being competent to form a sound opinion thereupon;
- (b) Being untruthful, deceptive, or misleading in any professional report, statement, or testimony whether or not under oath or omitting relevant and pertinent information from such report, statement or testimony when the result of such omission would or reasonably could lead to a fallacious conclusion on the part of the client, employer or the general public;
- (c) Performing an engineering assignment when not qualified by training or experience in the practice area involved;
 - 1. All professional engineer asbestos consultants are subject to the provisions of State statutes and administrative law, and shall be disciplined as provided therein.
 - 2. The approval of any professional engineer as a “special inspector” under the provisions of State statute., does not constitute acceptance by the board that any such professional engineer is in fact qualified by training or experience to perform the duties of a “special inspector” by virtue of training or experience.

Any such professional engineer must still be qualified by training or experience to perform such duties and failure to be so qualified could result in discipline under this chapter;

- (d) Affixing a signature or seal to any engineering plan or document in a subject matter over which a professional engineer lacks competence because of inadequate training or experience;
- (e) Offering directly or indirectly any bribe or commission or tendering any gift to obtain selection or preferment for engineering employment with the exception of the payment of the usual commission for securing salaried positions through licensed employment agencies;
- (f) Becoming involved in a conflict of interest with an employer or client, without the knowledge and approval of the client or employer, but if unavoidable a professional engineer shall immediately take the following actions:
 - 1. Disclose in writing to his employer or client the full circumstances as to a possible conflict of interest; and,
 - 2. Assure in writing that the conflict will in no manner influence the professional engineer's judgment or the quality of his services to his employer or client; and,
 - 3. Promptly inform his client or employer in writing of any business association, interest or circumstances which may be influencing his judgment or the quality of his services to his client or employer;
- (g) Soliciting or accepting financial or other valuable considerations from material or equipment suppliers for specifying their products without the written consent to the engineer's employer or client;
- (h) Soliciting or accepting gratuities directly or indirectly from contractors, their agents or other parties dealing with the professional engineer's client or employer in connection with work for which the professional engineer is responsible without the written consent of the engineer's employer or client;
- (i) Use by a professional engineer of his engineering expertise and/or his professional engineering status to commit a felony;
- (j) Affixing his seal and/or signature to plans, specifications, drawings, or other documents required to be sealed pursuant to State statute, when such document has not been personally prepared by the engineer or prepared under his responsible supervision, direction and control;
- (k) A professional engineer shall not knowingly associate with or permit the use of his name or firm name in a business venture by any person or firm which he knows or has

reason to believe is engaging in business or professional practices of a fraudulent or dishonest nature;

(l) If his engineering judgment is overruled by an unqualified lay authority with the results that the public health and safety is threatened, failure by a professional engineer to inform his employer, responsible supervision and the responsible public authority of the possible circumstances;

(m) If a professional engineer has knowledge or reason to believe that any person or firm is guilty of violating any of the provisions of State statute, or any of these rules of professional conduct, failure to immediately present this information to the board;

(n) Violation of any law of the State directly regulating the practice of engineering;

(o) Failure on the part of any professional engineer or qualified business organization to obey the terms of a final order imposing discipline upon said professional engineer or qualified business organization;

(p) Making any statement, criticism or argument on engineering matters which is inspired or paid for by interested parties, unless the professional engineer specifically identifies the interested parties on whose behalf he is speaking, and reveals any interest he or the interested parties have in such matters;

(q) Sealing and signing all documents for an entire engineering project, unless each design segment is signed and sealed by the professional engineer in responsible charge of the preparation of that design segment;

(r) Revealing facts, data or information obtained in a professional capacity without the prior consent of the professional engineer's client or employer except as authorized or required by law.

(s) Renewing or reactivating a license without completion of Continuing Education (CE) hours and subject areas as required by State statute and administrative code.

Appendix B. Standards of Conduct for State B

PURPOSE: This rule establishes a professional code of conduct for professional engineers.

(1) Definitions.

(A) Board—The Board for Professional Engineers.

(B) Licensee—Any person licensed as a professional engineer under the provisions of State statutes.

(2) The State Rules of Professional Conduct for Professional Engineers Preamble reads as follows: The board adopts the following rules, referred to as the rules of professional conduct. These rules of professional conduct are binding for every licensee. Each person licensed is required to be familiar with the rules of the board. The rules of professional conduct will be enforced under the powers vested in the board. Any act or practice found to be in violation of these rules of professional conduct may be grounds for a complaint to be filed with the Administrative Hearing Commission.

(3) In practicing professional engineering, a licensee shall—

(A) Act with reasonable care and competence and apply the technical knowledge and skill which are ordinarily applied by professional engineers of good standing, practicing in the State. In the performance of professional services, licensees hold their primary responsibility to the public welfare which should not be compromised by any self-interest of the client or the licensee.

(B) Undertake to perform professional engineering services only when they are qualified by education, training, and experience in the specific technical areas involved.

(C) In the conduct of their practice, not knowingly violate any state or federal criminal law.

(D) Comply with state laws and regulations governing their practice. In the performance of professional engineering services within a municipality or political subdivision that is governed by laws, codes, and ordinances relating to the protection of life, health, property, and welfare of the public, a licensee shall not knowingly violate these laws, codes, and ordinances.

(E) Recognize that their primary obligation is to protect the safety, health, property, or welfare of the public. If the professional judgment is overruled under circumstances

where the safety, health, property, or welfare of the public are endangered, they are to notify their employer or client and other authority as may be appropriate.

(F) Not assist non-licensees in the unlawful practice of professional engineering.

(G) Not assist in the application for licensure of a person known by the licensee to be unqualified in respect to education, training, experience, or other relevant factors.

(H) Truthfully and accurately represent to others the extent of their education, training, experience, and professional qualifications and not misrepresent or exaggerate the scope of their responsibility in connection with prior employment or assignments.

(I) Not accept compensation, financial or otherwise, from more than one party, for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties. The disclosure and agreement shall be in writing.

(J) Make full disclosure, suitably documented, to their employers or clients of potential conflicts of interest, or other circumstances which could influence or appear to influence their judgment on significant issues or the unbiased quality of their services.

(K) Not offer, give, solicit, or receive, either directly or indirectly, any commission, contributions, or valuable gifts, in order to secure employment, gain an unfair advantage over other licensees, or influence the judgment of others in awarding contracts for either public or private projects. This provision is not intended to restrict in any manner the rights of licensees to participate in the political process; to provide reasonable entertainment and hospitality; or to pay a commission, percentage, or brokerage fee to a bona fide employee or bona fide established commercial or marketing agency retained by the licensee.

(L) Not solicit or accept financial or other valuable consideration, either directly or indirectly, from contractors, suppliers, agents, or other parties in return for endorsing, recommending, or specifying their services or products in connection with work for employers or clients.

(M) Not attempt to, directly or indirectly, injure the professional reputation, prospects of practice or employment of other licensees in a malicious or false manner, or both.

(N) Not reveal confidential, proprietary, or privileged facts or data, or any other sensitive information obtained in a professional capacity without the prior consent of the client or employer except as authorized or required by law or rules of this board.

(4) Licensees having knowledge of any alleged violation of this Code shall cooperate with the proper authorities in furnishing information or assistance as may be required.