



Professional Ethics for the Construction Industry

Second Edition

Rebecca Mirsky and John Schaufelberger



Professional Ethics for the Construction Industry

This second edition of *Professional Ethics for the Construction Industry* empowers a new generation of built environment professionals to navigate the ethical challenges confronting them at every stage of a project, from the initial bid to its completion and beyond. Authored by a pair of veteran educators and industry professionals, this textbook introduces ethical dilemmas aspiring construction professionals will face on the job—and the critical thinking skills to reason their way out of them.

Written to meet curriculum requirements for all levels of construction education, this book explores ethics specific to the construction industry, illustrated by detailed and realistic case studies. All-new chapters on privacy, cutting-edge technologies, and pandemic-era worker protections complement chapters on perennial ethical issues surrounding the environment, client relationships, and more. Features include:

- Completely revised and updated to reflect changes in construction technology, workforce composition, and working environments.
- Updated to include new chapters on social media, privacy and technology, and construction during a disease outbreak or natural disaster.
- Ideal reading for courses in professional ethics, leadership, construction law, workforce readiness, and continuing education.
- Downloadable instructor's manual with commentary on scenarios provided at the end of each chapter.

As vital on the jobsite as in the classroom, *Professional Ethics for the Construction Industry* guides aspiring design and construction professionals through the thorniest on-the-job conundrums.

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Preface

Construction is a service industry where success is highly dependent on the confidence and trust of customers, subcontractors, suppliers, regulators, team members, and the general public. Members of the industry have always faced ethical challenges when confronted with what are often seen as conflicting priorities of profit, quality, and worker safety. This book provides a roadmap for construction students and industry professionals to navigate some of the more common ethical challenges related to obtaining work, complying with regulations, managing contracts, and ensuring the fair and safe treatment of workers in an often discriminatory and hazardous environment.

We address these issues by presenting distinct topics in a concise and organized manner, using terms and language common in the construction industry. Each topic is introduced with explanations of common ethical challenges. These topics are further illustrated with real-life examples from recent construction projects, and each concludes with a list of thought-provoking scenarios for discussion. We also provide information on how to develop a corporate code of ethics with examples from major, well-known U.S. construction industry leaders.

Learning and applying good ethical practice is not easy because the breadth of potential ethical issues within the industry is vast. Industry professionals need to be able to identify an ethical dilemma, develop alternative strategies for addressing it, and select the best course of action for all involved. A company's reputation for ethical behavior has a significant influence on its ability to acquire and deliver work, and that reputation is built on the ethical behavior of the company's leaders and employees.

In the past five years, since the first edition of this book was published, there have been some important changes within the industry, which we believe should be addressed in a second edition. Chapter 3 has been expanded to address construction procurement issues, and Chapter 6 has been expanded to address project execution issues. Chapter 7 has been updated to include discussion about recent initiatives in diversity, equity, and inclusion, and Chapter 9 includes new information about industry action related to climate change. Chapter 11 has been added to address ethics related to technology and digital information, and

Chapter 12 has been added to address ethics related to construction during crisis. Additional scenarios have been added to several chapters, and an instructor's manual has been prepared to provide commentary on the scenarios provided at the end of each chapter.

*Rebecca Mirsky
John Schaufelberger*

1 Introduction

Chapter Outline

- Learning Objectives
- Ethics Fundamentals
- Ethical Challenges in the Construction Industry
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Describe the five common ethical approaches that form the foundation of professional business ethics.
- Explain how an ethical issue differs from a legal issue.
- Identify common areas of ethical challenges specific to the construction industry.

Ethics Fundamentals

One of the distinguishing features of human society is the desire to establish rules and order, in the form of rules, covenants, codes, standards, and laws that define acceptable behavior and conduct in a civilized world. Throughout history, religious leaders, philosophers, and politicians have pondered and discussed the human condition, and argued over how to live, or inspire others to live a just and moral life, whether dealing with individuals or empires. The golden rule, which requires one to treat others as one would wish to be treated, is one of the most fundamental and simple tools for making ethical decisions.

Whether or not a set of beliefs is based on religious tenets, those beliefs constitute the moral values people use to distinguish between right and wrong in making personal and business decisions. Ethics is the practice of examining those moral values in the face of day-to-day situations and having the courage to do what is right. Each decision has consequences, both to ourselves and to others. Generally, there are three primary ethical directives: *loyalty*, *honesty*, and

2 Introduction

responsibility. Loyalty may be requested from many groups and institutions: friends, family, employer, profession, and society. Honesty is more than truth telling. It involves not lying, but, more importantly, the correct representation of ourselves, our actions, and our views. Responsibility means anticipating the potential consequences of our actions and taking responsible measures to prevent harmful occurrences.

Whereas laws and regulations define courses of action to which we must legally adhere or avoid, ethics include standards of conduct to help us make the right decisions. For example, an individual may hold a moral belief that stealing is wrong. Aside from legal interpretations, ethics provides a framework for that individual to evaluate why stealing is wrong, or unethical, in a certain context. Perhaps it is unethical because the individual has represented himself as an honest person. Or maybe it is unethical because by stealing, the individual gives herself an unfair advantage over someone else. Or perhaps it is unethical because it deprives another of his right to the stolen item. Ethical decisions are often referred to as dilemmas because they arise from situations that are rarely black or white. We can use the reasoning behind the various ethical theories to help us to navigate the gray areas we frequently encounter in our professional and personal lives.

There are many excellent books, journals, articles, and other references that explore deeply, and in great detail, the different theories and branches of ethical thought. For our focused look at business ethics, and specifically business ethics for construction, we will limit ourselves to five ethical approaches that we can apply to some of the most common ethical challenges in our industry:

- *The Utilitarian Approach*—The ethical choice is whichever produces the greatest good for the greatest number of people. The Utilitarian Approach is concerned with the *consequences* of the action or decision (as opposed to the motivation or the means), and the direct or indirect impacts on everyone involved. When applying the Utilitarian Approach, it is possible that individuals may be harmed, or suffer negative consequences, as long as the majority of those affected benefit from the decision. The Utilitarian Approach also allows for using potentially unethical means such as lying to achieve the end goal of maximum benefit to the greatest number.
- *The Rights Approach*—The ethical choice is the one that respects the fundamental rights of others to be treated as equals capable of making their own decisions. Some of the common fundamental rights are free speech, liberty, safety and security, and equal protection under the law. Rights are also related to duty; if we acknowledge that others have fundamental rights, then we have a duty to respect those rights. If we ignore that duty, then we have acted unethically.
- *The Justice Approach*—The ethical choice is the one that treats everyone involved fairly and in accordance with what they are due. This means that people in equal circumstances should be treated (and compensated) equally.

This approach is commonly applied in situations involving discrimination in the workplace. In evaluating a situation using the Justice Approach, we ask, “Are the individuals in this situation being treated equally, and if not, is there a justifiable reason for the inequality?”

- *The Common Good Approach*—The ethical choice is the one that promotes or contributes to the common good of society or the community. This approach is based on the assumption that there are certain services and resources, either natural or human made, whose existence benefits our common good as a society, and that the ethical choice preserves and protects those resources. Examples of services and resources that we all benefit from might include a healthy environment, a robust healthcare system, high quality education, and modern infrastructure. For all of society to benefit from resources that support the common good, all of society must also contribute to and share in the protection of those resources. Problems and conflicts arise when people value resources differently, choose to use more than their fair share, or refuse to conserve so that others may also benefit.
- *The Virtue Approach*—The ethical choice is the one that arises from and demonstrates our moral virtues. Honesty, integrity, respect, trust, and fairness are all examples of virtues. Companies commonly include the virtues they value most highly within their stated core values. These are understood to form the foundation for the corporate culture and how the company conducts its business. When faced with an ethical dilemma, the Virtue Approach requires that the individual or the company act in such a way that personifies the virtues for which they want to be known.

Applying an ethical approach in a business setting means using our knowledge of ethical decision-making in the management and operations of that business. Because there can be pitfalls with any single ethical approach when used alone, a sound framework for ethical decision-making looks at a situation from the perspective of each approach. Chapter 2 has more information about using a framework to make ethical decisions.

Ethical Challenges in the Construction Industry

Human survival depends on the protection and services provided by our built environment. Laws, codes, and standards to ensure safety and quality have been an integral part of the construction industry for hundreds of years. The earliest known building code is found in the Code of Hammurabi, dating back to nearly 1800 BC. The Babylonian king Hammurabi believed in strict punishment for shoddy work, stating:

If a builder has built a house for a man, and has not made his work sound, and the house he built has fallen, and caused the death of its owner, that builder shall be put to death.

(Hammurabi’s Code of Laws, no. 229)

4 Introduction

Today we address building safety and quality through building codes, safety regulations, and a wealth of specifications and standards. But many of the decisions about how a construction company conducts business are not so well defined. A company's success is tied to its reputation, and that reputation is built on relationships with clients, partners, subcontractors, suppliers, employees, agencies, and the community.

In construction, we face many ethical dilemmas in contract procurement, cost estimating, project management, accounting/financial management, customer relations, subcontractor relations, and material vendor relations. A construction company's ability to acquire and retain customers as well as to attract and retain talented employees is directly influenced by its reputation for ethical culture and the ethical behavior of its leaders and employees. Construction is basically a service industry, and purchasers of construction services have choices. Thus, a reputation for ethical behavior is essential for success. A company's ethics needs to be one of its core values to guide its employees in making daily decisions. Mishandling ethical situations can damage the company's reputation and destroy the morale of its employees.

The construction industry is also extremely competitive with ample temptation to look for advantages by cutting corners, making backroom deals, favoring friends or relatives, or withholding information. At times, it can seem that the ethical decision runs contrary to the financial success of the company, and it can be extremely difficult for companies and their employees to know how to proceed. This is particularly challenging in the management of construction projects which rely on successful collaboration of individuals representing diverse organizations with different ethical cultures. Treating everyone fairly should be emphasized in the execution of construction projects.

In the following chapters, we look at some of the most common ethical challenges encountered by construction professionals, and provide a framework for making tough decisions. The examples and scenarios are taken from our own real-life experiences as well as those of our colleagues in industry. We look into some of the dilemmas associated with obtaining and performing the actual work of construction, including issues arising from relationships with clients, subcontractors, and suppliers. We also discuss issues with discrimination and harassment in the office and on the jobsite, and examine current practices in creating and implementing company codes of ethical conduct. Finally, we address some emerging topics that are presenting unique ethical challenges, such as the increase in digital information, prevalence of social media, crisis communications, and the growing interest among corporations in social responsibility.

Further Reading

For more detailed information and an excellent discussion about the five ethical approaches presented in this introduction, please visit the material on ethical decision making available on website of the Markkula Center for Applied Ethics at Santa Clara University, at www.scu.edu/ethics.

2 Codes of Conduct, Compliance, and Reporting

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Components of a Business Ethics and Conduct Program
- The Role of Professional Associations
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Note
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Identify the main components of an effective ethics and business conduct program.
- Explain the difference between ethics and compliance.
- Give examples of common core values.
- Give examples of common areas of primary ethical or legal risk.
- Give examples of questions you might ask yourself in an “ethics check.”
- Describe a strategy to prevent retaliation against a whistleblower.

Introduction

The construction industry has long struggled with an image of a cutthroat, competitive business environment where award of work to the lowest bidder and low profit margins encourage fraudulent and unethical practices. Forward-looking companies realize that while such practices may pay short-term rewards, they are devastating to long-term success and profitability. As a result, more companies are devoting time and resources to improving their image as responsible

6 Codes of Conduct, Compliance, and Reporting

and trustworthy business partners. They are accomplishing this by developing codes of ethical conduct and establishing compliance programs to ensure legal operations. In particular, the U.S. government has taken a leadership role in setting standards and guidelines for legal and ethical practices by government contractors. Even in the private sector, studies by consulting firm FMI, in conjunction with the Construction Management Association of America (CMAA), have shown that the number one factor influencing an owners' choice of construction manager or contractor is trust and integrity.

In 1986, some of the nation's top defense companies, including General Electric, Boeing, and Raytheon, came together to establish the Defense Industry Initiative (DII). The Packard Commission, appointed by President Ronald Reagan, had just published recommendations to address widespread allegations of fraud and criminal misconduct in defense contracting. At the time, according to a report by the Ethics Resource Center, the general public had become incensed by reports of "the falsification of timecards and test results, poor quality controls, defective pricing, waste, fraud and overall mismanagement of defense contracts."

Member firms of the DII pledged to support and promote the following six principles of business ethics and conduct:

- Have and adhere to a written code of business ethics and conduct.
- Train employees concerning their personal responsibilities under the code.
- Create a free and open atmosphere that allows and encourages employees to report violations without fear of retribution.
- Monitor compliance, disclose violations, and report on corrective action taken.
- Share best practices and lessons learned with other firms.
- Be accountable to the public.

Beyond legal requirements, DII forums have functioned as environments for sharing best practices that firms can adopt to improve organizational conduct. DII member organizations voluntarily develop written codes of business ethics and share approaches for training employees to comply with the codes.

Starting in December 2007, the federal government began requiring all contractors awarded jobs valued at more than \$5 million to have a written code of ethics and compliance within 30 days of being selected for a job. The requirement is spelled out in Title 48 of the Code of Federal Regulations, Contractor Code of Business Ethics and Conduct. It applies to contracts for services and goods involving the General Services Administration (GSA), Department of Defense (DOD), or National Aeronautics and Space Administration (NASA). The regulations do not stipulate what exactly needs to be included in the code of conduct, allowing contractors to develop a code that is appropriate for the size and goals of their company. Many states and private owners also require contractors to have a code of ethics.

Under the federal regulations, a contractor who is required to have a written code of conduct, and a responsibility to discover and report misconduct, may face suspension and debarment by failing to disclose violations of the code. Both suspension and debarment are stiff penalties that refer to ineligibility to compete for federal contracts. Suspension occurs during an investigation or litigation, while debarment is typically for a fixed period of time. This has serious implications, and can substantially impact a contractor's ability to obtain work.

In 2008, a group of large U.S. construction firms recognized the need that construction companies might have to create the newly required code of conduct, and founded the Construction Industry Ethics and Compliance Initiative (CIECI), modeled after the DII. CIECI is a non-profit association of companies within the U.S. construction industry that are committed to the highest level of ethics and conduct and compliance with the law. To assist companies in creating their own codes of conduct, CIECI adopted the DII's toolkit and created a template, available for free download from their website at www.ciecinitiative.org/files/Blueprint.pdf.

Even if an owner does not specifically require a contractor to have a formal ethics and compliance program in place, a well-written and fully implemented code of ethics can be a useful tool for marketing and recruiting. It is visible evidence of a company's commitment to its core values and establishing a culture of ethics throughout the company. That level of commitment gives owners confidence, and attracts future employees who wish to work within an ethical culture where they can feel assured their rights and interests are valued.

Introductory Case Study

A contractor has just hired an entry-level estimator to assist with preparing bids. He is assigned to a team under the supervision of a senior estimator. His first assignment is to obtain bids from insulation subcontractors. The senior estimator instructs the new employee to tell each subcontractor who supplies a quote that the contractor already has a number that is 10% lower. The junior estimator doesn't think this is right, but he's afraid of losing his new job. How can a company avoid an incident like this? How does a company create a culture of ethics? How might a new employee learn what to do when confronted with a situation that goes against what he or she believes is right? In the following section, we will explore how companies develop codes of conduct that can guide employees in making ethical decisions.

Components of a Business Ethics and Conduct Program

Business codes of conduct generally cover two topical areas: ethics and compliance. A simple way to distinguish between these two is to remember that compliance is based on laws and regulations while ethics is based on values and judgment.

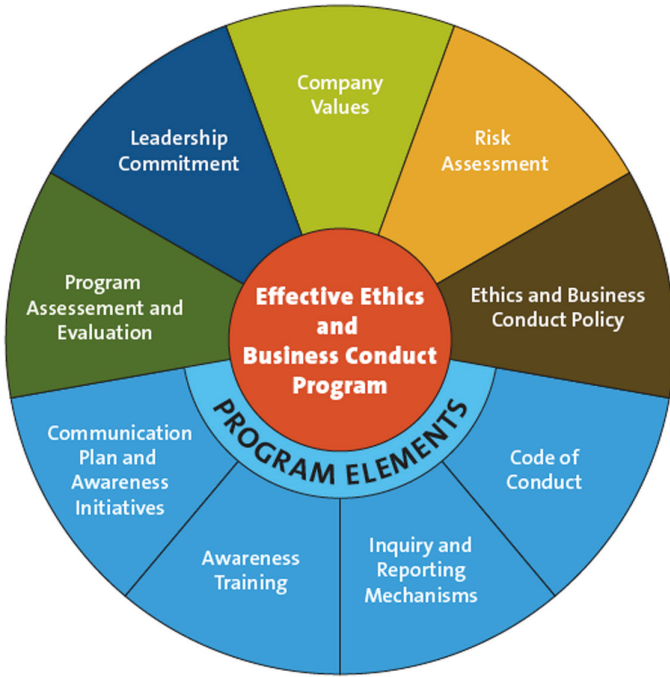


Figure 2.1 Elements of an effective ethics and business conduct program. Reproduced with permission from the Defense Industry Initiative.

The main goal of compliance is to prevent fraudulent and illegal actions, while the main goal of an ethics program is to emphasize the core values for which a company wants to be known and create a corporate culture that embodies those values and helps guide employees when there are no legal rules to go by.

Figure 2.1 illustrates the components of an effective ethics and business conduct program, as developed by DII and adopted by CIECI. The foundation of the program is the company's core values, shown at the top of the wheel. Each wedge of the wheel builds on the core values in a clockwise direction, until coming full circle, back to the top. These components are discussed further in the following paragraphs.

Company Values

In Chapter 8, Table 8.1 presents a comparison of the core values of companies selected from the Ethisphere Institute's *World's Most Ethical Companies*. Many of these, as well as additional common core values, are included in the CIECI *Blueprint*:

Honesty	People	Accountability
Integrity	Fairness	Cooperation
Respect	Commitment	Teamwork
Trust	Diversity	Loyalty
Good Citizenship	Leadership	Excellence
Responsibility	Openness	Creativity
Customer Satisfaction	Courage	Dignity
Quality	Safety	Conscientiousness

A company's values statements help define what a company stands for and what they want to be known for. They also make up the foundation upon which a company-wide culture of ethics is built. The core values should be built into every policy and procedure, so that day-to-day internal and external transactions reinforce the company's commitment to ethical practice.

Identifying Risk

Once the foundation of the company core values has been set, we move clockwise on the wheel to Risk Assessment. This is where the company identifies the areas of primary risk to the business. Areas of primary risk often have clearly defined legal boundaries, but can just as often include gray areas where the ethical decision is not obvious. Some examples of risk particular to the construction industry may include:

- time charging;
- company confidential information;
- competitor information;
- conflicts of interest;
- discrimination and harassment;
- electronic communications;
- environmental protection;
- offering gifts, gratuities, and entertainment;
- accepting business courtesies and kickbacks;
- political contributions and activities;
- quality and safety of the installed work;
- protection and use of company assets;
- security; and
- workplace safety.

Each item on the list carries with it a risk of violating one or more of the common core values. For example, if one of your company's core values is diversity, incidents of discrimination or harassment in your workplace erode the full realization of

that value. Identifying risk means understanding where poor decisions can compromise your company's core values, weaken your reputation, or even lead to illegal actions.

Policies, Procedures, and the Code of Conduct

Each area of potential risk should be addressed by policies and procedures. The company code of conduct is an effective way to organize these company policies into a useful resource for all stakeholders. Policies, procedures, and the code of conduct are represented by the next wedges on the wheel. Codes of conduct do not need to be complicated or lengthy to be effective. Their purpose is not to dictate every decision, but to provide guidance to help employees navigate the gray areas presented by common ethical dilemmas. A code of conduct can also serve as an effective communication tool to external stakeholders such as clients, owners, partners, subcontractors, and suppliers, who are also likely to be affected by the areas of primary risk.

Table 2.1 compares the content outlines of the codes of conduct of three different member companies of the Construction Industry Ethics and Compliance Initiative. (Each complete code of conduct is available for download from the company website.) The comparison illustrates different approaches companies might take to identify areas of potential risk and develop policies to address that risk. It also demonstrates that no single approach fits every company, although there are many common elements. Company codes of conduct are influenced by company culture, as well as factors such as whether the company is publicly held or privately owned, key market sectors, predominance of public or private clients, relationship with the company's board of directors, and many more.

It can be useful to pick out similar topics among codes of conduct to learn about areas of primary risk where ethical dilemmas commonly occur. In Table 2.1, all three of the codes of conduct have a main heading dedicated to conflicts of interest. Other similarities can be found if you dig more deeply into the material included under the main headings. For example, both Granite and DPR have headings that refer to safety and environmental protection. The PCL code of conduct also covers these topics, but they are included in the details under the heading, "Promote a Positive and Ethical Work Environment." The organization of the code of conduct grows out of the manner in which each company wishes to communicate its ethical priorities.

Handling Inquiries and Reports of Misconduct

Once employees learn to recognize situations that may present risk of illegal action or unethical behavior, they need to know what to do if they find themselves in such a situation, or how to report something that they may witness. They also need to be reassured that they will not suffer punishment or retaliation for reporting. This is a critical part of an ethics program, and it is why it is specifically addressed in most company codes of conduct.

Table 2.1 Code of Conduct Contents Selected from CIECI Member Companies

<i>Granite Construction</i>	<i>PCL</i>	<i>DPR</i>
<ul style="list-style-type: none"> • Core Values • Compliance Program and Guidelines <ul style="list-style-type: none"> ○ Standards of Conduct in Business Transactions ○ Construction Business Standards ○ Conflicts of Interest ○ Excellence ○ Accident & Injury Prevention ○ Equal Employment Opportunity and Other Employment Laws ○ Environment ○ Copying Documents & Software and the Use of Electronic Media ○ Trade Secrets & Company Information ○ Government Contracting ○ Public Affairs ○ Antitrust Laws & Competing Fairly ○ Securities Laws ○ International Business ○ Whistleblowing • Procedures <ul style="list-style-type: none"> ○ Getting Help ○ Discipline 	<ul style="list-style-type: none"> • Our Core Values • Our Commitment • Obey the Law • Act Ethically • Promote a Positive and Ethical Work Environment • Avoid Conflicts of Interest • Recordkeeping • Public Disclosures • Adhere to all Competition and Antitrust Laws • Political Contributions and Activities • Bidding, Negotiating and Performing Contracts • Gifts, Gratuities and Business Courtesies • Doing Business with U. S. Governments • Employment of Government Personnel • Consultants, Agents and Representatives • Protect Proprietary and Confidential Information • Use of Assets • Use of Electronic Communications • Report Unethical Conduct • Cooperate in Ethics Investigations 	<ul style="list-style-type: none"> • Conduct all business with the highest standards of honesty and fairness. • Follow the letter and spirit of the law and uphold all contractual agreements. • Maintain a culture where doing the right thing is not only professed, but prized and practiced by all employees. • Avoid conflicts of interest and circumstances that may lead to even the appearance of a conflict. • Create a safe workplace and uphold a commitment to environmental responsibility. • Exercise common sense and good judgment.
<i>www.graniteconstruction.com</i>	<i>www.pcl.com</i>	<i>www.dpr.com</i>

In Granite Construction's code of conduct, there is a section titled "Whistleblower." A whistleblower is someone within a company who discloses misconduct or illegal action by that organization. If not protected, whistleblowers can be the target of numerous forms of retaliation by company management or by coworkers, from verbal abuse, denial of raises and promotions, or assignment to undesirable locations or tasks, up to physical threats and termination. Even

the perception of retaliation can cause a breakdown in trust and disrupt the company culture. Effective codes of conduct address the threat of retaliation by providing a protected means of reporting violations and concerns. The Granite code of conduct explicitly states that whistleblowers are protected from “harassment, retaliation, or any adverse employment consequences” for raising concerns or reporting violations of the code of conduct.

An anonymous or confidential email or telephone hotline provides a safe avenue for employees to voice concerns. Ideally, the hotline is a two-way street, serving as a source of information for conduct-related inquiries, as well as a point of contact for complaints or reports. Calls or emails may be directed to an assigned individual in a senior management position, a company ethics committee or task force, or a person or group on the company’s board of directors. Inquiries should be handled by an experienced professional who has the knowledge and the appropriate authority to respond. There should be established procedures in place to ensure that inquiries and reports are handled in a consistent manner. Each inquiry must receive a response, or the program risks losing credibility.

For compliance with federal contract requirements, each call and the action taken must be documented. Regardless of whether the company is engaged in federal or private contracts, all reports should be investigated to determine whether the reported action is a violation of law or company policy. Tracking the number and frequency of complaints or reports can provide valuable information regarding areas of primary risk, and can even reveal problem areas that might have been overlooked. Tracking and reporting are important for assessing the performance of the conduct program, and should receive sufficient and ongoing budget allocation to be effective.

Education, Training, and Communication

An effective code of conduct is a tool to raise awareness of ethical issues and guide employees in making ethical decisions. A culture of ethics is not created by a slogan, or a one-time memo or training session. Employees must first be aware that a code of conduct exists, they must become familiar with the issues and the alternatives, and the information must be readily and easily accessible. Awareness comes from regular reminders in the form of notices, emails, posters, handouts, or weblinks. Familiarity comes from live or online training sessions, reading assignments and quizzes. The use of real-life scenarios and role-playing activities can help employees practice ethical decision-making skills and become comfortable using the code as a reference.

It’s widely known that people have different learning styles. Offering training materials in a variety of formats is a successful strategy to connect with the wide range of educational levels and skills in a typical organization. Because there are so many different ethical issues and situations that can arise within the construction industry, and in conducting business in general, it’s not possible or even advisable to attempt to provide employees with an encyclopedia of solutions.

Instead, people need to learn the process of recognizing and evaluating ethical dilemmas.

The Markkula Center for Applied Ethics at Santa Clara University has created a useful framework for identifying and analyzing ethical issues that is shown in Box 2.1. The framework encourages a role-playing approach by leading the inquirer through a series of first-person questions. Questions about possible alternative actions are related to the various ethical theories that were discussed in Chapter 1 of this book. Refer back to Chapter 1 if you wish to refresh your knowledge about these ethical theories.

Box 2.1 A Framework for Ethical Decision Making

Recognize an Ethical Issue

- 1 Could this decision or situation be damaging to someone or to some group? Does this decision involve a choice between a good and bad alternative, or perhaps between two “goods” or between two “bads”? Does this decision require me to choose “the lesser of two evils”?
- 2 Is this issue about more than what is legal or what is most efficient? If so, how?

Get the Facts

- 3 What are the relevant facts of the case? What facts are not known? Can I learn more about the situation? Do I know enough to make a decision?
- 4 What individuals and groups have an important stake in the outcome? Are some concerns more important? Why?
- 5 What are the options for acting? Have all the relevant persons and groups been consulted? Have I identified creative options?

Evaluate Alternative Actions

- 6 Evaluate the options by asking the following questions:
 - Which option will produce the most good and do the least harm? (The Utilitarian Approach)
 - Which option best respects the rights of all who have a stake? (The Rights Approach)
 - Which option treats people equally or proportionately? (The Justice Approach)
 - Which option best serves the community as a whole, not just some members? (The Common Good Approach)
 - Which option leads me to act as the sort of person I want to be? (The Virtue Approach)

Make a Decision and Test It

- 7 Considering all these approaches, which option best addresses the situation?
- 8 If I told someone I respect—or told a television audience—which option I have chosen, what would they say?

Act and Reflect on the Outcome

- 9 How can my decision be implemented with the greatest care and attention to the concerns of all stakeholders?

How did my decision turn out and what have I learned from this specific situation?

Source: this framework for thinking ethically is the product of dialogue and debate at the Markkula Center for Applied Ethics at Santa Clara University, August 1, 2015 (used with permission)

In Table 2.1, we compared the contents of three company codes of conduct. These three companies also offer ethics checks to their employees, consisting of a simple series of questions to ask when faced with an ethical dilemma as shown in Table 2.2.

Measuring Effectiveness

A familiar saying in business is that you can't manage or improve something that you don't measure. In other words, unless you have some way to measure how effective your ethics program is, you won't know if it's working. As we continue to move around the wheel of our Effective Ethics and Business Conduct Program, we reach the wedge for Program Assessment and Evaluation. Earlier, we discussed the importance of record keeping and tracking to identify any common themes and ensure that corrective action is being taken. It is also important to evaluate the effectiveness of the methods being used to communicate with and train employees on the contents and use of the code of conduct. Surveys and focus groups are two widely used ways to perform this evaluation. Ethics program effectiveness can be evaluated internally by an assigned group or task force, or an independent outside consultant can be engaged to remove any concerns about potential conflicts of interest.

Commitment from the Top

Ultimately, as we return to the top of the wheel, we come to the need for a visible and ongoing commitment from the company's top leadership to creating an ethical

Table 2.2 Ethics Checks Selected from CIECI Member Companies

<i>Granite Construction</i>	<i>PCL</i>	<i>DPR</i>
<p>As an aid, use the following Ethics Check as a guide during decision making:</p> <ul style="list-style-type: none"> • Is your behavior/ proposed action legal? Does it comply with the law and Company policies? • Is your behavior/ proposed action something you would like to see published in the newspaper? • Is your behavior/ proposed action something you could comfortably explain to your children? <p>In short, will your behavior or decision allow you to look in the mirror and feel proud about what you are doing?</p>	<p>When confronted with a situation which raises a concern, ask yourself:</p> <ul style="list-style-type: none"> • Are my actions legal? • Am I being fair and honest? • Will my actions stand the test of time? • How will I feel about myself afterwards? • Would I think that others were acting unethically if they acted this way? • How would it look in the newspaper? • Will I sleep soundly tonight? • What would I tell my child to do? • How would I feel if my family, friends and neighbors knew what I was doing? 	<p>If after reading The DPR Code, you are still in doubt about whether an action was or a potential action is ethical, ask yourself the following questions:</p> <ul style="list-style-type: none"> • Will the action violate either the law or a company policy? • Will the action damage or be unfair to any of the parties involved? • Will the action make me feel ashamed or uncomfortable looking at myself in the mirror, describing it at a staff meeting, explaining it to my family, or reading about it in a newspaper? <p>If the answer to any of these questions is “yes” or “maybe,” you have likely identified an issue that must be either avoided or reported.</p>
<i>www.graniteconstruction.com</i>	<i>www.pcl.com</i>	<i>www.dpr.com</i>

culture within the organization. Ethical leadership can be visible in all the day-to-day operations of a company, from hiring decisions and the manner in which employees are treated; to the type of work pursued; to relationships with clients, subcontractors and the community; to the prominence assigned to core values and corporate governance on the company website. Leadership commitment to ethical conduct is essential to an organization’s reputation for integrity and long-term success for all stakeholders as opposed to short-term rewards and personal gain for a few. Leaders set the example for the rest of the company. Ethical failures within an organization can be traced to a lack of commitment at the top level to making ethical conduct a priority.

The Role of Professional Associations

The construction industry has a wealth of professional associations that provide networking and professional development opportunities, guidance, and resources

relevant to the many specialties that exist within the sector, including construction managers, cost engineers, estimators, subcontractors, and numerous specialty trades. The majority of these associations have developed their own codes of conduct or ethics to guide their membership. Whereas a company code of ethics is built upon the core values and areas of primary risk specific to that organization, a code of conduct developed by a professional association assists in defining ethical behavior for an industry.

Table 2.3 presents the main themes from the codes of ethics of three professional construction associations. Professional association codes can be a valuable

Table 2.3 Codes of Ethics from Selected Professional Construction Associations

American Institute of Constructors (www.aic-builds.org)

- A Constructor shall have full regard to the public interest in fulfilling his or her responsibilities to the employer or client.
- A Constructor shall not engage in any deceptive practice, or in any practice which creates an unfair advantage for the Constructor or another.
- A Constructor shall not maliciously or recklessly injure or attempt to injure, whether directly or indirectly, the professional reputation of others.
- A Constructor shall ensure that when providing a service which includes advice, such advice shall be fair and unbiased.
- A Constructor shall not divulge to any person, firm, or company, information of a confidential nature acquired during the course of professional activities.
- A Constructor shall carry out responsibilities in accordance with current professional practice, so far as it lies within his or her power.
- A Constructor shall keep informed of new thought and development in the construction process appropriate to the type and level of his or her responsibilities and shall support research and the educational processes associated with the construction profession.

Construction Management Association of America (<http://cmaanet.org>)

Ethical Practice

- Construction Managers should be guided in all their relationships by the highest standards of integrity and honesty.
- Construction Managers should conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation and value of the profession.
- Construction Managers should avoid conduct or practices that deceive the public or represent a real or perceived conflict of interest.
- Construction Managers should respect the rights of others and should not discriminate on the basis of race, color, gender, marital status, religion, national origin, age, disability, or sexual orientation nor knowingly violate any law, statute, or regulation in the performance of professional services. Construction managers should strive to create a diverse workforce.
- Construction Managers should have a zero-tolerance policy for any form of harassment including sexual harassment and bullying.

Professional Practice

- Construction Managers should perform services only within their areas of competence and qualification.
- Construction Managers should contribute to the advancement of the program, project, and construction management profession by using best practices, continuing their professional education, and contributing to the development of the future workforce.

Table 2.3 Cont.

Responsibility to the Public

- Construction Managers should hold paramount the health, safety, and welfare of the workplace and the public.
- Construction Managers should guide and aid in defining and meeting objectives for environmental sustainability and resiliency throughout a project's life cycle.

Client-Centered Practice

- Construction Managers should ethically represent the best interests of the owner or client, as consistent with this code.

American Subcontractors Association's Model Code of Ethics for a Construction Subcontractor (www.asaonline.com)

- Competition. Compete fairly for contracts, avoiding any practice that might be construed to be in violation of the letter or spirit of the antitrust laws. Avoid any activity that could be construed as bid shopping or peddling. Do not knowingly violate any law or regulation governing the competitive process.
- Qualifications. Seek to perform contracts only for projects for which the firm has the technical competence and experience. Do not accept contracts for which the firm is not qualified. Assign staff to projects in accordance with their qualification and commensurate with the demands of the services to be provided under the contract.
- Standards of Practice. Provide materials and services in a manner consistent with the established and accepted standards of the construction industry and with the laws and regulations that govern it. Perform contracts with competence, reasonable care, and diligence. Establish prices that are commensurate with the firm's services. Serve customers with honesty and integrity.
- Conflicts of Interest. Endeavor to avoid conflicts of interest, both corporate and individual. Where a corporate conflict exists, disclose such conflict to the firm's customer or prospective customer. Regularly educate staff about personal conflicts of interest and establish a procedure for internal disclosure.
- Public Safety. Assure that the safety of the firm's employees, the employees of others on the job site, and the general public are protected during the provision of the firm's services.
- Service Providers and Suppliers. Treat service providers and suppliers in an equitable manner, assuring that they are provided clear direction and prompt payment for services rendered. Do not knowingly violate any law or regulation governing such relationships.
- Employees. Comply with the letter and spirit of laws relating to working conditions, equal employment opportunities, and pay practices. Do not knowingly violate any law or regulation dealing with employment.
- Public Information. Assure that all public statements and disclosures are truthful. Protect the proprietary interest of the firm's customers.
- Compliance with Laws. Do not knowingly violate any law or regulation.
- Image of the Construction Industry. Avoid actions that promote the firm's own self-interest at the expense of the construction industry and uphold the standards of the construction industry with honor and dignity.
- Internal Procedures. Establish internal procedures under which failure to conform to the above practices will be handled. Each year, review this code of ethics and its internal procedures with each employee. If an employee, customer or other individual becomes aware of a circumstance in which the firm or an employee of the firm fails to conform to the above standards, he / she should immediately report such circumstance to the appropriate individual who will initiate an investigation of and otherwise resolve the reported issue.

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resource for companies that are developing their own codes of ethical conduct because they address many of the risk areas inherent in the industry.

From the examples provided in the table, we can immediately identify some of the common core values that we have already discussed in this chapter:

- responsibility;
- honesty;
- respect;
- fairness;
- integrity;
- trust; and
- loyalty.

We can also identify some of the common areas of primary risk:

- company confidential information;
- competitor information;
- conflicts of interest;
- quality and safety of the installed work; and
- protection and use of company assets.

Membership in professional associations grants access to a knowledge base of issues, concerns and policies that are relevant to individuals and companies with common goals and interests. Interaction with other members is useful for obtaining reality checks and for sharing best practices, such as occurs at the annual CIECI forums.

Construction Participant Perspectives

Between 2010 and 2021, Granite Construction was designated one of the World's Most Ethical Companies nine times by the Ethisphere Institute (<http://ethisphere.com>). The company attributed the repeated accomplishment to its long-standing commitment to the company code of conduct, originally written around 1940 by the company's founder, Walter "Pop" Wilkinson, who named his 11-step document, *Founder's Guide to Future Generations*. The title illustrates the company's desire for long-term success, and the belief that certain core values last through generations. Granite's current Code of Conduct contains an introductory note from President and Chief Executive Officer James H. Roberts, in which he notes the relevance of the original core values, but also emphasizes that the code is a living document, subject to periodic review:

Our Code of Conduct, while rich with tradition, is regularly reviewed by a team of Granite employees to ensure that it continues to address current challenges and issues. As in the past, our eight Core Values are found to be

timeless and appropriate to any situation. Changes in legislation make periodic revisions necessary for the compliance section of the Code.

Later, he makes it clear that, “Under no circumstances should any Granite employee commit an unethical or illegal act under the pretense of being in the Company’s best interests.” This is an example of a simple statement that provides straightforward guidance and clearly comes from the top level of the company.

Also receiving one of the World’s Most Ethical Company designations in 2021 for the twelfth consecutive year was Parsons, a global engineering and construction firm. Upon receiving the honor in 2018, the company issued this statement describing some of the strategies used to integrate ethics throughout the organization:

Parsons communicates its commitment to integrity through its Code of Conduct, as well as through various training methods, including live training, videos, easily accessed online documentation, and periodic ethics “challenges” or quizzes to keep ethics in the forefront of its daily activities.¹

As members of the Construction Industry Ethics and Compliance Initiative, all the companies highlighted in this chapter—Granite, PCL, DPR, and Parsons—have demonstrated their commitment not only to instilling a culture of ethics within their organizations, but to sharing best practices with others in the construction industry.

Questions and Scenarios for Discussion

Evaluate the following scenarios:

- 1 Alicia Watson is working on a proposal for a large project with an important privately owned client. The award will be based on a number of factors, including the qualifications of the proposed management team. A close friend of Alicia’s works for a competing firm, which is also submitting a proposal for the same project. One afternoon, while the proposal is still in progress, Alicia meets her friend for lunch. While they are waiting for their food, Alicia’s friend confides that his company has “embellished” their proposed project manager’s resume with some false project experience to make him look better. He swears Alicia to secrecy, but he felt like he just “had to tell someone.”
 - What should Alicia do with this information?
 - Alicia’s company’s code of ethics includes Service as a core value and emphasizes the interests of their customers. Does this mean they owe it to their prospective client to reveal what Alicia learned about their competitor?
 - Alicia passes the information on to her manager, who asks Alicia how she found out. What should Alicia tell her manager?

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- Evaluate the situation using the Framework for Ethical Decision Making. Which ethical theory do you feel gives the best option?
- 2 Walt Miller has been asked to review the entries in his company's log of work-related injuries and illnesses. While comparing the supporting documentation to the log entries, Walt notices that one of the projects had several incidents that were categorized incorrectly. When Walt checks with the project manager, he is told that there is plenty of leeway in how incidents are categorized and the company's standard practice to minimize the severity. Walt is pretty sure that's not right. But if he corrects the log entries, the statistics for the project will look terrible. Walt is afraid that if he makes the corrections, the project manager's performance as well as the company's safety record will be in jeopardy. The project manager has a lot more experience than Walt does.
- Which do you think is more important for a company's future success—some numbers in a spreadsheet, or retaining an experienced project manager?
 - The company's core values include honesty and teamwork. If Walt believes that honesty requires him to correct the log entries, is he still being a team player?
 - Evaluate the situation using the Framework for Ethical Decision Making. Which ethical theory do you feel gives the best option?
- 3 Mike Rogers is a superintendent on a mixed-use mid-rise project in a busy urban location. The project manager has been with the company for over twenty years and is known for aggressive goal setting and a volatile temper. Mike has frequently been the target of the project manager's outbursts but he usually takes them in stride and brushes them off, even when they happen in front of his coworkers or subcontractors. Recently however, the outbursts have been more frequent and Mike has noticed that several project team members have stopped attending the daily planning meetings. Mike has pointed this out to the project manager but was told he needed to be tougher on the subcontractors. Mike feels like he should notify the division manager about the deteriorating morale at the site but he's worried it will make things worse.
- Is Mike's project manager being a strong, no-nonsense leader or is he creating a hostile work environment? Is Mike being too sensitive?
 - The company's core values include respect and loyalty. Is there a conflict between these core values in this situation?
 - Evaluate the situation using the Framework for Ethical Decision Making. Which ethical theory do you feel gives the best option?
- 4 You are the health and safety manager for a medium-sized firm that specializes in K-12 education projects. Your responsibilities include overseeing the creation and implementation of project health and safety plans, and for ensuring that project personnel are up to date in all their safety-related training and certifications. In addition to being a Certified Safety Professional with ten years of project experience, you are also an acoustical engineer. A former

client recently contacted you at a professional association meeting and asked if you would be their outside acoustical consultant for an upcoming project. This sounds like a great opportunity and you are very interested in taking on this assignment.

- Do you need to tell your employer about the consulting opportunity?
 - Since this involves a former client, is there any conflict of interest involved?
 - Evaluate the situation using the Framework for Ethical Decision Making. Which ethical theory do you feel gives the best option?
- 5 Allen Yu is an estimator for a national construction company. His company is preparing a proposal for major renovations at a U.S. Air Force base in Allen's hometown. Because of his familiarity with the site and location, Allen has been selected to participate in the presentation to the client team. This is a great opportunity for Allen to demonstrate his presentation skills and possibly secure a promotion. While reviewing the project details, Allen realizes that one of the client team members is a close friend of the family who has known Allen since he was a child. Allen is worried that this connection might jeopardize his chance to participate in the presentation.
- Does Allen need to let his company know about the connection with the client? Why could it be a problem if Allen chose not to reveal his connection?
 - The company's core values include openness. What risk, if any, might Allen be taking by not saying anything?
 - Evaluate the situation using the Framework for Ethical Decision Making. Which ethical theory do you feel gives the best option?

Note

- 1 Parsons (2018). Parsons Named as One of the World's Most Ethical Companies by the Ethisphere Institute for Ninth Year in a Row. Press release. Retrieved from www.parsons.com/2018/02/parsons-among-2018-worlds-most-ethical-companies.

Further Reading

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3 Contract Procurement

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur during the process of submitting a bid or proposal for a project between a general contractor and a project owner, between a general contractor and a project designer, and between a general contractor and subcontractors.
- Describe the ethical challenges that can occur between a contractor and suppliers during the bidding process.
- Imagine and evaluate potential consequences resulting from ethical decisions made during the contract procurement process.

Introduction

In this chapter, we will examine some of the ethical situations that one may encounter during the procurement of a construction contract or in the development of a bid or proposal for a construction project in response to a project owner's solicitation. Contract procurement ethics is about the basic concepts and fundamental principles of decent business conduct on or before the submission of a bid or proposal. We will examine two types of contracts and two types of procurement processes. The two types of contracts that we will discuss are those for only construction services and those for both design and construction

(design-build) services. The two types of procurement processes that we will discuss are bid and negotiated procurement.

Project owners may choose to select a general contractor for a project by requiring prospective general contractors to submit competitive bids or to submit competitive proposals for a negotiated selection process. Competitive bids may be submitted on a lump-sum or unit-price basis or a combination of both. Negotiated proposals may use the same methods of pricing, or often, may use a cost-plus approach in which most direct project costs are reimbursable and other contractor costs are included in the fee. Design-build contracts typically are awarded using a negotiated procurement process. Ethical issues can occur during both procurement processes as we will discuss in this chapter.

Competitive bidding is one form of contract procurement that a project owner may use to select a general contractor for a construction project. In this process, a project is described in the bid documents, and prospective contractors are requested to submit bids or prices to construct the described project. Since price typically is the criteria used for award of bid contracts, the bidding process is seen as a “market driven” process in which the lowest bid represents the “best value.” This is not always the case because sometimes contractors submit low bids to win projects with the expectation of recovering their costs when negotiating change orders during construction.

During the bidding process, the project owner and project designer usually conduct a pre-bid meeting with prospective bidders and subcontractors to address any issues that they have identified as a consequence of reviewing the contract documents. At the conclusion of the pre-bid meeting, the project owner collects the issues identified by prospective bidders and subcontractors and provides responses to all prospective bidders in the form of a contract addendum. The use of contract addenda ensures that all prospective bidders are using the same project information when developing their bids and ensures fairness and equitable treatment of all prospective bidders during the bidding process.

In developing a proposal for a project, a contractor must adhere to the instructions provided in the project owner’s request for proposal. Information requested may include a price proposal, a construction schedule, resumes of the contractor’s project team, a quality control plan, and a safety plan. For a design-build project, the proposal generally also includes design ideas or concepts and resumes of the design team.

When developing bids or cost proposals to submit to project owners, the general contractors decide which scopes of work that they will perform with their own work forces and which scopes of work will be subcontracted to specialty contractors. The subcontracted scopes of work are organized into subcontract bid packages, and prospective subcontractors are invited to submit quotations for each subcontract bid package. The general contractors evaluate the subcontractor quotations and decide which ones to select as a part of their bid or proposal preparation process. Subcontracts are not awarded, however, until the general contractor receives the contract from the project owner. Even if the general contract

uses a cost-plus pricing structure, the subcontracts typically are awarded on a lump-sum basis.

There are many legal issues associated with the contract procurement process, such as the contractors meeting to discuss their bids and deciding which one would submit the lowest bid or contractors offering bribes to be selected. None of these legal issues are addressed in this chapter. We will restrict our discussion solely to ethical issues that may occur during the contract procurement process.

Introductory Case Study

A project manager for Acme Construction reviewed the construction drawings and specifications for the construction of a shopping center prior to attending a pre-bid job site tour. During the review, the project manager identified two errors in the elevations provided in the drawings. During the site visit, the project manager asked the project architect about the elevation errors and was provided the correct information. However, the project owner did not issue an addendum to all prospective bidders making the elevation corrections to the project drawings. Were the project owner's actions ethical?

The site work associated with the project was unit priced, because a portion of the site contained contaminated soil that needed to be removed and replaced, additional fill material needed to be imported, and a large asphalt parking lot constructed. In addition, major utilities were to be installed on the site. During the review of the contract drawings, Acme Construction's estimator determined that the quantity shown on the unit price bid sheet for asphalt pavement was considerably less than what would be required for completing the project. The estimator decided not to notify the project owner and to inflate the unit price for the asphalt bid item because of the anticipated overrun. Was the estimator's action ethical?

Quotations were solicited from six prospective electrical subcontractors for the project. The lowest quotation was submitted by Northern Lights Electrical Contractors, but the project manager preferred to work with West Coast Electric. The project manager contacted the owner of West Coast Electric and provided the quotation received from Northern Lights and told West Coast that they could have the job if they revised their quotation to a value less than that submitted by Northern Lights. Was the project manager's action ethical?

The shopping center structure was to be constructed of steel. Acme's estimator solicited quotations from three steel suppliers for the project. The estimator was concerned both about the cost of the steel and the ability of the suppliers to meet the required delivery dates established in the preliminary construction schedule. Continental Steel submitted the lowest quote but did not guarantee that they could meet the required delivery dates. The salesman for the steel supplier indicated to Acme's estimator that if Continental Steel received the supply contract that they would host the estimator to a fishing trip. What should the estimator do in this situation?

Ethical Challenges

Ethical Challenge: Errors in Project Documents

The bidding instructions given to prospective bidders on a project typically require that the bidder consider all conditions described in the contract documents and all conditions that can be observed by physically visiting the site. Liability for hidden conditions not described in the documents or in a soils report typically is the responsibility of the project owner. These would include buried utility lines not shown on the drawings or contaminated soil not described in the documents.

During a pre-bid conference on the job site, representatives of the project designer and the project owner are present to describe the project and collect inquiries from prospective general contractors and subcontractors regarding the contract documents. To ensure that everyone who participates in the bidding process has the same information, the project owner should collect all of the questions and issue a contract addendum providing appropriate responses to each question. From the perspective of the justice approach, it is unethical to provide answers only to the party who asked the questions. Even though the issuance of a contract addendum late in the bidding process may necessitate delaying the receipts of bids, it is the ethical responsibility of the project owner to do so. It may also negate the need to issuance of a change order after the contract has been awarded.

Ethical Challenge: Bid Shopping

Bid shopping occurs when general contractors disclose to prospective subcontractors the price quotations received from competing subcontractors. The intent is to encourage subcontractors to lower their prices. Again, based on the justice approach, this is considered unethical because it discloses information that is confidential, and not available equally to all bidders. A likely result is subcontractors refusing to work with general contractors who use this practice. The subcontractors are being asked to provide their best price for a specific scope of work, and they provide the price to the general contractor with the expectation that their price will not be shared among their competitors. Often subcontractors' quotations contain lists of specific inclusions and specific exclusions, which means that the scope of work addressed by each subcontractor may vary. This requires the general contractor to carefully evaluate each quotation and select the ones that provide the best value to the general contractor.

Another form of bid shopping that is unethical is when a general contractor uses the quotation of one subcontractor in their bid, but selects different subcontractor to perform the work. For example, suppose Allied Construction Company is developing a bid for the construction of a high school and solicits quotations for the electrical work associated with the project. Capital Electric submits the lowest quotation for the electrical work, and their price is used by Allied in

preparing their bid to submit to the project owner. Allied receives the contract for construction of the high school, but instead of awarding the subcontract for the electrical work to Capital Electric, they contact Southwest Electric and offer them the subcontract if they will do the work for less than the price submitted by Capital Electric. This sharing of Capital Electric's proposed price with another subcontractor is considered a form of bid shopping and is unethical. It is also dishonest, and therefore violates the approach of virtue-based ethics.

Ethical Challenge: Receipt of Favors

Subcontractors may offer favors to general contractors in an effort to win a subcontract, and suppliers may offer favors to secure a contractor's business. Such practices may be unethical. Sometimes suppliers offer their good customers discounts for early payment of their invoices, and such practices are not considered unethical. However, a supplier offering a personal favor to the contractor's employees would be considered unethical. Whether or not a person's behavior is influenced by the receipt of a favor, there is a perception that such actions may occur. Anyone involved in making decisions related to award of contracts or subcontracts needs to ensure that a no-favor policy is adopted. This may include tickets to athletic events, fishing trips, meals, or other social events. When faced with an ethical situation, it is best not to enter into a situation where there is a perception of favoritism or unfair advantage.

Applicable Standards

The applicable standards are to practice good faith and fair dealing in the solicitation of bids or proposals and in the preparation of bids or proposals for construction projects. Project owners and designers need to ensure that all prospective bidders have the same information relative to project scope and conditions. Any issues identified by the prospective bidders during the bidding process need to be resolved, and the information provided to all bidders. Contractors often are more willing to bring issues identified in the contract comments to the attention of project owners when a negotiated process is to be used to select the contractor to whom to award the contract. This is because the criteria to be used to select the contract recipient may include several factors in addition to price. In a bid process, the proposed contract price typically is the primary criteria for selecting the general contractor to whom to award the contract.

General contractors need to treat subcontractors' price proposals as confidential and not disclose the information to other subcontractors. General contractors may wish to engage in discussions with a subcontractor regarding their inclusions, exclusions, and price; but they should not disclose the proposals submitted by other subcontractors.

Anyone engaged in a contract procurement action needs to avoid the perception of favoritism by accepting any favors. This is true whether the individual is employed by the project owner, the designer, the general contractor,

a subcontractor, or a supplier. Acceptance of favors undermines the perceived fairness of the procurement action.

Construction Participant Perspectives

To minimize the potential for bid shopping, many government agencies and other project owners require that a listing of major subcontractors to be used on a project be submitted along with completed bid documents and proposals. This does not reduce the potential for bid shopping prior to submission of the bids, but it does reduce the potential for bid shopping after the contract has been awarded.

General contractors who conduct bid shopping may find that quality subcontractors are not interested in working for them and may not respond to the general contractor's solicitation for subcontract quotations. This is particularly true during periods when the subcontractors have adequate backlogs of work. Specialty contractors want general contractors to treat the quotations that they submit as confidential information that is not shared with their competitors. How the subcontractors are treated will greatly influence their interest in working with a general contractor and the price that they request for their services.

Subcontractors estimate their cost of doing business with each general contractor and may propose different prices for similar bid packages from different general contractors. This practice is not considered unethical and is the reason why general contractors should treat subcontractors fairly. When a subcontractor has a good experience working with a general contractor, they often propose very competitive prices for subcontract scopes of work on future projects. If a subcontractor has had bad experiences working with a general contractor, they may decline to submit a proposal or may request additional compensation to offset an anticipated difficult working experience.

Some project owners may choose to select general contractors for their projects using a negotiated procedure. In this process, the relationship between the owner and contractor is more collaborative than it is in a bid procedure. The proposed construction schedule, experience of the contractor's project team, the contractor's reputation for quality work, the contractor's safety record, and other factors may be used in addition to project cost in the selection process.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 Near the end of the bidding process for the construction of a hotel, a project owner received a written inquiry from a prospective bidder regarding some missing information on the structural drawings. The owner consulted the structural engineer for the project to determine the requested information and provided the information to the prospective bidder. Not wishing to delay receipt of bids for the project, the project owner decided not to issue an addendum to the contract documents.

- Were the actions of the project owner ethical?
 - How would you have handled this situation?
- 2 Continental Constructors received a contract for the construction of a hospital. During the bidding process, Continental received quotations for the mechanical scope of work from six subcontractors. Five of the quotations were solicited, and the sixth was unsolicited. Continental selected the lowest quotation from among the five solicited quotations, because they had had a previous unsatisfactory experience with the subcontractor who submitted the unsolicited quotation. However, the unsolicited quotation was the lowest price.
- Was it unethical for Continental Constructors to not select the lowest price quotation?
 - What would you have done in this situation?
- 3 You are finalizing the bid for the construction of a middle school, and you notice an omission in the bid for exterior painting. You insert an estimated amount to cover scope of work. Your company is successful in receiving the contract, and you contact a painting subcontractor and tell them that they can have the subcontract for the painting work if their price does not exceed the amount that you estimated.
- Are you treating the painting subcontractor ethically?
 - What would be an alternative approach to solving the problem?
- 4 A general contractor is developing a proposal for the construction of a medical clinic. Since the contract will be executed prior to the completion of design, the contract will be negotiated on a cost-plus-fixed-fee basis with a guaranteed maximum price. There is significant site work required for the project, and the contractor has decided to ask five subcontractors for quotations for the site work bid package. The contractor's estimator received the five quotations and upon review determined that the preferred subcontractor did not submit the lowest price. The estimator then contacted the preferred site work subcontractor, told them that their price was 10% higher than the lowest quotation received, and asked the subcontractor if they would like to lower their price by 10% in order to receive the subcontract.
- Were the actions of the general contractor's estimator ethical?
 - If you were the subcontractor who was contacted, what would be your reaction?
- 5 You are the estimator for Excel Mechanical Contractors and have received requests for quotation from five general contractors for the mechanical scope of work associated with the construction of a research facility. You evaluate the scope of work and your past experiences in working with each of the general contractors. You choose to submit different prices on each of the quotations provided to the general contractors. The reason for the different prices was your perceptions regarding how you would be treated by each of the general contractors.
- Was submitting different prices to each of the general contractors ethical? Why or why not?

- 6 Certified Constructors has a design-build contract for the construction of a new high school. To design the new school, Certified Constructors hired Jones Architects. During the design of the school, the lead designer was approached by a representative of Intermountain Manufacturing and offered tickets to a major league baseball game if the designer selected a roofing system developed by Intermountain.
 - Could the lead designer ethically accept the manufacturing representative's offer?
 - If you were the designer, what would you do?
- 7 Henry Smith is the project manager for a design-build contractor that has a contract for the design and construction of a new academic building for a major university. During a design review, the project architect briefed the university's representative on the materials selected for the interior finishes of the building. Later, Henry determined that the floor covering selected was not within the budget estimated for the project. He directed the project architect to make a change to select a more economical carpet and did not notify the university's representative.
 - Were Henry Smith's actions ethical?
 - What action would you have taken?

4 Construction Contracts and Purchase Agreements

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur during the administration of a construction contract between a general contractor and a project owner, and between a general contractor and a subcontractor.
- Describe the ethical challenges that can occur between a contractor and a supplier during the administration of a purchase agreement.
- Imagine and evaluate potential consequences resulting from ethical decisions made during the administration of contracts and purchase agreements.

Introduction

When a project owner and a contractor sign a construction contract, the responsibilities of each party are limited to those prescribed in the contract documents. The project owner agrees to provide information and to compensate the contractor for the scope of work described in the contract. The contractor agrees to complete the project described in the drawings and specifications within the specified duration. Few general contractors actually perform all of the work required to complete the project; instead, they usually select specialty contractors to perform selected scopes of work as subcontractors under the terms and conditions of their subcontracts.

Both general contractors and subcontractors purchase construction materials from suppliers by means of purchase orders or agreements. The contractors and subcontractors provide the contract specifications to the supplier to enable the supplier to determine which products meet the specification requirements and provide the information to the general contractors and subcontractors. If the contract stipulates that the material must be approved by the project designer, the contractor must provide a submittal that either contains a sample of the material or manufacturer's information demonstrating conformance with the contract specifications. Once the material has been approved by the project designer, the contractor or subcontractor determines the quantity required and issue a purchase order to the supplier requesting the cost for the approved materials. The contractor or subcontractor then approves the purchase agreement ordering the required materials. A purchase agreement basically is a supply contract for the acquisition of construction materials.

There are many legal issues associated with administration of construction contracts and purchase agreements. None of these legal issues are addressed in this chapter. We will restrict our discussion to ethical issues that may occur during the administration of these contracts and purchase agreements.

Introductory Case Study

Continental Construction Company has been awarded a contract for the construction of a medical office building. During the development of a bid for the project, the construction company's project manager decided to hire a subcontractor for the electrical scope of work. During the bidding process, the company estimator solicited quotations from five electrical contractors. The best-value quotation was received from Capital Electric, and their quotation was used by Continental's estimator in developing the winning bid for the project. Continental's project manager had good experience with Olympic Electric and would like to use them on this project. Olympic had submitted a quote for the electrical work, but it had been 10% higher than the price submitted by Capital. The project manager contacted the owner of Olympic Electric and told him that Olympic would be awarded the electrical subcontract if they agreed to perform the work at the price quoted by Capital Electric. Were the actions of Continental's project manager ethical?

The contract that Continental signed for the construction of the office building allowed the submission of materials that deviated from the specifications as long as the contractor indicated such deviations on the submittal documents and provided a justification for the deviation. The mechanical subcontractor on the project proposed to use a fan unit that did not comply with the contract specifications. The subcontractor did not indicate on the submittal documentation that the proposed fan unit was a deviation from the contract specifications. Upon reviewing the subcontractor's submittal, Continental's project engineer recognized that the proposed fan unit did not conform to contract requirements, but chose to forward the submittal to the project designer without comment. Were the actions of Continental's project engineer ethical?

The project owner decided to make some changes in the layout of the building lobby and asked Continental's project manager for a cost proposal for the additional work. The project manager reviewed the additional scope of work and estimated that the direct cost for the work would be \$500,000. Project indirect cost, company overhead, and profit would add \$100,000 because executing the change order would delay the project completion by one week. Work on the project was already ten days behind schedule for other reasons, and the project manager decided to include the overhead cost and potential liquidated damages liability due to that delay to the change order cost, which he estimated to be \$150,000. Thus the cost that project manager submitted to the project owner for the change order to the additional lobby work was \$750,000. Were the project manager's actions ethical?

Construction has been under way on the project for five months, and Continental Construction has been experiencing cash flow problems on the project. The company's project manager decided to mitigate the cash flow problem by not paying subcontractors for the work that they had performed until 45 days after the general contractor receive payment from the project owner for the work. In effect, the project manager was using the money owed to the subcontractors to fund the general contractor's cash flow issue. Was the project manager's action ethical?

Ethical Challenges

Ethical Challenge: Award of Subcontracts

In developing a bid or proposal for a construction contract, the general contractor's estimator typically invites multiple specialty contractors to submit quotations for each subcontract work package. These quotations are evaluated, and the best value subcontractor is selected for each subcontract work package. If the general contractor is selected for receipt of the construction contract, the specialty contractors submitting the best value quotations are offered subcontracts for the project. From the perspective of the justice approach, contacting other specialty contractors and telling them the quotations provided by their competitors is a form of bid shopping and considered unethical.

Ethical Challenge: Errors in Submittal Documentation

When engineers and architects prepare their designs for a construction project, they rarely specify single products or materials to be used on the project. They typically prepare specifications that describe the types of materials or products that are acceptable. To ensure that the materials and products selected by the contractors conform to the design intent, the construction contract requires the submission of product samples or manufacturers' literature describing the proposed materials or products. These are known as submittals. The submittals must be approved by the designer before the contractors issue purchase orders

for the acquisition of the proposed materials or products. To avoid delay of the project, the general contractor's project team needs to ensure that all proposed materials and products fully conform to contract requirements. If a deviation is proposed, it must be highlighted in the submittal documentation. If deviations are not noted, the submittal may be disapproved or unacceptable materials may be purchased for the project. If unacceptable materials are purchased and installed, the general contractor will be required to replace them at the contractor's cost.

Ethical Challenge: Pricing of Change Orders

During the construction of a project, the project owner may wish to change some aspect of the project or there may be some discrepancy in the contract documents. In either case, the result would be a change to the contract, known as a change order. The project designer typically prepares the change order, and the general contractor is asked to submit a cost for executing the additional work. Estimating the direct cost of the work usually is not difficult. Estimating the impact cost on the planned execution of the project, however, may be more difficult. The contractor's project manager needs to ensure that the proposed change order cost includes only the direct cost of doing the work, the indirect or overhead cost, profit, and any impact cost of doing work out of sequence. It is dishonest, and therefore unethical based on the virtue approach, to include costs that are not the result of the change order.

Ethical Challenge: False Claims

Sometimes a contractor encounters conditions while executing a construction project that were not depicted in the contract documents. The contractor typically places the project owner on notice and requests a change order to cover the additional costs incurred. If the project owner declines to issue a change order, the contractor may file a claim for additional compensation. Sometimes contractors inflate their costs when submitting their claims. Submitting a false claim is an illegal action under the False Claims Act if the project owner is part of the federal government (Chapter 8 has more information about the False Claims Act). Submitting a false claim is unethical whether the project owner is a private entity or state or local government.

Ethical Challenge: Payment to Subcontractors

Because many general contractors subcontract major portions of a construction project, the work of the subcontractors is critical to ensure a successful project. When working for a general contractor, the subcontractors expect to be treated fairly. This means ensuring that the job site is ready for each subcontractor when they are scheduled to arrive on site and ensuring that they are paid in a timely manner. The subcontractors must pay their employees prior to receipt of payment from the general contractor, but usually pay for their construction materials after

receipt of general contractor's payment. The subcontractors' requests for payment are included in the general contractor's monthly request for payment to the project owner. Once the general contractor receives payment from the project owner, the subcontractors need to be paid. The subcontract document may provide for some retention, perhaps 5%, from the payment to the subcontractor, but the remainder needs to be paid promptly to enable the subcontractors to manage their cash flow. The purpose of retention or retainage is to offer some protection against possibilities such as failure to correct defective work. Withholding retention funds beyond satisfactory contract completion is also unethical and can cause cash flow problems for the subcontractor.

Ethical Challenge: Material Purchasing

Just as the situation with subcontractors, suppliers should be treated in an ethical manner. A general contractor may solicit quotations from three concrete suppliers for concrete to be delivered to a project site. Each quotation should be treated as proprietary information. From the perspective of the justice approach, it is not ethical to provide competitors' cost proposals in an effort to obtain a better price from a preferred provider. Suppliers also need to be paid in a timely manner, just like subcontractors. Some suppliers may offer discounts for early payment, but many purchase orders state that the contractor will pay for the materials once payment has been received from the project owner.

Ethical Challenge: Payment Requests for Cost-Plus Contracts

Cost-plus construction contracts typically have two cost components: a cost-reimbursable component for project-related costs and a fee component for company overhead and profit. In some cost-plus construction contracts, there is a third component: a lump-sum amount for project indirect or overhead costs. If project indirect costs are considered reimbursable, some general contractors seek to transfer some company overhead costs, such as cost estimating and cost accounting, to the project so that they can be considered as reimbursable costs. Since the cost estimating and cost accounting costs were included in establishing the fee component, it is unethical to transfer company overhead costs to the project and request that they be considered project indirect costs.

Applicable Standards

The applicable standards are to practice good faith and fair dealing in the administration of construction contracts and purchase agreements. General contractors need to be fair in the selection of subcontractors for their projects and not engage in bid shopping. Subcontractors and suppliers need to be treated fairly during project construction and paid in a timely manner. Subcontractors and suppliers' willingness to work with a general contractor is greatly influenced by their perspectives of how they will be treated by that contractor.

Any documents submitted to general contractors or submitted to project owners by general contractors must be completed accurately and contain all of the information required by the contract. Not providing complete information may delay the processing of the documents or may result in improper decisions being made. Change orders and claims need to be correct and not include requests for reimbursement for unrelated issues.

Construction Participant Perspectives

When project owners select general contractors for construction projects, they expect the contractors to deliver quality projects that conform to the contract requirements by the dates specified in the contracts. To be able to meet the project owners' expectations, general contractors rely on subcontractors to perform selected portions of the projects and suppliers to provide the needed construction materials. To ensure that quality subcontractors and suppliers are willing to work with a general contractor, the contractor needs to treat them fairly.

When subcontractors and suppliers submit quotations for their scopes of work or for construction materials, they expect the general contractor to treat the information as proprietary and not disclose the information to their competitors. How the subcontractors and suppliers are treated greatly influences their willingness to work with a general contractor. Subcontractors who have had a bad experience with a general contractor may choose not to provide a quotation for one of the contractor's projects when invited to do so.

Project owners expect general contractors to comply fully with all contract requirements. The contract specifications identify what material submittals are required for the project and contain descriptions of what materials are acceptable for use on the project. If deviations are to be proposed, they must be clearly identified in the submittal documentation. Failure to identify deviations violates the terms of the contract, but it also is unethical. It may result in the contractor purchasing and installing improper materials that later will need to be replaced at the contractor's cost.

Project owners expect that change orders and claims are priced fairly. They realize that changes in the scope of work often have cost impacts and may have schedule impacts. Contractors are expected to assess the impact of the change order on the planned construction of the project and only include costs associated with the change. Adding unrelated costs is not ethical and may result in a dispute regarding the cost of the change order.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 A contractor has a contract for the construction of an office building for an agency of the federal government. One of the contract specifications requires that all materials used on the project be manufactured in the United States.

A steel supplier has offered steel for the project at a very competitive price. The general contractor's project manager accepts the proposal and requests submittal documents. The steel supplier provides the required documents but omits a certificate of origin for the steel. The general contractor's project engineer reviews the submittal, contacts the supplier, and determines that the steel was manufactured in Mexico. Because this supplier's price was lowest for the steel needed for the project, it was used in developing the project budget. Not wanting to exceed the budgeted amount for steel, the project engineer chose to forward the steel supplier's submittal to the structural engineer with no indication of the place of manufacture.

- Were the actions of the project engineer ethical?
- How would you have handled the situation?

- 2 Eastern Construction has a contract for the construction of a data center. During the construction of the building, the contractor found that the electrical and mechanical drawings contained several conflicts with the structural drawings. Eastern's project manager submitted several Requests for Information (RFI) to determine how to resolve the conflicts. Upon analyzing the responses to each RFI, the project manager determined that Eastern would incur additional costs as a consequence of the additional work to be performed. To seek compensation for the additional work, the project manager submitted a request for a change order to the project owner, which was refused. Since the contractor had incurred unanticipated cost due to the design conflicts, the project manager submitted a claim to the project owner in accordance with the claims procedures contained in the construction contract. Eastern's electrical subcontractor had incurred additional cost due to unanticipated material price escalation for electrical materials that were not related to the change in electrical scope of work. The project manager decided to include that additional cost in the claim for additional compensation for the design conflicts.

- Were the actions of the project manager ethical?
- How would you have handled the situation?

- 3 During the excavation for the foundation for an office building, Western Construction encountered a buried fuel tank and a natural gas line that were not shown on the contract drawings. The contractor's project manager placed the project owner on notice of the unanticipated fuel tank and gas line. Because of extra work associated with the fuel tank and gas line, Western's project manager requested a change order. The project owner agreed and requested a cost for the extra work associated with removal of the fuel tank and the gas line. The project manager knew that a mistake had been made in estimating the amount of concrete for the foundation. She decided to add the cost of the additional concrete to the cost of removing the fuel tank and gas line and proposed a price of \$100,000 for the change order.

- Were the actions of the project manager ethical?
- How would you have handled the situation?

- 4 Acme Construction has a contract for the construction of a medical research building. The project requires significant site work which has been subcontracted to an excavation subcontractor. The subcontract agreement between Acme and the excavation subcontractor contains no provisions for withholding payment for work completed, but does state that Acme will make payment to the subcontractor once payment for the work has been received from the project owner. Acme's project manager has evaluated the contractor's cash flow on the project and determined that it will be negative at the beginning of the project. To reduce the amount of negative cash flow, the project manager decided to withhold payment to the subcontractor until 60 days after receipt of the first payment from the project owner and 30 days after the second payment is received.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 5 Midwest Construction has a contract for the construction of a three-span highway bridge. The deck stringers of the bridge are to be precast concrete T-beams that are to be post-tensioned. The contractor's project manager contacted three precast concrete vendors to obtain quotations for the concrete girders. On a previous project, the project manager had good experience with Quality Precast, but they submitted the highest price for the concrete girders. The project manager called the owner of Quality Precast and told her that they would receive the purchase order if they lowered their price to equal the lowest quotation received.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 6 Pacific Builders has a design-build contract for the design and construction of a medical office building. Major subcontractors were selected during the contract procurement process to enable collaboration with designers during design development. The design-build contract was awarded using a negotiated procurement process involving the submission of lump-sum cost proposals. Building performance criteria were specified in the request for proposals and have been incorporated into the design-build contract. Prior to starting construction of the project, the completed design was submitted to the project owner for review and approval. During procurement of the building envelope materials by the envelope subcontractor, it was determined that the lowest price for the desired materials exceeded the project budget allowance. To stay within the budget, Pacific Builders' project manager directed the envelope subcontractor to find alternative materials that would meet the budget allowance. In making the decision, the project manager did not discuss the situation with the project designer or project owner.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 7 Capitol Constructors has a contract for the construction of a sewage treatment plant. Because the contractor was selected early during design development,

the construction contract is priced as cost-plus-fixed-fee. Direct and indirect project costs are considered as reimbursable based on payroll data and paid invoices from subcontractors and material suppliers. The fee covers company overhead and profit. Capital Constructors' safety director plans to visit the project site every two weeks to ensure proper safety procedures are being followed. Even though the safety director's salary is part of the company overhead, Capital Constructors' project manager has decided to include 25% of the safety director's salary as part of project indirect costs and request reimbursement from the project owner.

- Were the actions of the project manager ethical?
- How would you have handled the situation?

5 Documentation and Recordkeeping

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur related to the preparation and submission of documents used in the management of construction projects.
- Imagine and evaluate potential consequences resulting from ethical decisions made in the preparation and submission of documents and records.

Introduction

Documentation and recordkeeping are an essential part of the management of construction contracts. This is true for paper documents as well as for electronic documents. It is very important that documents be prepared properly and accurately and retained in locations for easy retrieval. There are many documents that must be retained on a construction project. Those discussed in this chapter include:

- payroll data showing hours worked and wages paid;
- safety records including descriptions of any accidents;
- reports of any environmental incidents;
- project labor cost data; and
- requests for reimbursement of expenses paid.

Some of these documents must be submitted to project owners or public agencies, while others are used by the contractors in managing their companies and tracking performance and trends over time. The proper way to handle these documents ethically is to submit all required documentation and to ensure that each document accurately depicts occurrences during the completion of the project.

Introductory Case Study

Mountain Construction Company has a contract for the construction of five miles of highway including the replacement of a three-span bridge. Since the project owner is a state department of transportation, the construction contract contains minimum wage rates that must be paid to workers employed on the project site. These are known as prevailing wages and vary by trade classification, such as carpenter, equipment operator, or steel worker. The required minimum wage rates for each trade classification are contained in the special conditions. Mountain Construction hired a drilling contractor to drill the holes for the construction of drilled pier foundations for the bridge. As required by its subcontract, the drilling subcontractor submitted their payroll data each month. Mountain's project manager reviewed the payroll data and observed that several subcontractor employees were misclassified and were paid lower wage rates than they would have received if properly classified. The project manager decided not to challenge the drilling subcontractor and forwarded the payroll data to the project owner without comment. Were the actions of the project manager ethical?

During the construction of the concrete forms for construction of the bridge abutments, two carpenters employed by Mountain were slightly injured and were unable to work for the remainder of the day, although they did not seek medical attention. Not wanting to adversely impact the company's safety record, Mountain's superintendent chose not to report the accidents. Were the actions of the superintendent ethical?

During the fueling of a tractor on the job site, a worker spilled diesel fuel on the ground. Because it was raining, the rain washed some of the spilled diesel fuel into an adjacent stream. The equipment foreman found the spill and directed that it be cleaned up to include removal and proper disposal of the contaminated soil. Because all evidence of the spill had been removed, the foreman chose not to report the fuel spill. Were the actions of the foreman ethical?

When reviewing the cost reports for the construction of the foundation of the bridge, Mountain's superintendent noticed that the concrete work package was over budget, while the work package for the embankment construction was under budget. Not wanting to have any work packages exceed their budget amounts, he decided to transfer some of the labor charges from the concrete work package to the embankment work package. The end result was that both work packages were now within their budgeted amounts. Were the actions of the superintendent ethical?

Mountain's project engineer had been transporting concrete cylinders to a testing laboratory as part of the company's quality control process. When

submitting his request for reimbursement of travel expenses, he included a parking receipt for a movie that he attended the previous evening. Were the actions of the project engineer ethical?

Ethical Challenges

Ethical Challenge: Submission of Payroll Data on Government Projects

The federal government and most state and local governments require the payment of prevailing wages to all workers employed on their projects of value greater than some specified value. The prevailing wage rates for federal projects are determined by the U.S. Department of Labor, and the prevailing wage rates for state and local government projects typically are determined by a state government agency. On prevailing wage projects, contractors and subcontractors generally are required to submit certified payroll data showing that all workers employed on the project were paid at least the prevailing wage rate. Workers may be paid higher wage rates, but not lower wage rates. Failure to pay at least the prevailing wage rates can subject the employer to steep fines, and falsification of payroll data can subject the employer to legal action. Sometimes contractors and subcontractors improperly classify workers in order to pay them lower wage rates. Such action is considered unethical and illegal. Calling workers individual contractors instead of employees to avoid payment of prevailing wages is also unethical and illegal.

Ethical Challenge: Recording and Submitting Accident Data

Construction contractors are required to collect exposure and accident data for periodic reporting to a state agency or to the Occupational Health and Safety Administration (OSHA). Accident data is used by the agency to develop an experience modification ratio, which is used to determine the company's cost for workers' liability insurance coverage of its employees. Sometimes contractors fail to report minor accidents even though they meet the lost time criteria for reporting. It is unethical to fail to report accident data, and contractors found to be submitting incomplete accident data may be subjected to fines or legal action.

Ethical Challenge: Proper Environmental Records

Environmental regulations and laws generally require contractors to report any environmental incident, such as a fuel spill or discharge of untreated storm water, and require proper documentation and disposal of any contaminated materials removed from a construction site. Failure to comply with these regulations and laws may result in significant fines or legal action, but they are also considered as unethical behavior. Sometimes special environmental permits are required in order to complete a project, and the contractor must comply with the terms and conditions of the permits.

Ethical Challenge: Time Sheets

The proper reporting of employees' time on a construction project can present an ethical challenge. The correct procedure is to charge the time to the appropriate cost code for the work being performed. Sometimes a work item may be over budget, and there is pressure not to exceed the project budget. This may lead to consideration of charging employees' time to work items that are under budget. This invalidates the project cost reports by providing incorrect information resulting in an inability to compare actual costs to projected or estimated costs. Improper charging of employees' time is considered unethical. In the long run, misreporting time charges also hinders a contractor's ability to accurately estimate future projects based on historical data.

Ethical Challenge: Expense Reports

Sometimes a contractor's employees incur costs associated with the completion of a construction contract and request reimbursement from the company. Typically, receipts are required in order to request reimbursement. It is unethical to request payment for expenses that either were not incurred or were for personal gain and not related to the project. Even if a single personal expense seems relatively minor, its misrepresentation is an unethical action that has the potential to become a habit resulting in a significant impact over time.

Applicable Standards

The applicable standards are to ensure that all people working on a project are treated fairly and that all documentation is accurately and completely prepared. Proper classification of workers and payment of prevailing wages are required on projects executed for government owners. Any environmental incidents and accidents must be reported as required by regulation. Labor charges should be applied to the appropriate work items so that construction company project managers can determine the causes of cost variances at the conclusion of the project.

Construction Participant Perspectives

Compliance with prevailing wage requirements on public projects is a legal requirement. This includes ensuring that all workers employed on the projects are classified properly. General contractors observing non-compliance by subcontractors must take action to bring them into compliance.

Submission of accurate accident data is required by regulations. All reportable accidents must be reported, and the causes of accidents determined. A company's safety record is an important factor in selecting contractors for projects, but failure to report accidents can lead to significant fines and legal costs.

Contractors must comply with environmental regulations regarding the reporting of environmental incidents and control of any materials leaving the

project sites. Failure to comply with these requirements can lead to significant fines and potential legal fees.

Proper accounting of labor hours is not a legal requirement, but it is an ethical issue. Company leaders need accurate information regarding the cost incurred on projects and how the actual costs compare with the estimated costs. This means that time sheets need to be properly completed, and the labor costs charged to the correct work items.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 Pacific Constructors has a contract for the construction of an office building for a state government agency. The contract specifies that prevailing wage rates must be paid to all workers employed on the project site and lists the minimum wage rates to be paid to each trade classification. As required by their subcontracts, all subcontractors are required to submit payroll reports to Pacific each month. The reports are combined with a payroll report for Pacific's workers, and the entire report is submitted to the project owner. Pacific's project engineer reviewed the payroll reports submitted by the mechanical and electrical subcontractors. He observed that several journeyman electricians and plumbers were listed as helpers, and thus paid lower wage rates than journeymen would have earned. Rather than have a conflict with the two subcontractors, the project engineer decided to forward their payroll reports as submitted.
 - Were the actions of the project engineer ethical?
 - How would you have handled the situation?
- 2 Eastern Construction has a contract for the construction of a medical clinic. The contractor's project engineer went to a local material supplier to purchase several items for the project. He charged the needed items to a company credit card used for purchasing project materials. During the trip, the project engineer stopped at a restaurant and charged his lunch to the same credit card.
 - Were the actions of the project engineer ethical?
 - How would you have handled the situation?
- 3 Western Construction has a contract for the construction of a building that will house an automobile dealership. During the construction, the site work contractor encounters contaminated soil. The amount of soil appears to be minimal, so the subcontractor decides to reuse the contaminated soil as fill under the dealership parking lot.
 - Were the actions of the subcontractor ethical?
 - How would you have handled the situation?
- 4 Acme Construction has a contract for the construction of a water treatment plant. There is significant site work needed to prepare the site for construction of the plant. Both the electrical and mechanical work will be performed

by subcontractors, but Acme will self-perform most of the remaining work. As the project progresses, the superintendent notices that the work package for the site work is over budget because of lower than anticipated worker productivity. To minimize the effect on the project budget, he decided to charge some site work labor hours to other work packages that were completed under budget.

- Were the actions of the superintendent ethical?
 - How would you have handled the situation?
- 5 A contractor has a contract for the construction of a warehouse building that will be constructed with tilt-up concrete wall panels. During the construction of the wall panels, a concrete finisher was injured and not able to work as a concrete finisher for three days. Because he was able to work in the project office, the superintendent decided not to report the accident.
- Were the actions of the superintendent ethical?
 - How would you have handled the situation?
- 6 Highline Constructors has a contract for the construction of five miles of new highway and a three-span bridge. While touring the project, the superintendent noticed several locations where fuel spills had occurred during fueling of construction equipment. Wanting to remove the contaminated soil, the superintendent told the equipment foreman to remove the contaminated soil and transport it to the local landfill.
- Were the actions of the superintendent ethical?
 - How would you have handled the situation?
- 7 Enterprise Construction has a contract for the construction of a 25-story office building in a major metropolitan area. One of the ironworkers installing reinforcing steel for the fifth-floor concrete deck twisted his ankle and was unable to work for two days. Because the injury was considered minor, the subcontractor installing the reinforcing steel decided not to report the accident to the project superintendent.
- Were the actions of the subcontractor ethical?
 - How would you have handled the situation?

6 Project Execution

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur with respect to time, cost, quality, and safety during the management of a construction project.
- Imagine and evaluate potential consequences resulting from ethical decisions made during the management of a construction project.

Introduction

When a contractor signs a construction contract with a project owner, the contractor commits to completing the scope of work defined in the contract documents:

- for the price stipulated in the contract agreement;
- by the date required in the contract;
- to the quality standards required by the specifications; and
- in compliance with all applicable code requirements.

The project construction schedule submitted at the start of construction represents the contractor's best estimate regarding the amount of time that will be required to perform each task. However, during the execution of the work,

things may occur that will affect the execution of the work necessitating updates to the construction schedule. Periodic schedule updates may be required by the construction contract, or may be required whenever the projected completion date changes.

Just as with the schedule, the cost of completing the project may increase. The cost increases may be due to:

- errors in estimating the cost;
- reduced worker productivity;
- mismanagement of subcontractors; or
- increase in the scope of work.

Scope increases typically are addressed by change orders, while the other cost increases typically are covered by the contractor in a lump-sum contract or by the project owner in a cost-plus contract. This is because the contractor agrees to complete a specific scope of work for a fixed price in a lump-sum contract, whereas direct project costs generally are reimbursable in cost-plus contracts.

Material testing requirements and other quality standards are contained in the contract specifications. Some tests may be performed by the contractor, while others may be performed by the project owner or a third-party testing agent. Documentation of all tests is required to be submitted to the project owner. In addition, the owner or her representative usually conducts frequent quality inspections as part of a quality assurance program.

Building codes, fire codes, and occupational safety regulations typically are included by reference in most construction contracts. This makes compliance with these codes and regulations both contractual as well as legal requirements. Code violations found during final inspections will delay completion of the project and may result in additional contractor costs. Failure to comply with safety regulations may result in citations and fines, while failure to follow good safety practices may result in accidents.

Introductory Case Study

Capital Construction Company has a contract for the construction of a middle school. The contract stipulates that substantial completion must be no later than August 15 to enable the school to move into the building prior to the start of the school year at the beginning of September. If the school is not completed on time, the contract states that liquidated damages will be assessed at the rate of \$1,000 per day after August 15. During the procurement of materials for the project, the contractor failed to order needed wall covering for the library and the correct number of interior doors. The contractor's project manager updated the construction schedule for the project to determine the impact of the late delivery of these needed materials. He determined that the impact would be a two-day delay of the completion of the project. He reviewed the schedule and determined that interior painting was

on the critical path for the project. To enable the project to be completed on time, the project manager contacted the painting subcontractor and told them that they needed to complete the interior painting in 12 days rather than the 14 days currently scheduled at no additional cost. Was the project manager treating the painting subcontractor ethically?

When preparing the monthly application for payment to the project owner, Capital Construction's project manager reviewed the payment requests that had been received from the subcontractors and the status of work being performed by Capital's workforce. One of the payment items, cast-in-place concrete, being constructed by the contractor's crews seemed to be about 50% complete. The site work subcontractor's request for payment indicated that the site work was 70% complete. Wanting to minimize negative cash flow on the project, the project manager decided to submit a request for payment to the project owner indicating that the concrete work was 65% complete and that the site work was 85% complete. Were the actions of the project manager ethical?

While inspecting the installation of the floor covering in the classrooms, the contractor's superintendent noticed that the floor covering installed was not certified as inflammable as required by the contract specifications. Observing that the floor covering was installed properly and looked good, the superintendent decided not to determine whether the floor covering material was inflammable. Were the actions of the superintendent ethical?

During a weekly inspection, the contractor's superintendent noticed that mechanical pipes suspended from the ceiling were not installed in conformance with the local building code. The installed pipe looked safe and would later be covered with suspended ceiling. Because the mechanical work was behind schedule, he decided to accept the work and not notify the mechanical contractor to correct the work. Were the superintendent's actions ethical?

Ethical Challenges

Ethical Challenge: Schedule Management

Most construction contracts specify a date by which the construction contractor must achieve substantial completion, which is when the project can be used for its intended purpose even though some work remains to be completed. Failure to achieve substantial completion by the specified date often subjects the contractor to payment of liquidated damages for each day that they are late in achieving substantial completion. To avoid liability for liquidated damages, the contractor develops an initial construction schedule showing completion of the project by the required date. The schedule shows:

- the tasks to be performed;
- the length of time to perform each task;
- the sequence in which each task is to be performed; and
- milestone dates for the completion of the project.

When events occur that impact the completion of the individual construction tasks, these impacts need to be reflected correctly on the schedule so that the impact on the overall schedule for completion of the project can be assessed. Sometimes schedule updates are manipulated to incorrectly indicate the causes of schedule delays. The result may be to incorrectly reflect the causes and impacts of delays in the individual tasks. This manipulation of the schedule is considered unethical.

Ethical Challenge: Progress Payment Requests

Most construction contracts require the submission of applications for payments monthly near the end of the month for the work performed during the month. The general contractor's payment application also includes the payment requests from those subcontractors who worked on the project during the month. The project owner reviews the applications for payment and reviews the status of the project. Based on her review of the project, the project owner's project manager either verifies that the indicated amount of work is correct or engages in a discussion with the general contractor to reconcile the differences. Once agreement has been achieved regarding the amount of work that has been completed, the project owner makes payment to the general contractor, who in turn makes payments to the subcontractors. Since the measurement of the actual work performed during a month may be subjective, there are opportunities for subcontractors or general contractors to bill for work that has not been completed. This is known as overbilling and is considered unethical.

Ethical Challenge: Quality Management

The construction contract specifications contain quality requirements regarding the types of materials and products that are acceptable for the project, the standards for their installation, and the quality of workmanship expected. The submittal process described in Chapter 4 is used to verify that materials and products proposed for the project conform to contract requirements. Quality management involves inspection of project documentation, conducting testing when required, and inspecting the construction work as it progresses. Any discrepancies noted during the inspections generally are placed in a database for tracking until corrected. Follow up inspections are made to ensure that all discrepancies are corrected. Failure to comply with construction quality standards is considered a failure to comply with contract requirements and is considered unethical.

Ethical Challenge: Code Compliance

Many code requirements are incorporated into construction contract specifications by reference. These may include building codes, electrical construction codes, mechanical construction codes, fire protection codes, and occupational safety

codes. This is the same as if all of the code requirements were listed in the contract specifications. Compliance with all code requirements is the responsibility of the general contractor. Municipal requirements will specify which inspections must be performed by municipal inspectors during the various phases of the construction project. It is both unethical and in violation of contract requirements to knowingly install improper materials or equipment or to install materials in an improper manner. Upon discovery by inspectors, non-conforming work will be required to be removed and replaced at the contractor's expense.

Ethical Challenge: Safety Management

Construction is one of the most dangerous occupations, accounting for numerous disability injuries and fatalities each year. There are two major aspects of construction project safety: (1) safety of persons on the job site; and (2) safety of persons who may be near the project site. Most construction companies have recognized the importance of good safety management and have developed effective company safety programs. The effectiveness of these programs, however, is directly related to the project leaders' commitment to safety. Many hazards exist on all construction sites, and mitigation measures are needed to minimize the potential for injury. Safety inspectors may visit the project unannounced to verify compliance with all safety requirements. Failure to comply with safety requirements usually results in citations and potential fines. Contractors are legally and morally responsible for the working conditions on the project site. Failure to enforce good safety practices is considered unethical. This includes the cleanliness of the job site, removal of tripping hazards, and protection from hazardous activities.

Applicable Standards

The applicable standards are to practice good faith and fair dealing when addressing time, money, quality, and safety issues during the execution of construction contracts. General contractors need to be fair with subcontractors and project owners when:

- managing their construction schedules;
- requesting change orders;
- submitting applications for progress payments;
- ensuring that quality products and materials are used;
- ensuring that the completed work conforms to quality requirements of the contract;
- requiring proper safety practices from all individuals visiting or working on the project site; and
- ensuring compliance with all applicable codes.

A contractor's professional reputation is greatly influenced by project owners' perceptions of how the contractor handles these important issues. The contractor's

performance regarding these aspects of contract management may affect whether or not the contractor will have future opportunities to work with the project owner on other projects.

Construction Participant Perspectives

When project owners select general contractors for their construction projects, they expect the contractors to treat them fairly and to fully comply with all of the terms and conditions of the construction contracts. Likewise, subcontractors expect to be treated fairly when invited to participate on a project. If they perceive that they might not be treated fairly, they may decline the contractor's request to submit a quotation for the work. It is very important for general contractors to maintain good relations with quality subcontractors because their willingness to participate on future projects may significantly affect the success of those projects and the general contractor's reputation.

The construction schedule is used to manage the execution of the project. The project owner expects that schedule updates accurately depict the impacts of changes that have occurred during the execution of the project. Subcontractors use the schedule to plan their work, so they also expect it to be current and that the milestone dates depicted will occur as scheduled.

Project owners expect that monthly requests for progress payments are completed accurately and that they are based on the quantity of work completed during the period covered by the request. Subcontractors and suppliers expect to be paid as soon as the general contractor receives payment from the project owner. Failure to pay subcontractors and suppliers promptly may cause them financial stress and cause economic hardship. It may also result in subcontractors and suppliers declining to undertake future business with the general contractor.

Project owners expect general contractors and their subcontractors to perform all quality control measures required by the contract and to ensure that all work performed meets quality and code requirements. This means that contractors and subcontractors must be knowledgeable of the requirements of all codes listed by reference in the contract specifications.

Construction projects are dangerous environments that pose many hazards to workers and potentially to the neighboring community. To minimize the risk of accidents, construction companies develop project-specific safety and accident prevention plans to identify hazards associated with each work activity and corresponding measures to eliminate, reduce, or respond to these hazards. These include environmental hazards that may occur at the project site, such as extreme or hazardous weather or seismic events. Effects of and response to unexpected catastrophic events is discussed further in Chapter 12. Ensuring job site safety is both a legal responsibility and an ethical imperative. Creating a safe working environment is a function of the physical conditions of the job site as well as the behavior or attitude of individual workers.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 A contractor has a contract for the construction of a large retail store located within a shopping complex. The project owner is very interested in getting the store completed by mid-October to enable the store to open in early November to serve holiday shoppers. The contract contains a provision for \$2,000 in liquidated damages for each day beyond October 15 that it takes for the contractor to achieve substantial completion. During the excavation for the installation of utility lines for the project, the contractor encountered an unanticipated buried water line, which will require additional time to work around. The construction schedule for the building showed five days of float for the utility line construction, and the estimated time for the additional work was three days. Thus the extra work associated with the buried water line would not extend the duration of the project. Because two activities on the critical path were behind schedule, the contractor's project manager changed the logic of the construction schedule to show that the utility line construction was a critical activity and requested a three-day extension to the required project completion date to address the work associated with the buried water line.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 2 A contractor has a contract for the construction of a parking garage that contains significant quantities of cast-in-place concrete. The contract specifications require that concrete cylinders be made and tested to verify the strength of the concrete mix. Three samples were taken when placing the concrete for the second-floor deck slab and sent to an independent testing laboratory. Two of the samples met the contract specifications regarding strength, and one did not. Consequently, the contractor's project engineer decided to provide the project owner only the test results for the two samples that met the contract requirements.
 - Were the actions of the project engineer ethical?
 - How would you have handled the situation?
- 3 Cascade Construction has a contract for the construction of a medical office building. The company's project manager decided to hire a subcontractor for the installation of drywall on the project. The drywall subcontractor has been lax at ensuring that all of their workers wear proper personal protective equipment. Cascade's superintendent observed that some of the drywall subcontractor's workers were not wearing gloves and hard hats on the project, but made no attempt to correct the situation even though Cascade's accident prevention plan for the project requires the wearing of both gloves and hard hats.
 - Were the actions of the superintendent ethical?
 - How would you have handled the situation?

- 4 Central Constructors has a lump-sum contract for the construction of a community college classroom building. The company's project manager was developing the monthly application for payment to be submitted to the project owner. All of the subcontractors except the mechanical subcontractor had submitted their applications for payment to Central Constructors. Even though the mechanical subcontractor did not submit an application of payment, the project manager planned to include the mechanical work in the application for payment to be submitted to the project owner. The project manager estimated that about 20% of the mechanical work was completed during the month. Wanting to help Central Constructor's cash flow on the project, the project manager decided to indicate that the mechanical subcontractor had completed 35% of the mechanical work in the application for payment submitted to the project owner.
- Was the project manager being ethical when he billed for the mechanical scope of work when no request for payment was received from the mechanical subcontractor?
 - Was the project manager being ethical when he billed for 35% of the mechanical work when he believed that only 20% of the mechanical work had been completed?
- 5 Acme Construction has a contract for the construction of a hospital. The company's project manager subcontracted both the electrical and mechanical scopes of work to separate subcontractors. The project superintendent developed a three-week look ahead schedule which showed that the electrical subcontractor could start to work on the project on September 20 and told the subcontractor to start work on that day. The electrical subcontractor arrived with their workers on September 20 and found that the project was not ready for electrical rough-in to start. The project site was not ready for the electrical subcontractor to start work until September 24. Being delayed, the electrical subcontractor submitted a claim to Acme for the additional cost incurred by the delay. Acme's project manager took the claim, added mark-up for Acme, and submitted it to the project owner for payment.
- Were the actions of the project manager ethical?
 - What would you have done in this situation?
- 6 High Quality Construction has a contract to construct a medical office building. While inspecting the work being performed on the project, the superintendent notices that the hand railing on an open staircase was not of sufficient height to meet local building code requirements. He reviewed the project drawings and determined that the hand railing was constructed as designed by the architect. Since the hand railing complied with contract requirements, he decided not to make an issue regarding the building code violation.
- Were the actions of the superintendent ethical?
 - What would you have done in this situation?
- 7 Continental Construction has a contract for construction of an industrial facility that will be used to manufacture batteries for electric vehicles. While

inspecting the jobsite, the project superintendent noticed that it was very cluttered with construction materials randomly stored and several tripping hazards unmarked. The completed work looked good, and subcontractors had adequate personnel and support equipment on site to complete their scopes of work early. The superintendent met with the subcontractors' foremen and congratulated them on their work but made no mention of the job site conditions.

- Were the actions of the project superintendent ethical?
- What would you have done in this situation?

7 Discrimination and Harassment

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Regulations and Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Notes
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Describe ways in which discrimination can occur in the workplace.
- Give examples of discrimination on the basis of age, disability, race, sexual orientation, and gender identity.
- Describe the purpose of affirmative action.
- Explain the difference between quid pro quo sexual harassment and a hostile work environment.
- Give examples of federal regulations that prohibit various forms of discrimination in the workplace.
- Explain how a diversity, equity, and inclusion program might help to eliminate discrimination in the workplace.

Introduction

Jobs in the construction industry are typically described as dirty, dangerous, and requiring physical strength. While there are certainly many tasks that fit this description, there are a great many more that require ingenuity, problem-solving abilities, excellent communication and people skills, and technical knowledge.

A narrow view of the work associated with the construction process has in many cases resulted in a narrowly defined, and often discriminatory workforce.

Discrimination in the workplace occurs when someone is restricted or excluded from a job solely because he or she is a member of a certain group, or has physical characteristics or beliefs that differ from the majority. Discrimination often results from stereotyping a group of people and then applying that stereotype to all individual members of that group. The stereotypes usually involve some characteristic, feature, or belief that supposedly makes the group inferior and unfit for employment, promotion, or assignment to certain tasks or a higher level of responsibility. Discrimination can be intentional, or can occur unintentionally based on commonly accepted and unquestioned biases. For example, a company owner may believe that a successful project manager must be aggressive and adversarial, and that only an employee of a particular sexual orientation or gender identity would have the necessary characteristics to succeed in this position. The company owner may be completely unaware of this bias, and may believe he is assigning the best person for the job. But in this example, he is not only making incorrect generalizations about the skills required for the position, but also about the abilities of employees that don't conform to his assumptions.

Discrimination can be by individuals or by an entire company. Even non-discriminatory policies may have discriminatory outcomes. For example, a company whose policy is to seek hiring recommendations from current employees may inadvertently end up hiring from a narrow pool of people that look and act like the other people in the company. Discrimination can also occur unintentionally in social settings where whoever is present must have the same hobbies or interests as the others in the group to feel like he or she fits in. Someone who doesn't play golf may be left out of discussions and decisions that are made on the golf course. This doesn't mean that these discussions can't occur. It just means that the group must make an effort to seek input from team members who may not be present.

People often fall prey to their misperceptions or biases when making snap decisions or acting on instinct. This is most likely to occur when decisions are made by a single person, in a vacuum, without input or review from others. It's important to consider other options or viewpoints to avoid the pitfalls of knee-jerk reactions, even if this means a decision might not be made as quickly as you would like.

Federal laws prohibit discrimination in employment, but discrimination can also be unethical from several perspectives. From the perspective of the common good, discrimination is unethical because by restricting or excluding certain individuals or groups from equal employment opportunities, it fails to benefit the community of qualified jobseekers. From the perspective of ethics based on rights, the outcome of discriminatory actions in the workplace denies an equal right to employment to members of a particular group. Discrimination also fails the basic application of the golden rule since no one would choose to be discriminated against by others.

Because stereotypes are so common and widespread, the opportunities for discrimination are as well. Discrimination can occur on the basis of assumptions that people make about:

- age;
- sexual orientation and gender identity;
- religious beliefs;
- racial and ethnic groups;
- disability; and
- sexual orientation.

Introductory Case Study

Arun wears a turban as required by his Sikh religion. His supervisor tells him that his turban makes his coworkers “uncomfortable” and asks him to remove it while he’s at work to avoid harassment and unwanted attention. The supervisor cites a company policy that prohibits employees from wearing hats or other head coverings in the office. Is this a reasonable request, or is this discrimination? Would the request be reasonable if Arun worked on a job site where hardhats were required?

Ethical Challenges

From the perspective of virtue ethics, discrimination on any basis violates many of the commonly accepted core values, such as fairness, diversity, and respect. Discrimination also opposes the rights of individuals and the common good of the community. The following paragraphs examine some of the common aspects of various forms of discrimination.

Ethical Challenge: Age Discrimination

As with other forms of discrimination, age discrimination occurs when assumptions are made about the characteristics or abilities of an entire group of people based on stereotypes and without supporting evidence. For older workers, those stereotypes might include reduced mental acuity, unfamiliarity with technology, and physical or health limitations. While these issues might occur with older workers, there is no supporting evidence that justifies the stereotype for all the employees or job applicants in this group. In fact, these same issues can also frequently occur in younger workers. In general, age discrimination falsely assumes that worker productivity decreases with age.

According to research by the Center for Construction Research and Training (CPWR), between 1985 and 2015, the average age of U.S. construction workers jumped from 36.0 to 42.5 years old.¹ Many workers choose to delay retirement for financial reasons as the eligible age for collecting Social Security benefits has increased over time, and as economic factors have affected retirement savings. As

more older workers enter or choose to stay in the workforce, employers need to be aware of outright or hidden bias concerning the abilities of this group. Although physical strength is frequently required for certain manual construction labor tasks, in many cases, simple adjustments to work activities such as attention to safe practices and ergonomics can reduce the potential for injury and benefit both older and younger workers.

When it comes to discrimination against older job applicants, even normal hiring practices may contain pitfalls that can bring out hidden biases. For example, the simple requirement for job applicants to state years of experience can inadvertently reveal the age of the applicant. It is important during the hiring process to be aware of clues like this that may subtly influence hiring decisions.

The potential for age discrimination should be of concern to everyone in the workforce. Although some employees may escape labeling or stereotyping for most of their careers, everyone, as long as they are living and working, eventually becomes a member of the over 40 age group. As an ethics check, one need only ask oneself, "When I am this applicant's or employee's age, how do I want to be treated?"

Ethical Challenge: Discrimination based on Disability

Disability discrimination occurs when an employee or job applicant is treated less favorably because he has an existing disability, a history of a disability (such as cancer that is controlled or in remission) or because she is believed to have a lasting physical or mental impairment. Disability discrimination can also occur if an applicant is excluded from consideration because of a relationship to someone with an impairment. For example, an employer may assume that a jobseeker with a disabled spouse or child will be unreliable or require extra time off to care for that family member. If that assumption removes an otherwise qualified candidate from the employment pool, that is discrimination.

Ethical Challenge: Discrimination against National Origin, Race, Color, or Religion

National origin can be defined by, or inferred from an individual's birthplace, ancestry, culture, last name, accent, or native language. It is unlawful to discriminate against any employee or applicant on the basis of that individual's national origin, race, color, or religion. It is also unlawful to deny equal employment opportunity because of marriage or association with other members of a national origin group or because of attendance or participation in schools, churches, temples, or mosques generally associated with a national origin group.

A gray area frequently encountered in the construction industry is whether a company can require that employees be fluent in English. Would this policy discriminate against employees or job applicants who spoke English as a second language or with an accent? According to the U.S. Equal Employment Opportunity Commission (EEOC), a fluency requirement is only permissible if required for the

effective performance of the position for which it is imposed. An English-only rule may be adopted only for a nondiscriminatory reason, such as being necessary for safe operations. An example of this might be a position responsible for safety training where fluent English and a minimal accent are necessary to ensure the effective communication of critical information. An employer may not base a hiring or other employment decision on an applicant's foreign accent unless the accent poses an obvious interference with job performance.

Ethical Challenge: Discrimination based on Sexual Orientation or Gender Identity

Although discrimination on the basis of sex (gender) has been illegal for decades, until 2020 nearly half of the U.S. had no protections for lesbian, gay, bisexual, and transgender people (LGBT). A decision by the U.S. Supreme Court in June 2020 stated that the 1964 Civil Rights Act does protect LGBT employees from discrimination based on sex. As mentioned in the introduction to this chapter, stereotypes about the behavior and abilities of cis women and LGBT individuals in construction careers often prevent them from being hired at all, or lead to their placement in lower-paying jobs and fewer opportunities for advancement. (The term *cis* is used to describe people whose gender identity matches the sex that they were assigned at birth.)

Hiring and job assignment decisions that discriminate against qualified cis female or LGBT candidates may also be made out of ignorance about, and fear of sexual harassment definitions, or reluctance to invest in appropriate workforce training concerning discrimination and harassment policies. Differences, misunderstandings, and confrontations between employees in the workplace are common occurrences; however, the solution is not a segregated workforce, but rather clearly communicated company policies, a designated individual or office where employees can go to ask questions and voice concerns, and open channels of communication. It is important for contractors to recognize that the diversity of their client pool is increasing, and that a diverse workforce, especially in management positions, will expand their ability to be responsive to a wider range of communication styles and preferences among those potential clients.

Ethical Challenge: Affirmative Action

Although a company may currently have rigorous policies in place barring discriminatory employment practices, there may still be barriers to advancement for underrepresented groups or individuals due to biased decisions that were made in the past. The purpose of an affirmative action program is to create fairness and equal opportunity in organizations where past practices may have resulted in widespread and institutionalized discrimination. This is the most important thing to remember about the purpose of affirmative action. Without it, it is almost impossible for underrepresented groups to advance in occupations like construction where leadership positions continue to be dominated by white, heterosexual

cis males. Benefits of affirmative action include increased diversity within the organization, and a larger network of job applicants, subcontractors, and vendors to make the company stronger and more resilient.

There are different levels of affirmative action. The strongest form involves reserving a portion of business exclusively for minorities and underrepresented groups. This is the case with set asides for disadvantaged, minority, or woman owned businesses. At a less strict level, the company can show a preference for minorities in a mixed pool, or encourage minorities to apply and offer incentives. At its weakest level, an employer may simply choose to advertise in minority publications or associations.

There has been some debate about whether affirmative action programs are themselves a type of discrimination. Some have claimed that affirmative action, in seeking to increase workplace diversity, is a form of “reverse discrimination” against white males. However, as we discussed in the introduction to this chapter, discrimination involves labeling an individual as inferior based on a stereotype of the group to which the individual belongs or is associated with. It cannot be said that an affirmative action program applies any such stereotype of inferiority to white males. A valid concern is the potential abuse of an affirmative action program by individuals falsely identifying themselves as members of a disadvantaged group in order to receive preference in an employment action.

From an ethical perspective, affirmative action employs the utilitarian approach, in which the desired outcome is the greatest good for the greatest number of people. It is also aligned with the common good approach. Although the rights of an individual member of the dominant group (typically a white male) may be violated by an affirmative action decision, the outcome of greater diversity in the workplace benefits the greater good of the organization and the community.

Ethical Challenge: Sexual Harassment

Sexual harassment with respect to the law is defined by the EEOC as:

unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when submission to or rejection of this conduct explicitly or implicitly affects an individual’s employment, unreasonably interferes with an individual’s work performance, or creates an intimidating, hostile or offensive work environment.²

There are many common misconceptions about the nature of sexual harassment. In reality, the victim as well as the harasser may be of any gender or orientation. The victim does not have to be of the opposite sex. In fact, data from the EEOC presented in an article in *Engineering News-Record (ENR)*, showed that between 2002 and 2011, 20–25% of complaints brought against construction companies involved a harassment claim by a man.³ This is illustrated in Box 7.1.

Box 7.1 Hostile work environment or harmless trash talk?***EEOC v. Boh Brothers Construction Company***

In this 2011 lawsuit, a former employee of Boh Brothers Construction Company charged that a superintendent harassed and taunted him by engaging in verbal abuse and taunting gestures of a sexual nature, and by exposing himself. The harassment took place in 2006 on the I-10 Twin Span project over Lake Pontchartrain between Slidell and New Orleans, LA. After making a complaint about the harassment, the employee was transferred to another jobsite, and then laid off, allegedly because of a lack of available work. He then filed a charge with the EEOC, complaining of a sexually hostile work environment and retaliation. The EEOC presented evidence at trial that the victim's supervisor harassed him because he thought he was feminine and did not conform to the supervisor's gender stereotypes of a typical "rough ironworker." Following a two-and-a-half-day trial, the federal jury awarded the victim damages for the sexual harassment claim, including punitive damages and emotional distress. The EEOC established that Boh Brothers had no policy that defined or specifically prohibited sexual harassment. The superintendent testified that before this lawsuit, he had never received training on sexual harassment.

A year later, the 5th U.S. Circuit Court of Appeals reversed the decision. The appeal ruling stated that the superintendent's behavior was not indicative of sexual harassment, "nor is it the business of the federal courts generally to clean up the language and conduct of construction sites." A Boh Bros. spokesperson said the company disciplined the superintendent for his behavior, and was implementing a training program on appropriate behavior for all workers. In their ruling, the three-judge panel noted that the superintendent was "a world-class trash talker and the master of vulgarity in an environment where these characteristics abound."

In a follow-up editorial, ENR staff expressed their opposition to the reversal of the decision. The superintendent's "unrelenting harassment created a hostile work environment ... that no employee should have to endure. The judges' characterization of the behavior as fun-lovin' horseplay and needling ... misses the whole point of statutory protection for employees. The ruling creates a second-tier workplace category for construction by condoning [the superintendent's] actions as "non-sexual" trash-talking ..." The editorial also pointed out that prior to the harassment, the victim had declined to join a union amid unionized workers, and was then subjected to name-calling with terms such as "rat." The abuse subsequently escalated to sexual humiliation and attacks on the victim's masculinity.

Sources: Editorial: Justice Denied in Boh Bros. Same-Sex Harass Verdict, *ENR*, August 7, 2012; Judges Overturn Same-Sex Harass Verdict Against Boh Bros, *ENR*, July 31, 2012; EEOC Obtains \$451,000 Jury Verdict Against Boh Brothers Construction Co. for Male-On-male Sexual Harassment, EEOC press release, March 29, 2011

The victim also does not have to be the person harassed but could be anyone affected by the offensive conduct. The harasser can be the victim's supervisor, a supervisor in another area, a coworker, or a nonemployee such as a client, subcontractor or a supplier doing business with the company.

There are two general categories of sexual harassment: *quid pro quo* (literally "this for that") and hostile work environment. With *quid pro quo* harassment, a sexual favor is expected in return for receiving a job benefit such as a promotion or a raise. *Quid pro quo* can also describe a situation in which benefits are denied if an employee refuses a sexual advance. A hostile work environment can be created as a result of unwelcome teasing, physical contact, or offensive comments or pictures. Although the law doesn't prohibit any of these things if they occur as isolated incidents, harassment is illegal when, in addition to being unwelcome, it is also frequent, persistent, or severe.

A concern for victims of sexual harassment is the threat of retaliation for reporting workplace misconduct, either from the harasser, or from other coworkers. For this reason, an important component of sexual harassment training includes educating employees about how to recognize and stop retaliation, and to make it clear that retaliation or further harassment of individuals who raise concerns, or report violations will not be tolerated. Chapter 2 presents more information about protection against retaliation.

From an ethical perspective, companies have an obligation to provide a workplace free from sexual harassment, and employees have a right to work in a safe and non-threatening or offensive environment. An excellent example of a clearly stated policy on harassment and retaliation is found in the Code of Conduct for Granite Construction, a member company of the Construction Industry Ethics and Compliance Initiative (CIECI). Granite's policy on Equal Employment Opportunity (EEO) and Other Employment Laws includes these two statements:

The Company has zero tolerance for discrimination or harassment of any kind, and employees will be subject to disciplinary action, including termination, for violations.

The Company will not tolerate retaliation against anyone who in good faith raises a concern or reports a violation.⁴

Applicable Regulations and Standards

The U.S. Equal Employment Opportunity Commission (EEOC) is the federal agency responsible for enforcing federal laws against various forms of discrimination in the workplace. Most employers with at least 15 employees are covered by EEOC laws, as are most labor unions and employment agencies. The laws apply to all types of work situations, including hiring, firing, promotions, harassment, training, wages, and benefits. Some specific examples are described in this section.

In 1964, the federal government took the first big step to address discrimination in the workplace by passing the Civil Rights Act. Title VII of the act prohibits any form of discrimination by any employer with 15 or more employees, on the basis of race, color, religion, sex, or national origin. As noted earlier in this chapter, the U.S. Supreme Court in June 2020 stated that the 1964 Civil Rights Act also protects LGBT employees from discrimination based on sex.

In 1967, the Age Discrimination in Employment Act (ADEA) was added to protect employees and job applicants aged 40 or older from employment discrimination based on age. Under the ADEA, it is unlawful to discriminate against an older worker when it comes to any employment decision, including hiring, firing, promotion, compensation, benefits, job assignments, or training. Since its inception, amendments to the ADEA have included prohibiting mandatory retirement (1978), eliminating an upper age limit for protection under the act (1986), and enacting the Older Workers Benefit Protection Act (1990). The ADEA applies to companies with at least 20 employees.

The Pregnancy Discrimination Act (PDA) is another amendment to Title VII of the Civil Rights Act of 1964. This amendment makes it unlawful to discriminate on the basis of pregnancy, childbirth, or related medical conditions. An employer cannot refuse to hire a pregnant person as long as they are able to perform the major functions of the job. People affected by pregnancy or related conditions must be treated in the same manner as other applicants or employees who are similar in their ability or inability to work. If a person is unable to continue in a certain position due to pregnancy, the company may wish to offer an equally rewarding and compensated position in a different capacity to allow them to retain a valued employee.

The Family and Medical Leave Act (FMLA) of 1993, enforced by the U.S. Department of Labor, protects employees who must take leave from their jobs for specified family and medical reasons. For example, a new parent (including foster and adoptive parents) may be eligible for 12 weeks of leave for care of the new child. In general, the FMLA applies to private sector companies with 50 or more employees, and any public sector agency, regardless of the number of employees, although there are certain exceptions and restrictions. In most cases, employees must have worked for the company for at least 12 months to be eligible.

The Americans with Disabilities Act (ADA) protects qualified employees or job applicants from being treated unfavorably because they have a disability.

The law prohibits discrimination in all decisions related to employment. The employment provisions of the ADA apply to private employers, State and local governments, employment agencies, and labor unions, all with 15 or more employees. (Federal employees and applicants are covered by the Rehabilitation Act of 1973, instead of the ADA.) ADA requires an employer to provide reasonable accommodation to an employee or job applicant with a disability, unless doing so would cause significant difficulty or expense for the employer (referred to as “undue hardship”). The law also protects someone from discrimination based on a relationship with a person with a disability. For example, it is illegal to discriminate against an employee because their spouse has a disability.

An employer can claim undue hardship when asked to accommodate an applicant’s or employee’s disability, religious practices, or other protected situation, if the accommodation would result in any of the following:

- more than ordinary administrative costs;
- another job becoming less efficient;
- an infringement of other employees’ job rights or benefits;
- a less safe workplace;
- other workers having to carry an additional share of potentially hazardous or burdensome work; or
- a conflict with another law or regulation.

Recognizing that some employers might struggle with the financial burden required to accommodate a disabled employee, the Internal Revenue Service offers certain tax credits or deductions for costs incurred in making a business more accessible, such as providing disabled access, or removing architectural and transportation barriers.

Construction Participant Perspectives

Many companies now include statements about diversity, equity, and inclusion as part of their core values. Diversity, equity, and inclusion is a broad umbrella encompassing programs and initiatives designed to promote a workforce composed of many different kinds of people (diversity) who are open to and willing to hear every voice (inclusion) in a manner that considers all people to be equally valuable (equity). Forward-looking companies realize that a diverse and inclusive workforce is needed to address critical labor shortages.

The CEO Action for Diversity & Inclusion (www.ceoaction.com) is a good example of how important these programs have become. This initiative involves a collective of nearly 2,000 business leaders from a wide range of industries who are striving to create a more diverse, inclusive, and equitable workforce. Construction firms including Granite, Mortenson, and JE Dunn have signed the CEO Action for Diversity & Inclusion pledge to encourage discussions about diversity, equity, and inclusion; implement and expand unconscious bias education and training; share successful as well as unsuccessful efforts in creating

diversity, equity, and inclusion programs; and engage boards of directors when developing diversity, equity, and inclusion strategies.

The following statements are three examples of how these companies are talking about diversity, equity, and inclusion on their websites and in their company literature:

We value diversity in our workforce and strive to create an inclusive culture that fosters innovation and growth.

(Granite Construction)

We are on a mission to advance our inclusive culture, which values the diversity of each and every team member. And we won't rest until we have achieved more diverse representation in our own ranks, and within our industry as a whole.

(Mortenson)

At JE Dunn, we believe diversity and inclusion fosters innovation and creative thinking. [We] promote a culture of inclusion where everyone feels like a valuable contributor to the company's success.

(JE Dunn)

Granite Construction has also made a commitment to be an Impact Champion with the Associated General Contractors (AGC) Culture of Care initiative, which was developed in 2018 to advance diversity and inclusion in the construction industry nationwide. Companies who take the Culture of Care pledge commit "to hire and pay based on skill and experience regardless of ability, age, ethnicity, gender identity, nationality, race, religion, sex, or sexual orientation."⁵

An important step to eliminating discrimination and harassment on the jobsite is to create a company culture where every employee is valued. Diversity, equity, and inclusion programs work hand in hand with a company's code of conduct and core values to build a strong company identity, which in addition to project experience and quality, becomes what a company is ultimately known for. This has long-reaching implications for recruiting and retaining employees and building a respected reputation in a competitive market.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 A female project engineer is attending a meeting in a subcontractor's job site trailer. This is her first field assignment and she wants to make a good impression and show that she knows her stuff. When she walks into the conference room, she sees several pornographic magazines on the table and a calendar on the wall with a photo of a nude woman. She asks the subcontractor's representative to please remove the magazines and the calendar before the

meeting. The subcontractor laughs and tells her that it was her choice to work in a man's job so she better just get used to it.

- What should the project engineer do next?
 - What is her employer's responsibility?
 - What is the subcontractor's responsibility?
- 2 Roger Wilson has been an estimator for 20 years. He's good at his job, reliable, and has been a good mentor for the younger employees. Recently, Roger applied for a new position as a lead estimator responsible for organizing the effort for new bids and assigning tasks to several junior estimators. One afternoon, Roger accidentally overhears two managers talking about how they need to promote more "younger" people because they have more energy and drive, fewer health issues, and aren't thinking about retirement. Roger is worried that he will get passed over for promotion because of his age.
- What should Roger do?
 - What is his employer's responsibility?
- 3 Sunita Kumar, who has a noticeable Indian accent, has five years of experience as a front desk receptionist for a local planning department. Through her job, she has met many local contractors and building professionals. A friend of hers, who works for one of the local contractors, told Sunita that her company was looking for a new receptionist, and encouraged Sunita to apply for the job. After her interview, Sunita was told that although she was otherwise qualified for the job, the contractor needed someone at the front desk who "sounded more American" and was "easier to understand."
- Was this a legitimate reason for not considering Sunita for the position?
 - Would the contractor have had the same difficulty hiring someone with a British or a Southern accent?

Notes

- 1 Center for Construction Research and Training. (2018). *The Construction Chart Book: The U.S. Construction Industry and Its Workers*, 6th edition. February.
- 2 U.S. Equal Employment Opportunity Commission. (2002). Facts About Sexual Harassment. Retrieved from www.eeoc.gov/fact-sheet/facts-about-sexual-harassment.
- 3 Engineering News-Record. (2012). Construction Men Find Refuge in Sexual Harassment Laws. August 28. Retrieved from www.enr.com/articles/2904-construction-men-find-refuge-in-sexual-harassment-laws.
- 4 Granite. Core Values. Retrieved from www.graniteconstruction.com/company/core-values.
- 5 Culture of CARE. About. Retrieved from <https://buildculture.org/about>.

Further Reading

Barnard, S., A. Dainty, S. Lewis, and A. Culora (2020). *LGBT in Construction: Exploring Experiences to Inform Inclusive Practices*. A Continuing Professional Development (CPD) publication from the Chartered Institute of Building (CIOB) and Loughborough University. Available from www.lboro.ac.uk/news-events/news/2020/march/lgbt-experiences-in-construction-report.

66 *Discrimination and Harassment*

For information about different types of discrimination, for employees and employers, and current federal regulations, please visit the website of the U.S. Equal Employment Opportunity Commission at www.eeoc.gov.

For more discussion about ethical issues related to discrimination, an excellent resource is *Business Ethics* by William H. Shaw, published by Wadsworth Cengage Learning.

8 Client Relations

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Regulations and Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Notes
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Describe ethical challenges that can occur between a contractor and client.
- Explain the difference between a gift and a bribe.
- Imagine and evaluate potential consequences resulting from common ethical decisions in contractor-client relationships.
- Recognize the statutes that regulate relationships with representatives of federal agencies.

Introduction

Project owners are a diverse group. An owner may be a federal, state, or local agency; a publicly held or private corporation; a municipal authority, such as a school district or local transportation authority; a utility company; a non-profit organization; or an individual developer. Owners may have substantial experience in managing construction projects and contracts, or may have none at all. The ideal owner / contractor relationship is built on a foundation of mutual trust; unethical behavior by either side can erode that trust and lead to suspicion,

blaming, retribution, justification of further unethical decisions, and possibly legal action.

Consulting firm FMI in conjunction with the Construction Management Association of America (CMAA) has conducted numerous surveys of construction project owners about their perceptions of and experiences with a variety of topics and issues, including risk management, project delivery, technology, and ethics.

In the 2005 Sixth Annual Survey of Owners, FMI/CMAA asked owners: what characteristics do you use to choose the right construction manager and contractor for your project? Setting aside the cost constraint, the number one factor that influenced the owners' choice of construction manager or contractor was trust and integrity. Other important factors for owners were the contractor's ability to control schedule and cost, experience level, and communication and leadership skills.

Integrity is commonly listed among a company's core values. Table 8.1 shows the core values for four companies who have repeatedly been among those honored by the Ethisphere Institute as the World's Most Ethical Companies. Note that instead of integrity, CH2M Hill lists respect, which is a consequence of acting with integrity. A company's core values provide the framework and the context for making decisions. By listing integrity as a core value, a company is telling its clients, investors, subcontractors, suppliers, and employees that when ethical challenges occur, maintaining the company's integrity will be a guiding principle.

Integrity is often described as "walking your talk." In his 2002 book *The Integrity Chain*, author Ralph James lists things that he would do to demonstrate integrity. This list can also be viewed as simple rules for building trust between you and your client:

- Show up on time to meetings.
- Follow up on action items.
- Don't make promises you can't keep.

Table 8.1 Core values of companies selected from Ethisphere Institute's "World's Most Ethical Companies" (<https://worldsmoethicalcompanies.com>)

<i>Granite Construction</i>	<i>Parsons</i>	<i>Fluor</i>
Safety	Safety	Safety
Integrity	Quality	Integrity
Excellence	Integrity	Teamwork
Inclusion	Diversity	Excellence
Sustainability	Innovation	
	Sustainability	
www.graniteconstruction.com	www.parsons.com	www.fluor.com

- Act consistently.
- Don't cover up bad news.
- Don't look for scapegoats to take the blame.
- Know your policies and procedures.
- Go through proper channels instead of looking for ways to game the system.

When trust and integrity are weak, owner–contractor relationships can become adversarial. Each may attempt to gain the upper hand by engaging in unethical or even illegal practices. If unethical actions occur at top management levels, there is a risk that these practices may become a way of doing business for that organization. A contractor who doesn't trust an owner to award contracts fairly may try to obtain a preferred status by giving his client a gift or favor (unethical and possibly illegal). An owner who doesn't trust her contractor may withhold payment or cut costs on change orders. A contractor who doesn't receive fair or timely payment may try to compensate by overbilling. Some examples of unethical practices between contractors and clients are presented in this chapter.

Introductory Case Study

A contractor learns that the head of the local Department of Public Works, who signs off on all major procurement for the County, owns a vacation home nearby. This official has many friends in the contracting community who frequently drop by and help out on home improvement and remodeling projects. Some of these contractors have even donated supplies along with their own labor. Our contractor has been invited to a “work party and barbecue” on the upcoming weekend to help build a new fire pit at the official's vacation home. She is concerned that if she doesn't participate, her company will be at a disadvantage when it comes time to bid on Public Works projects. Can our contractor help out at the work party? Can she bring along some of her employees to help too? What other choices might she have?

Ethical Challenges

In the following paragraphs, we will discuss some of the common ethical challenges encountered in contractor–client relationships, beginning with the issue of gift giving, which was illustrated in the introductory case study.

Ethical Challenge: Gift Giving

Particularly when a large client offers the potential for ongoing projects, a contractor may feel a need to set himself apart from the competition somehow, attract attention, or gain favor with that client. Many contractors have sought ways to gain “a foot in the door” with an important client in order to be placed on short

lists to be able to bid or propose on work. A contractor can differentiate herself from the competition naturally over time through outstanding performance, earning a reputation for integrity, quality, safety, and value. However, in the short term, and in the absence of a relationship that has been built over time, there can be a temptation to look for a short cut.

A personal relationship with an owner or an owner's employee might present an opportunity for either party to take a short cut. There's an important distinction between a friendly working relationship and taking unethical advantage of that relationship to gain a competitive edge or financial reward. A personal relationship between a representative of the owner and a representative of the contractor might even predate their business relationship. Typically, there is no ethical issue when an employee accepts a gift when it is clear that the gift is motivated by a family relationship or personal friendship rather than the position of the employee. However, in this case, both parties must be especially sensitive to perceived impropriety.

Some companies allow gift giving to clients or potential clients. The *ethical* challenge is being able to determine when a gift is acceptable and appropriate. The *legal* challenge is being able to distinguish the difference between a gift and a bribe. The following two conditions transform gift giving to bribery:

- 1 if the gift predisposes the recipient to favoring the interests of the gift giver;
- 2 if the value of the gift places the gift giver in a privileged position.

A good definition of a gift is something of value given without the expectation of return. In general, token gifts, meals, and entertainment are allowable if acceptance is not illegal and if the gift is clearly appropriate under the circumstances. In addition, it should also be possible, acceptable, and appropriate for the gift to be reciprocated. That is, a gift should not be given if it is clearly beyond the ability of the recipient to return an equivalent gift. For example, it is typically not unethical to pay for a client's meal if the client has the opportunity and the means to reciprocate at another time.

There are additional important considerations if your client is an employee of a federal, state or local government, or a public agency. Federal government employees are restricted by law from accepting gifts over certain dollar thresholds. Federal regulations state that no single gift or item to a representative of the federal government should exceed a value of \$20, and the annual limit for more than one gift is limited to \$50.00.¹ This is illustrated in Box 8.1. State or local governments may have similar restrictions. Even a token gift as simple as a contractor-branded cap or coffee mug may pose a problem for a public employee. Not only may the gifts exceed the allowable value limits, but a government employee wearing your company's T-shirt or carrying around a mug with your logo could create an appearance of impropriety or conflict of interest.

Box 8.1 Gift or Bribe? *United States v. Hoffman*

In *United States v. Hoffman*, (2009), the appellate court upheld a gratuities conviction based on an indictment alleging that the defendant had given a government employee a set of golf clubs for or because of that government employee's role in rating the contractor's performance under a contract with the United States Army Corps of Engineers.

Russell Hoffman was a vice president at Surdex Corporation, and project manager for a two-year contract for aerial photography and mapping services that was awarded in 1996. William Schwening was the Army Corps of Engineers' primary point of contact for the project. Schwening was also responsible for completing a performance evaluation report grading Surdex's performance under the contract.

The primary evidence consisted of email correspondence between Hoffman and Schwening in which statements by Schwening somewhat jokingly implied that he was delaying Surdex's performance evaluation until he received a new set of golf clubs. Hoffman subsequently sent Schwening a set of golf clubs that were paid for by Surdex. The fact that it was the company that purchased the clubs rather than Hoffman, suggested that the gift was given for a business purpose, and not based on a friendship between the two men.

The jury acquitted Schwening on all counts but convicted Hoffman. Although Hoffman appealed, the conviction was upheld because the gratuities statute states that the government need only establish that a gift was given with the *intent* to induce or reward an official act, regardless of whether that act occurred or whether the gift was accepted.

Source: www.governmentcontractslawblog.com

If you can answer "yes" to any of the following questions, then chances are, the gift is unacceptable:

- Is the gift illegal?
- Is the gift cash?
- Does the gift exceed a modest value?
- Could the gift give the appearance of an unfair business advantage?
- Is the gift prohibited by the recipient's employer?
- Would public knowledge of the gift cause embarrassment or reflect negatively on the individual gift giver, the individual's company, or the recipient?

Ethical Challenge: Talking Negatively about a Competitor

Another short cut around establishing a trustworthy reputation through performance is to offer the client negative or harmful information about the competition. One way this can happen is when employees move from one contractor to another, bringing with them “insider” or proprietary information. Proprietary information that can damage a competitor might include knowledge about upcoming changes in key personnel, financial or legal problems, or issues with jobsite training and procedures. Is it unethical for a contractor to share this kind of information with a client, or is she just looking out for her client’s best interest? There are several potential consequences to consider.

Whether you are the contractor thinking about divulging information, or the client who is receiving the tip, it’s important to consider the source of the information, how the source came by the information, and the motivation of that source. Both should be asking themselves: how current and accurate is the information? Has it been verified or is it a rumor? The contractor should be asking himself: what do I think I can gain by telling this to the client? The client should be asking herself: why is this contractor choosing to give me this information at this particular time? From the viewpoint of the contractor, the tactic of talking negatively about the competition is truly a shortsighted approach. Contractual relationships differ from project to project. Today’s competitor might be tomorrow’s construction manager, or subcontractor, or joint venture partner. Is the contractor willing to end all possible future work with this competitor for a better shot at the current project?

From the viewpoint of the client, knowing that a contractor has revealed confidential information about a competitor may seriously impact the sense of trust that an owner has with that contractor. Revealing information about a competitor may also have the result of the owner requesting additional requirements of all bidders, and thus may backfire on the company revealing the information. In short, it is best practice for all parties to be responsible for their own due diligence concerning their potential clients, contractors, and partners.

Ethical Challenge: Client Taking Advantage of the Owner–Contractor Relationship

In some cases, the owner is well aware that the contractor is motivated to please the client to the extent possible in order to retain favorable status. What happens when an owner takes advantage of this motivation to secure uncompensated work by the contractor? How much free consulting is ethically acceptable and where does the contractor draw the line? What happens if the owner receives information given in good faith by a contractor and then uses that information to enter into a contract with a competitor at a lower price? How does a contractor protect himself from an unethical client? How does this situation change if our contractor is now the recipient of privileged information? How does the contractor act on such information?

Naturally, owners seek to obtain the best ideas and approaches that will make their projects successful. However, once in possession of proprietary information regarding a contractor's means and methods, clients must respect this information as intellectual property and not divulge confidential information from one contractor or architect to another. At the same time, if such information is offered to a contractor or architect for review, the ethical response would be for them to refuse to see it. Some unethical behavior on the owner's side is attributed to inexperience. When inexperienced owners choose to act as their own construction manager, serious issues and misunderstanding can arise.

Ethical Challenge: Overbilling

When the opportunity arises, a contractor may seek to make more money on a project by overcharging on changed work, or overbilling for work that is running under budget. What is the downside for the contractor to overcharging? He may recoup some money, but at what cost to his reputation? Is some overcharging permissible if it is reasonable and fair? If overcharging is allowed or encouraged, what does that communicate to employees about the values of the company?

In another situation, an owner may have an unwritten policy of automatically cutting a percentage of every proposed change order, causing the contractor to respond by padding each change order for negotiation purposes. This approach sends a signal to the contractor that the owner is expecting the contractor to overcharge, and further, that the owner is accepting this as a standard way of doing business.

From the contractor's standpoint, it is unethical for an owner to withhold payment for work done and the contractor is justified in overcharging to maintain a positive cash flow. From the owner's standpoint, the contractor is acting unethically by overcharging for work not done and the owner must withhold payment to compensate. How can this standoff be resolved? Is an ethical code relative, that is, can an action be ethical in one situation and unethical in another?

Table 8.2 shows one way of analyzing this situation. Each possible action is based on a core value and has potential consequences that can be designated as a benefit or a risk. The basis for the decision is whether the benefits of the action outweigh the risks, and if the outcome is aligned with the contractor's core values and code of conduct. For each possible action, do the benefits outweigh the risks?

Table 8.2 shows us that if a company's core values, and hence its ethical code of conduct, is based on improving the company's bottom line, then the benefit derived from overcharging does in fact outweigh the risks. However, if the contractor's core values are honesty, integrity, and trust, then overcharging is never aligned with an ethical code of conduct, even if it can be justified from a financial standpoint. If we refer back to the core values listed in Table 8.1, we will not find one value among any of those listed, that represents monetary gain. It is important to remember that just because an action can be justified, it isn't automatically or necessarily ethical.

Table 8.2 Scenario contractor has an opportunity to overcharge for work done on a project

<i>Action</i>	<i>Core value basis</i>	<i>Potential benefits</i>	<i>Potential risks</i>
Do not overcharge	<ul style="list-style-type: none"> • Honesty • Integrity • Trust 	<ul style="list-style-type: none"> • Enhance reputation in the contracting community • Build goodwill with the owner 	<ul style="list-style-type: none"> • Don't make as much money
Overcharge	<ul style="list-style-type: none"> • Improve the company's bottom line 	<ul style="list-style-type: none"> • Make more money on the current project 	<ul style="list-style-type: none"> • Damage reputation • Lose current and possibly future clients • Set a precedent within the company for overcharging

Some contractors have defined overbilling as rebalancing or front-end loading the payment schedule to place a higher value on work performed early in the project and lower values on work to be completed near the end of the project so that the contractor does not incur a seriously negative cash flow. This is a completely different situation than overcharging for work not done, and should not by all rights be called overbilling. Front-end loading the schedule of values, when limited to a few planned early completion activities, is a common and generally accepted practice that should be negotiated and agreed on by the contractor and the owner. Inexperienced clients may require some education on front-end loading to fully understand why the practice is necessary.

Ethical Challenge: Timely Exchange of Information

Owners recognize that they share in the responsibility for a successful owner-contractor relationship. In the 2005 survey of owners mentioned at the beginning of this chapter, FMI/CMAA asked owners what responsibilities they felt they themselves needed to improve. Their top answers were:

- Making timely decisions.
- Requiring good project definition.
- Communicating clear work scope.
- Providing leadership for project collaboration.
- Communicating clear business goals to design and construction team.

It's critical for clients to fully understand the importance of clear and timely communications. Contractors should not assume that clients bring to the table the communication skills necessary to avoid misunderstandings of project goals and priorities. Both contractor and client need to take an active role to remedy gaps in the communications process so that the project will be successful for everyone involved. This is illustrated in Box 8.2.

Box 8.2 Poor Performance or Poor Communications?

A general contractor was awarded a \$20 million project to renovate a store for a major retail client. After 18 months, the client dismissed the contractor on the basis of missed milestones. The decision halted renovation for five months, including the holiday shopping season. The contractor sued the client, claiming that the managers undermined the project with numerous changes to its scope, slow responses to questions posed by the contractor, routine denials of change orders and interference with subcontractors.

Although there was no evidence presented of any unethical behavior, it's easy to see how poor communications might be used to justify unethical actions by either the client or the contractor. Did the client deliberately undermine the project to justify terminating the contract? Did the contractor blame the client to cover up for poor performance? This is one contractor-client relationship that will most likely never have another chance.

Applicable Regulations and Standards

Earlier in this chapter, we discussed some the ethical implications of gift giving and overbilling. These actions have even more serious consequences if they cross over the line from unethical to illegal, as in cases of bribery and false claims. There are a number of statutes that address these illegal actions.

Federal Bribery Statute

Bribery of public officials is addressed in Title 18, Section 201 of the U.S. Code. The law specifically prohibits anyone from giving or promising anything of value to any public official, either directly or indirectly, with the intent to influence that official to act in violation of his or her public duty. It also prohibits public officials from seeking something of value in return for influence.

Notice that the law uses the word "intent." It's not necessary for a public official to accept the gift. Any gift given with the "intent" to influence that official may be considered a bribe. Because the law is so strict in its language, contractors working with any public official or representative, even if that person represents a public entity other than the federal government, must be aware of actions that may even appear to involve improper gift giving.

False Claims Act

False claims against the U.S. government are addressed in Title 31, Section 3729 of the U.S. Code. The law prohibits knowingly presenting false or fraudulent claims for payment or approval.

Actions that can be prosecuted under the False Claims Act include mischarging labor hours and using excessive unit prices. Other common aggressive billing practices include charging for hours not worked, invoicing for documents not produced, and misrepresenting the need for additional services. On the owner's side, clients can be prosecuted for certifying payments for contractors who have submitted inflated bills and approving work that is not completed. An example is shown in Box 8.3.

Box 8.3 False Claims: *Morse Diesel International v. United States*

During 1994 and 1994, AMEC Construction Management Inc. (ACMI), which was known as Morse Diesel International at the time, was awarded four federal construction contracts: two related to the Eagleton Courthouse in St. Louis, MO; one for construction of the U.S. courthouse and federal building in Sacramento, Calif.; and a fourth for renovations to the U.S. customs house in San Francisco. Morse Diesel submitted false bond reimbursement claims to the U.S. Government. According to counterclaims filed in the U.S. Court of Federal Claims, in addition to the submitting false bond reimbursement claims, ACMI's parent company also received kickbacks from the company's bond broker. After a lengthy litigation process, the United States recovered more than \$19 million from ACMI to resolve the allegations of fraud, false claims and kickbacks. The United States sought damages and penalties under the False Claims Act, the Anti-Kickback Act and common law theories.

Source: www.justice.gov/opa/pr/2009/February/09-civ-085.html

Anti-Kickback Act

The federal Anti-Kickback Act of 1986 is contained in Title 41 Sections 8701–8707 of the U.S. Code. A kickback is compensation of any kind directly or indirectly accepted by a public official from a vendor, contractor, or subcontractor for the purpose of influencing the award of a contract. Kickbacks can include money, fees, commissions, gifts, or gratuities. We can differentiate between a bribe and a kickback by looking at examples. When a contractor gives a gift to a public official with the intent to influence the official's decision in the contractor's favor, that's a bribe. When a public official makes a decision in a contractor's favor, and then receives a portion, percentage, or cut of the monetary or other benefit, that's a kickback.

Construction Participant Perspectives

One way that construction companies relay the importance of ethical client relationships is by including the client in their statements of core values. The

global architecture and engineering firm AECOM accomplishes this clearly on the company's Ethics and Compliance webpage:

We are committed to integrity and ethical business practices as we continue to earn our clients' trust by delivering outstanding customer service and acting ethically in all that we do.²

This sends the message to clients that earning trust through ethical business practices is of prime importance to AECOM. It also lays the groundwork for establishing a corporate culture of ethical client service.

Engineering firm Parsons emphasizes collaboration as part of the company's vision statement:

Our diverse teams are problem-solvers and collaborate with our customers to solve their most difficult challenges.

For their part, clients can create an incentive for contractors by requiring bidders to have and abide by an ethics code to compete for projects. The Federal Acquisition Regulations already require that contractors for the federal government must have established a code of business ethics and conduct, a compliance training program, and procedures for reporting and taking corrective action.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 You are out to dinner with your spouse at your favorite restaurant. One of your clients happens to be in the restaurant with a small party at another table. You ask the waiter to offer that table a bottle of wine that you will pay for. They accept your offer.
 - Would the cost of the bottle of wine become an issue?
 - Does it make a difference if the client is from a private company or a public agency?
 - How would the situation be different if you offered to pick up the tab for the entire group?
- 2 You spot an omission in a bid. A portion of the work that you know must be done has been left out of the specifications. You put money in your bid to cover the cost of the work. Now the job has been awarded to your company.
 - Should you notify the client about the mistake at no cost to them?
 - Should you notify the client and then pursue a change order to cover the cost even though you have already included it in your bid?
 - Would your decision be different if you discovered you had underbid a different item of work and you could use the client error to make up the difference?

- 3 Your company is a government contractor working on a federal construction project. Your project is going well and you are planning a holiday gala celebration with a no host bar. There is a large guest list that includes your employees, subcontractors, vendors, spouses, and several government representatives. The event will include a drawing for prizes that have been donated by your company and your subcontractors. The winner is drawn randomly from the names of all the guests. Most of the prizes are valued at less than \$400 and include power tools, electronics, sporting goods, apparel, and a liquor basket.
 - Are there any ethics or compliance issues involved if the winner of the drawing is a federal employee?
 - After the party, there are several unclaimed T-shirts and coffee mugs with your company's logo on them. Is there any problem giving these out to any of the remaining guests?
 - What issues can you imagine if your company was hosting the bar?
 - How might you organize this event to avoid any negative ethics and compliance issues?
- 4 Nick Johnson manages information technology software for a mid-sized commercial construction company. After a promotional presentation to highlight several new products, a vendor offers to buy Nick lunch, which costs less than \$20. Nick decides that lunch is such a minor expense that it couldn't possibly be considered a conflict of interest. Over lunch, the vendor asks Nick if he would be willing to share the names of some of his company's clients who might be interested in the vendor's products.
 - What issues might there be with the vendor asking Nick to share his contact list?
 - Would accepting lunch from the vendor make Nick more or less likely to share his contact list?
 - What would you think of Nick's decision if you were one of his contacts whose information was shared with the vendor?
- 5 Superior Construction Inc. leases a private skybox at a major league ballpark. One of the company's managers offers two free tickets for an upcoming game to an employee of the state highway department. The company has done work for the state in the past, but does not have any current projects with them. The skybox tickets provided to the employee do not have a face value.
 - What issues might there be with offering the skybox tickets to the state employee?
 - Would the situation be different if the state employee offered to pay for the tickets?
 - What do you think the company's policy should be regarding use of the skybox?

Notes

- 1 Contractor gratuities offered to government personnel are subject to the restriction under the Standards of Ethical Conduct for Employees of the Executive Branch, 5 CFR part 2635.204.
- 2 AECOM. Ethics and Compliance. retrieved from <https://aecom.com/ca/about-aecom/ethics>.

Further Reading

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9 Ethics and the Environment

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Studies
- Ethical Challenges
- Applicable Regulations and Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Notes
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Describe the concept of environmental justice.
- Explain what is meant by the “precautionary principle” and the “tragedy of the commons.”
- Imagine and evaluate potential consequences to the environment resulting from common construction site management practices.
- Recognize the federal statutes that regulate environmental impacts from construction activities.

Introduction

Most of the focus of this text has been on ethical decision-making with respect to impacts on other people—clients, employees, subcontractors, vendors, etc. Environmental ethics asks us to evaluate impacts that may occur beyond the arena of our human relations. While it is natural to view our activities from a human-centered viewpoint, we must also keep in mind that all human activity is made possible by the natural resources of our planet. Negative environmental impacts can have both immediate and long-term consequences, affecting our

personal, individual health; the quality of life that we enjoy; and our ultimate survivability as a species.

When we make decisions that impact a natural resource that is shared, such as clean air and water, there may be ethical consequences of those decisions, even if they are in strict compliance with laws and regulations. The concept of environmental justice has its roots in the belief that each individual has a fundamental right to a healthy environment. Historically, that right has been most frequently denied to poor people, and to minority communities. Although the federal government made strides to address racial discrimination in the 1960s with the Civil Rights Act, it wasn't until the mid-1980s that awareness was raised about another form of discrimination that was denying equal access to a pollution-free, healthy environment in which to live.

In 1982, in Warren County, North Carolina, a group of African American citizens and supporters came together to protest the dumping of contaminated soil into a hazardous waste landfill that the state had located and constructed in their community. This act of civil disobedience, which led to the arrests of more than 500 people, sparked a study by the U.S. General Accounting Office (GAO) of the racial and socioeconomic profile of communities adjacent to four landfills in the southeast U.S. The study found that three of the four communities were predominantly African American.

A larger study commissioned by the United Church of Christ (UCC) in 1986 (updated in 2007) found that “racial and ethnic Americans are far more likely to be unknowing victims of exposure” to hazardous wastes.¹ Whereas wealthier communities are better equipped to take a stand against the siting of a hazardous or industrial facility in their communities—the “Not In My Backyard” or NIMBY position—poor communities have less access to information, and spend more time coping with the demands of daily life. They typically have neither the time, the transportation, or the financial resources to advocate on their own behalf. In addition, industrial facility sitings often take advantage of the need in the local community for employment. The ability to earn a paycheck today can understandably take precedence over longer term health impacts. The UCC study found a consistent national pattern of the siting of commercial hazardous waste facilities in neighborhoods with high minority populations, with three of the five largest commercial hazardous waste landfills located in African American or Hispanic communities.

Beyond the U.S., the idea of environmental justice has been concerned with the exploitation of developing countries by multinational corporations who wish to take advantage of poorly enforced, lax, or nonexistent environmental regulations for resource extraction, manufacturing, or waste disposal. According to the U.S. Environmental Protection Agency (EPA):

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.²

The concept of environmental justice asks us to consider whether our decisions are being influenced by any preconceived ideas or beliefs we may have about the relative importance or value of the stakeholders.

Issues of environmental justice can arise during a construction project. If not managed properly, construction activities can be major sources of air, water, soil, noise, and even light pollution, negatively impacting the environment and the quality of life for workers on the site, and residents in neighboring communities. Construction project owners and managers must take care that equal attention is given to the environmental needs of the surrounding community regardless of racial or economic features or status. One method of evaluating potential impacts is to employ the *precautionary principle*.

In 1998, a group of scientific researchers gathered to discuss what they had become accustomed to referring to as “the precautionary principle.” One outcome of the meeting was the 1998 *Wingspread Statement on the Precautionary Principle*, which summarizes the principle this way:

When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.³

The precautionary principle is a more scientifically defined expression of the old advice that it is “better to be safe than sorry.” With respect to the environment, the ethical assumption behind the precautionary principle is that humans are responsible for the protection and preservation of the earth’s natural resources, which are vital to the common good. It shifts the burden of proof from the potential victims of a harmful action to those who would implement the action. The Occupational Safety and Health Act is precautionary legislation that places the burden of responsibility on employers to provide a safe workplace. Precaution is often considered a moral virtue and one of the bases for sound judgment and decision-making.

When many people share a common resource, such as the earth’s atmosphere, minerals, trees, or the fish in the ocean, there is a risk of severely depleting that resource if each individual believes he or she is entitled to an amount deemed necessary for his or her own short term, personal gain or best interest. In the absence of regulations that place limits on how much each person can take for their own benefit, there is no incentive or motivation for individuals to preserve the resource for the common good. This phenomenon is referred to as the “tragedy of the commons.” Many environmental regulations that are in place today attempt to prevent the tragedy of the commons and subsequent resource depletion.

Introductory Case Studies

Two construction company managers were convicted of mishandling asbestos cement pipe during an upgrade of a municipal water and sewer system and

sentenced to six months in prison. Both men pled guilty to violating the asbestos work practice standards of the Clean Air Act. Federal investigators found that company workers, who were insufficiently trained and supervised, crushed the pipe during removal, releasing the asbestos and creating a health hazard. The material was then improperly disposed of on the construction site as well as at sixteen additional sites in the vicinity. The U.S. EPA ended up spending almost \$4 million to clean up the disposal sites, and imposed penalties on the company to recover the cost.

Another firm that had five of its own untrained and unprotected employees remove asbestos from pipes and boilers inside a factory was fined \$1.2 million for 27 willful and serious safety violations. The U.S. Occupational Safety and Health Administration said the fine was one of the largest against any employer. The state environmental protection agency learned of the removal when asbestos-covered pipe was sent to a recycling center. Among other things, the firm was cited for not monitoring airborne asbestos, failure to use particulate air vacuums for dust control and improper asbestos waste disposal.

Considering these two case studies, and outside of the legal issues, whose rights to a healthy environment may have been harmed by the actions involved? Whose rights are being protected by the state and federal environmental protection agencies and the Occupational Safety and Health Administration? Should these rights take precedence over the right of a company to make a profit on a project? Would your answer be the same if either company qualified as a small, disadvantaged business?

Ethical Challenges

In the following sections, we will examine some of the common ethical challenges encountered by construction companies with respect to environmental protection.

Ethical Challenge: Impacts of Construction Site Activities

Construction site activities frequently require the removal of vegetation and topsoil and the subsequent exposure of large areas of unprotected soil. When rain from storm events falls onto the unprotected soil, some water will infiltrate into the ground, but much will run off, following the path of least resistance, to the nearest storm sewer or stream, carrying with it, a burden of loose soil and sediment. The release of high levels of sediment into storm sewer outlets, or other receiving bodies of water has a harmful effect on water quality and on wildlife. The U.S. EPA considers storm water runoff to be one of the most significant sources of water pollution in the nation, and takes compliance very seriously, as is illustrated in Box 9.1.

Box 9.1 Erosion and Sedimentation Control: Wal-Mart Clean Water Act Settlement

In May 2004, the Department of Justice and the U.S. Environmental Protection Agency, along with the U.S. Attorney's office for the District of Delaware and the States of Tennessee, and Utah reached a Clean Water Act settlement for storm water violations at Wal-Mart store construction sites across the country. Under this Clean Water Act settlement, Wal-Mart agreed to pay a \$3.1 million civil penalty and reduce storm water runoff at its sites by instituting better control measures.

In 2001, Wal-Mart settled claims that it had violated the storm water requirements at about 17 sites across the country. That settlement called for payment of a \$1 million penalty and a compliance and training program.

After the settlement, follow-up inspections at 24 Wal-Mart stores revealed that violations continued. Specifically, EPA and state inspectors found:

- failure to obtain permits for some sites;
- discharges of excessive sediment to sensitive waterways;
- failure to install and/or maintain adequate sediment and erosion control devices;
- failure to develop and/or implement a storm water pollution prevention plan;
- failure to inspect sediment control devices to ensure adequacy and condition and that operating properly; and
- failure to develop an adequate plan for controlling sediment and minimizing erosion.

The settlement was the largest civil penalty ever paid for violations of the storm water regulations.

Source: www2.epa.gov/enforcement/wal-mart-ii-clean-water-act-settlement

The requirement for preventing soil erosion and the transport of sediment in storm water runoff from a construction site is a good illustration of the precautionary principle in action. It requires preventive steps to be taken to eliminate potentially polluted storm water runoff at the source, rather than waiting to see if any damage is caused to the waterway, and then reacting with expensive and most likely ineffective treatment.

Contractors may view erosion and sedimentation control as a costly imposition. However, it's important for both contractors and clients to understand that costs associated with water quality protection must legally and ethically be considered as one of the basic costs of construction, just like materials, equipment

and labor. If construction projects do not take responsibility for protecting nearby water quality from the negative impacts of site activities, some other individual, agency, or municipality will end up paying for that protection or treatment. Costs that are created by an industry, but are paid by people or a community outside of that industry are referred to as externalities. Ethically, it is unjust to impose external costs on people or a community that do not share in the profits of the activity. The cost of environmental cleanup is one of the most common and overlooked categories of externalized costs.

Construction projects also have ethical responsibility to bear the cost of mitigation and control of other forms of pollution associated with site activities, including dust and noise. Dust can become airborne from temporary and haul roads, material handling, stockpiles, and site earthwork activities. Soil tracked out onto roadways by site vehicles can get washed into storm sewers and streams by rain, and is considered an element of construction site runoff. Noise can range from fairly unobtrusive power tools, to persistent reversing vehicle alarms, to extremely loud impacts from pile driving. Outside of urban areas, the presence of wildlife may require consideration. Human-wildlife encounters can be hazardous to people as well as animals, whether they occur on roadways, during earthwork activities, or when animals are attracted to the presence of water, food, or light.

Many impacts are an unavoidable part of the construction process, but it is still important to consider potential mitigation efforts. In many cases, construction project managers simply need to consider what they might ask for if they happened to find themselves close neighbors to their own project sites, and develop strategies for communications and control. When impacts from site traffic, noise, odors, intrusive night lighting, or other factors can't be eliminated, communities should at least be informed of the estimated degree and duration so that they can prepare and plan around it.

Ethical Challenge: Construction Waste and Hazardous Materials Management

The construction process can generate substantial amounts of waste: excavated soil, scrap materials, pallets and packaging, used oil and lubes, miscellaneous rags and safety gear, and ordinary household trash from job site trailers and lunch rooms (Table 9.1). Many of these materials, such as fuels, paints, and adhesives, are considered hazardous waste, and must be disposed of in accordance with regulatory requirements. Demolition waste is also frequently contaminated with hazardous materials including lead, asbestos, or soil containing spilled fuel, heavy metals, or other contaminants. Even non-hazardous waste materials can have a major impact on local communities, requiring transportation from the jobsite and large landfill areas for disposal. In 2003, the U.S. EPA estimated that the quantity of construction and demolition waste generated annually was almost 170 million tons, with 39% coming from residential and 61% from nonresidential sources.⁴ To put this into perspective, and based on the number of people in the U.S. in 2003, this amount of construction waste is equivalent to a generation rate of 3.2

Table 9.1 Typical components of construction and demolition wastes

<i>Waste Component</i>	<i>Examples</i>
Wood	Forming and framing lumber, stumps/trees, engineered wood
Drywall	Sheetrock (wallboard)
Metals	Pipes, rebar, flashing, wiring, framing
Plastics	Vinyl siding, doors, windows, flooring, pipes, packaging
Roofing	Asphalt, wood, slate, and tile shingles, roofing felt
Masonry	Cinder blocks, brick, masonry cement
Glass	Windows, mirrors, lights
Miscellaneous	Carpeting, fixtures, insulation, ceramic tile
Cardboard	Packaging
Concrete	Foundations, driveways, sidewalks, floors, road surfaces (all concrete containing Portland cement)
Asphalt Pavement	Sidewalks and road structures made with asphalt binder

Source: Adapted from U.S. EPA, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, Table 1, www.epa.gov/sites/default/files/2017-09/documents/estimating2003buildingrelatedcanddmaterialsamounts.pdf

pounds per person per day, compared to 4.45 pounds of municipal solid waste (household trash) per person per day. That volume of waste from construction and demolition activities effectively almost doubles the amount of landfill area needed for disposal when added to the amount of municipal solid waste already being landfilled.

As was discussed earlier in this chapter, the siting of landfills, waste transfer stations, and other storage or disposal sites often raises issues related to environmental justice. The construction industry therefore has a responsibility to be aware of the types and amount of waste their projects are generating, and the communities in which those wastes end up. While construction waste may be “out of sight, out of mind” once it leaves the jobsite, the impact doesn’t disappear with the hauler. It merely gets transferred to someone else’s backyard.

There are a number of ways that contractors can minimize the amount of waste that ends up in a landfill. These include:

- Requesting suppliers to reduce unnecessary packaging.
- Planning material use to reduce the amount of scrap.
- Donating unused but usable materials to non-profit salvage or resale outlets.
- Recycling materials when possible.

The preferred strategy for minimizing waste is source reduction—that is—avoid generating waste in the first place. The next preferred strategies are reuse and recycling of materials, both of which keep waste out of the landfill. Organizations such as the Construction & Demolition Recycling Association (www.cdrecycling.org) assist contractors in finding outlets for recyclable materials. Many project owners, especially federal or state governments, now require contractors to have

an approved construction waste management plan that estimates types and quantities of waste and identifies the disposition of those materials. A well-researched waste management plan can make financial sense. Landfill space is becoming increasingly expensive, with significant “tipping fees” imposed for every truckload, not to mention the fuel and equipment cost for the actual transportation of the waste. The money that is saved by avoiding landfill tipping (dumping) fees can offset additional costs that may be incurred by separating and transporting materials for reuse or recycling.

Ethical Challenge: Fuel Storage and Containment

Construction projects are dependent on fossil fuels to run vehicles and equipment. Depending on size and location, many projects must store substantial amounts of fuels and lubricants on the job site. Storage tanks and containers of petroleum products must be properly contained so that any spills do not come into contact with soil or water. Petroleum compounds range from volatile materials that readily evaporate at ambient temperatures, to heavier constituents that can remain in the soil for decades. Although regulations exist that govern the proper containment of fuel storage vessels, contractors often overlook individually minor but cumulatively significant spills that can occur in parking areas or where equipment is maintained.

As with erosion and sedimentation control, the cost of protecting the surrounding environment from contamination by spilled fuel products is a necessary cost of construction and should not be externalized to the community.

Applicable Regulations and Standards

There are a number of statutes that address the environmental impacts of construction. Table 9.2 provides an overview of some of the most common and relevant regulations.

Construction Participant Perspectives

In August 2021, the Associated General Contractors of America (AGC) announced an initiative “designed to lessen the carbon footprint of the built environment while also making the process of building projects even more efficient.”⁵ Recognizing that the built environment is responsible for approximately one third of U.S. greenhouse gas emissions, the AGC initiative is primarily focused on ways to support project owners in constructing projects that are less energy intensive. The AGC’s Climate Change Task Force examined building, transportation, federal, and utility infrastructure markets, and made a number of recommendations including:

- Supporting a national strategy to invest in physical infrastructure that will make our communities more resilient.

Table 9.2 Environmental regulations related to construction activities

Activity or Impact	Regulations
Storm water runoff	<p>Clean Water Act permit required for discharge of storm water runoff from the construction site. Storm water general permits are issued through the U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) program or the state NPDES permitting authority. Information on the storm water requirements: www.epa.gov/npdes/npdes-stormwater-program. Information about county and State storm water requirements through the State Resource Locator at www.envcap.org/swrl/</p>
Dredged and fill materials Work affecting wetlands	<p>Clean Water Act Section 404 permit required for discharge of dredged or fill material to waters of the U.S. "Dredged" refers to material that is dredged or excavated from waters of the U.S., and "Fill" refers to material that replaces an aquatic area with dry land or changes the bottom elevation of a water body. Section 404 permits are issued by either the U.S. Army Corps of Engineers or, for certain waters, a state with an approved Section 404 permitting program. Information at: www.epa.gov/wetlands</p>
Construction and demolition wastes Hazardous wastes Wastes containing lead-based paint Fluorescent lamps containing mercury Petroleum product storage tanks	<p>The Resource Conservation and Recovery Act (RCRA) lists hazardous wastes and their allowed concentrations, and also contains requirements for managing, treating, and disposing of hazardous wastes. Information at: www.epa.gov/environmental-topics/land-waste-and-cleanup-topics Lead information at www.epa.gov/lead</p>
Emissions from heavy-duty trucks Dust emissions	<p>Clean Air Act requirements for mobile and stationary sources apply to some construction activities. Requirements are implemented primarily by states through their State Implementation Plans (SIPs). Information at www.epa.gov/air-quality-implementation-plans</p>
Asbestos	<p>The Clean Air Act's National Emission Standard for Hazardous Air Pollutants (NESHAP) for asbestos has to be met if there is a release of a Regulated Asbestos-Containing Material during demolition or renovation. Information at www.epa.gov/asbestos</p>

Adapted from U.S. EPA Federal Environmental Requirements for Construction. www.epa.gov/regulatory-information-sector/construction-sector-naics-23

Source: Adapted from U.S. EPA Federal Environmental Requirements for Construction, www.epa.gov/regulatory-information-sector/construction-sector-naics-23

- Supporting government initiatives that encourage and promote voluntary efforts for sustainability, such as tax incentives and expedited permitting consideration.
- Supporting local recycling markets for construction and demolition materials.
- Evaluating current policy and permitting processes to facilitate better climate-related decisions, such as how siting of batch plants on a job can minimize diesel consumption for trucks.
- Educating owners on ways in which climate change-related extreme weather events may impact construction processes.

The task force highlighted a number of ways in which contractors are cutting down on fuel consumption and vehicle emissions (strict maintenance schedules and voluntary “no idling” policies) and reducing the use of virgin materials (recycling construction and demolition debris, deconstructing and repurposing materials, and incorporating industrial products such as fly ash, roofing shingles, and recycled asphalt). Although concerns remain that environmental protection and sustainability measures incur added costs, there is also growing recognition that there are also market opportunities and incentive programs to encourage contractors to become more actively engaged in reducing environmental and climate impacts associated with construction and the built environment.

In the United Kingdom, the Considerate Constructors Scheme (CCS) is a nationwide initiative focused on improving the image of the construction industry. Among the focus areas, the CCS is particularly interested in reducing negative impacts of construction activities on the environment and the community. Construction projects that voluntarily register with the CCS agree to comply with five fundamental expectations of the Code of Considerate Practice (www.ccscheme.org.uk):

- Constructors should ensure sites appear professional and well managed.
- Constructors should give utmost consideration to their impact on neighbors and the public.
- Constructors should protect and enhance the environment.
- Constructors should attain the highest levels of occupational health and safety performance.
- Constructors should provide a supportive and caring working environment.

The Code of Considerate Practice amounts to a code of ethical conduct for an individual construction project site. Registered projects are visited by monitors who review site practices and make recommendations if the project is out of compliance with the code. The CCS website provides a reporting avenue for members of the public who have witnessed CCS code violations, or feel they have been negatively impacted by a project. If an employee, neighbor, or other stakeholder submits a complaint about a registered project, the CCS acts as a mediator between the complainant and the relevant site or company manager until the issue is resolved. Rather than being a burden on participating construction firms,

success stories posted on the CCS website describe how registering a project and complying with the code has helped companies take a fresh look at project plans and procedures. In addition, project managers describe how attention to the fundamental guidelines of the code assisted them in establishing a track record as a professionally run company, and resulted in new clients and more contracts. The independent review process helped companies to measure their practices against an industry benchmark allowing them to improve public perception and increase client satisfaction.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 Tanya Miller is the field engineer on a job site that is going to be visited tomorrow by a group of managers from the home office, including the company's environmental compliance manager. Tanya does a quick site inspection to make sure the fuel storage area is clean, but notices that there are some oily stains on the ground in the equipment maintenance area. The last thing Tanya needs right now is some unnecessary attention on a couple of insignificant drips, so she asks the laborers to spread a few wheelbarrows full of fresh gravel over the stained area.
 - Are there any consequences associated with covering up a small fuel spill area?
 - What do you think Tanya would say if the environmental compliance manager noticed the fresh gravel and asked her about it?
 - What might happen if the environmental compliance manager asked the laborers about the fresh gravel?
 - What might be some other options for dealing with the spilled fuel?
- 2 Luis Gonzalez is managing a large-scale mixed use development project. The project is currently in the site preparation phase and there is a fairly large exposed area where the topsoil has been removed. That night, there is a heavy rain, and when Luis arrives in the morning, there is standing, muddy water in one of the low-lying areas. Fortunately, other runoff protection measures have prevented water from leaving the site, but in order to keep things moving, Luis arranges for a vacuum truck to remove the water from the site and empty it into a nearby storm drain.
 - Are there any consequences associated with discharging the muddy water into the storm drain?
 - Are there any circumstances when it might be permissible to discharge site runoff into a storm drain?
 - What might be some other options for managing the accumulated water?
- 3 John O'Brien is the superintendent on a project that is using a fleet of earth moving equipment. There are several containers of used oil that are taking up space in the maintenance area and John wants to get rid of them. The

local waste transfer station accepts used oil, so John asks one of his laborers to drop the containers off on her way home. When the laborer arrives at the transfer station, she finds out it's closed for the day and the gate is locked, so she leaves the containers right outside the gate and goes home.

- Are there any consequences associated with leaving the containers of used oil outside the gate to the transfer station?
 - Do you see any issues with making the laborer responsible for the oil disposal?
 - What might be some other options for disposing of the used oil?
- 4 Wendy Pearson is managing a waterfront development project where the design requires piles to be driven with an impact hammer. The noise from the pile driving is extremely loud and disruptive. The project is located next to the city's busy financial district.
- What are Wendy's responsibilities to the nearby businesses?
 - What might those responsibilities be if the project was located in an industrialized area next to a low-income housing project?
- 5 Mike Tanaka is scheduling the concrete delivery for a tilt-up office project in a suburban location. The job site has been set up so that the concrete washout area will be convenient for trucks leaving the site. However, it seems that the washout container was undersized and is close to overflowing with several trucks still scheduled. Mike makes a snap decision to have the concrete trucks switch to washing out into an unlined roll-off container that is being used for construction waste. The roll-off is located adjacent to the roadway that provides access in and out of the jobsite. Mike feels fairly confident that the concrete washout will safely dry in the roll-off without causing any issues and besides, once it's in the roll-off it will be the trash hauler's responsibility.
- What decisions might have led to having an undersized washout container? Who is affected and who should bear the cost of remediating the situation?
 - As long as the roll-off container doesn't leak, are there any issues with using it for concrete washout?
 - Are there any other options that Mike could consider?
- 6 Syed Malek works the late shift on a highway bridge project in an area surrounded by rural and agricultural land. Over the last several evenings Syed has noticed a few of the crew members tossing chicken bones to the coyotes that occasionally appear near the worksite. One of the coyotes has become quite bold and now approaches the crew when they take their lunch break. Syed is not familiar with coyotes and has no idea if this is safe or not. He's afraid of making a big deal out of nothing and being ridiculed for being a "city boy" so he decides not to say anything about it.
- What are some possible consequences of Syed deciding not to say anything about the wildlife encounters? Who might be affected?
 - What other options does Syed have and what would you recommend?

Notes

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Further Reading

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10 International Construction

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Regulations and Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Further Reading

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur when executing a construction project in a foreign country.
- Describe the basic requirements of the Foreign Corrupt Practices Act of 1977 and its impact on the conduct of international business.

Introduction

In this chapter, we will examine some of the ethical situations that one may encounter in the procurement and execution of construction projects in a foreign country. The standards of ethical behavior in the country may differ from those normally accepted in the United States, and U.S. construction companies need to understand how business is transacted in the country before deciding to pursue business in that country. In addition, some business practices that are acceptable in the country may actually be unlawful for U. S. companies to adopt. International construction projects tend to present greater risk than that experienced with domestic projects, and construction firms considering entering the international construction market need to understand the risks to be faced and adopt strategies to manage each risk. However, the opportunity for greater

profits makes international construction attractive for those construction firms that are able to manage their risk exposure.

Project owners for international construction projects can be grouped into five general categories:

- United States government agencies;
- multinational corporations;
- international government agencies;
- local government agencies; and
- local private companies.

Each of these project owners presents different levels of risk. Contracts with U.S. government agencies will comply with the Federal Acquisition Regulation. Contracts with multinational corporations and international government agencies tend to be well-known international documents, such as contract documents drafted by the International Federation of Consulting Engineers (commonly known as FIDIC, acronym for its French name *Fédération Internationale Des Ingénieurs-Conseils*). Contract provisions used by local government agencies and local corporations may not be well known to U. S. construction firms. Irrespective of the project owner; labor, materials, and subcontractors usually are procured locally, and the construction contractors must comply with the foreign nation's regulations and procedures. Because non-U.S. construction firms may not be constrained by U. S. laws, it may be tempting to adopt local ethical standards. Such behavior may lead to the foreign country terminating the construction company's ability to conduct business in the country and/or may subject the company to prosecution in the United States.

Introductory Case Study

Acme Construction was interested in obtaining a contract for the construction of a major hotel in the capitol city of a foreign country and selected a project manager to investigate the situation and develop a tender for the project. The project manager requested the solicitation documents for the project and carefully reviewed them. He noticed that the contract documents to be used on the project were in a foreign language as were the solicitation documents. Since he was unable to read the documents, he hired an interpreter to translate the documents. The project manager carefully reviewed the translated documents and determined that the design of the hotel did not seem complete, but that the project owner required a lump sum tender or bid for its construction. The project location was described, but limited soils information was provided.

To obtain a better perspective of the local business environment and inspect the proposed construction site, the project manager traveled to the capitol city. While there, he met with the project owner's representative to discuss the project and visit the project site. He learned from the project owner's representative

that some of the construction materials needed for the project were not available in the country and must be imported. He learned that the procedures for obtaining customs clearance for imported materials can take significant time. He also determined that a construction firm must determine that sufficient local labor is not available before being allowed to import skilled labor and that any local labor to be hired must be obtained from local contractors. The availability of experienced subcontractors was quite limited, and project manager would need to hire local supervisors to manage local construction workers, because few of the workers speak other than the local language. The project owner's representative informed the project manager that he could ensure that Acme Construction will win the construction contract for the hotel if the company would compensate him for his efforts.

After investigating the situation in the foreign country, the project manager returned to the United States to prepare Acme's bid or tender for the project. Because the hotel design was not complete and some aspects of the site conditions were unknown, he decided to add a 30% contingency when developing the bid. Was the inclusion of the contingency ethical or legal? The project manager also decided to include a fee for the project owner's representative to ensure award of the contract and a fee for the local custom agent to ensure timely process of imported materials. Were these fees ethical or legal?

Ethical Challenges

Ethical Challenge: Gift Giving

In some foreign countries, it is common business practice to give gifts to project owners or their agents to obtain business and to government officials to obtain expedited processing of government transactions. Such practices are considered unethical, and perhaps unlawful, in the United States. It is easy to rationalize conducting business in the same manner to be competitive with other international construction firms, but it is not a good business strategy. Many construction firms, however, refuse to do business in countries where such practices are common and chose to select countries with ethical business practices.

Ethical Challenge: Construction Standards

Many foreign countries have not adopted the types of rigorous building codes that ensure that completed projects provide sufficient life safety measures for occupants. Detailed inspection of completed projects may not be required by local building officials. In such situations, it is unethical, and perhaps unlawful, for construction companies to use substandard materials or take short cuts in constructing the project. Ethical construction firms will fully comply with contract requirements, even if the work is not inspected by the owner's representatives or local building officials. The reputation of the construction firm is greatly impacted by the quality of completed projects.

Ethical Challenge: Environmental Standards

Many foreign countries may have not yet adopted rigorous environmental regulations similar to those adopted by the United States and provide no guidance on the proper disposal of hazardous wastes. Most construction projects generate hazardous wastes, such as paints or solvents, and they must be disposed of properly. Even if the country in which a project is being constructed does not have environmental regulations or standards, it is incumbent on the construction firm to determine safe means for control and proper disposal for all hazardous waste. Failure to do so represents unethical behavior.

Ethical Challenge: Project Safety

Many foreign countries do not have comprehensive workplace safety and health requirements, such as those used in the United States. In some locations, project safety is ignored by workers and management in the performance of construction operations. It is unethical not to require the same level of job site safety as required in the United States. Proper safety equipment should be provided, and workers required to use it. International construction firms should make job site safety a priority to demonstrate concern for the people working on construction projects as well as eliminate the costs of accidents. Failure to enforce good safety practices is unethical.

Ethical Challenge: Work Hours

Construction workers on many international construction projects may have been recruited outside of the country in which the project is being constructed. These workers tend to be housed in temporary project support facilities for the duration of their employment on the project. Since they are separated from their families, many of them want to work seven days per week for long hours in order to maximize their income. In some foreign countries, such practices are not allowed by local employment regulations. In other countries, there may be no prohibition to adopting such working conditions. Workers without adequate rest are susceptible to accidents and may not pay close attention to detail in their work. International construction companies should carefully monitor the number of hours worked to ensure that workers receive adequate rest. In most cases, construction workers should not be allowed to work more than six days per week. Failure to enforce procedures that focus on worker welfare are considered unethical.

Applicable Regulations and Standards

In response to investigations conducted in the 1970's, the U.S. Congress passed the Foreign Corrupt Practices Act (FCPA) in 1977 making it unlawful to bribe foreign government officials to obtain or retain business. The abuses identified in the 1970's ranged from bribery of high foreign officials in order to secure some

type of favorable action by a foreign government to facilitating payments that allegedly were made to ensure that government employees discharged certain responsibilities. The Act makes it unlawful for a company (as well as for any employee or agent) to offer, pay, or promise to pay anything of value to a foreign official for the purpose of inducing the recipient to misuse his official position to wrongfully direct business to the payer. The Act contains an exception to the antibribery prohibition for facilitating or expediting performance of “routine government action.” The statute lists the following exemptions:

- Obtaining permits, licenses, or other official documents.
- Processing governmental papers, such as visas and work orders.
- Providing police protection and mail service.
- Providing telephone service, utility services, and loading and unloading services.
- Scheduling of inspections associated with contract performance or transit of goods.

Companies that enter the international construction market must ensure that its employees and agents are fully aware of the provisions of FCPA.

Applicable ethical standards are to practice good faith and fair dealing with project owners and in the selection of material suppliers, subcontractors, and life support contractors. Any construction company planning to enter the international construction market needs to obtain legal counsel who are familiar with the contracting procedures and legal requirements of all countries in which the company plans to pursue business. This is to understand the risks associated with procurement and contracting actions and the legal framework for resolving disputes.

Construction Participant Perspectives

To be successful in international construction, construction firms must understand the contracting and business practices of project owners as well as the country in which the project is located. They must fully understand the requirements of the FCPA to ensure that none of their employees or agents engages in an unlawful behavior. Company leaders must ensure that individuals selected to lead the project teams fully understand company policy for ethical behavior. In most cases, when a construction firm decides to enter the construction market in a foreign country, they wish to receive future projects when their initial project is completed. If this is the company’s business strategy, the company must develop a reputation for ethical behavior and ensure that all employees understand their role in developing such a reputation.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 International Constructors, a U.S. firm, is interested in obtaining the contract for the construction of a major industrial facility to be located in a foreign country. The contractor's project manager requested the solicitation documents and investigated the procedure that was to be used for the selection of the construction contractor for the project. He determined that the mayor of the city in which the project is to be constructed was on the Board of Directors of the company planning to build the facility. Wanting to ensure receipt of the construction contract, International Constructors' project manager invited the mayor to lunch and promised to make a large contribution to the mayor's re-election campaign if International Constructors received the construction contract.
 - Were the actions of International Constructors' project manager ethical? Were they lawful?
 - How would you have handled the situation?
- 2 Continental Construction has a contract for the construction of a water treatment plant in a foreign country. The design documents were about 90% complete when the construction contract was awarded to Continental. During the construction of the project, Continental's superintendent noticed that the electrical design did not require installation of safety features typically required in the United States. The superintendent decided not to ask the project designer about the issue or require the installation of the safety features.
 - Were the actions of the superintendent ethical?
 - How would you have handled the situation?
- 3 National Construction Company has a contract for the construction of an oil refinery in a foreign country. The project is nearing completion, and the project superintendent discovered significant quantities of leftover hazardous materials. He asked the project manager what procedures should be followed in disposing of the hazardous materials. The project manager submitted requests for guidance to both the project owner and a local government agency. Both responded that there were no regulations related to the disposal of hazardous waste. The project manager then told the superintendent to dispose of the hazardous materials in the project landfill.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 4 Allied Construction has a contract for the construction of a power plant in a foreign country. The workforce employed on the project contains workers from multiple countries. The project superintendent noticed that several of the steel workers working on the roof of the plant were not wearing hard hats or gloves. Since the country in which the plant is being constructed has no workplace safety regulations, the superintendent chose to ignore the lack of safety equipment.
 - Was the action of the superintendent ethical?
 - How would you have handled the situation?

- 5 Cascade Constructors has a contract for the construction of a major hotel in the Middle East. Many of the workers employed on the project were imported from Asia. The workers requested that they be allowed to work ten hours per day seven days per week in order to make significant overtime wages. Cascade's project manager, seeing the benefit of early completion of the project, readily agreed.
 - Were the actions of the project manager ethical?
 - How would you have handled the situation?
- 6 Ted Jones is the project superintendent on the construction of a multi-span highway bridge in a foreign country. He visits the project site while local steelworkers are placing the reinforcing steel for the concrete bridge deck. He notices that the workers are all wearing sandals while working with the reinforcing steel. There are no workplace safety requirements in the country where the bridge is under construction. Since many local construction workers typically wear sandals, Ted took no action.
 - Was the action of the superintendent ethical?
 - How would you have handled the situation?
- 7 International Construction Group has a contract for construction of a petrochemical plant in a foreign country where the primary language is Arabic. Many of the contractor's workers are from Korea and Pakistan and neither read nor speak Arabic. All of the safety signage on the construction site is in Arabic in compliance with contract requirements. Since not required by the contract, the contractor's project superintendent decided not to install multi-lingual safety signage.
 - Was the decision of the project superintendent ethical?
 - How would you have handled the situation?

Further Reading

For more information on the Foreign Corrupt Practices Act, please visit the Department of Justice website at www.justice.gov/criminal-fraud/foreign-corrupt-practices-act.

11 Technology and Digital Information

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion

Learning Objectives

After reading this chapter, you should be able to:

- Describe the ethical challenges that can occur regarding the shared use of collaborative digital information.
- Describe the ethical challenges that can occur regarding the disclosure of private or confidential information.
- Describe the ethical challenges that can occur regarding the use of electronic mail.
- Describe the ethical challenges that can occur regarding the use of social media.

Introduction

As we have seen in previous chapters, ethical issues faced by the construction industry, as for business in general, deal largely with matters pertaining to honesty and fairness in the performance of work, the rights of employees in the workplace, and personal and corporate conflicts of interest. Construction companies are now facing new issues related to the enhanced use of and reliance on technology and digital information. A major issue related to the increased use of technology is cybersecurity and measures taken to protect project and corporate data. In this

chapter, we will explore some of the ethical issues related to use of technology, but not the technical protective measures needed for cybersecurity.

Investing in construction technology is helping construction companies facilitate digital transformations in their workflow to maintain a competitive edge. The increased capability and portability of tablets and smartphones and the development of data collection and analytical applications have led to a rapid adoption of digital tools for managing construction projects. The most frequently used mobile devices are smartphones, followed by laptops and tablets. Using mobile devices and software to obtain instant access to important documents and information, construction managers are making enhanced use of technology to work more efficiently. Some of the major uses of mobile devices in executing construction projects include:

- viewing building information modeling models;
- viewing installation drawings;
- viewing project documents;
- creating project documentation, such as requests for information and emails; and
- entering time information for payroll.

The use of building information modeling (BIM) software provides space for collaboration among project participants because each person and expertise area can add their piece to the same model, instead of using multiple versions of two-dimensional drawings. This way, the model evolves as people contribute, streamlining the process and increasing efficiency. Use of BIM models has increased in construction, and advances in software development have led to increased use of project websites for collaboration among project participants.

Introductory Case Study

Henry Gonzalez is a project manager for Coastal Construction Company and is preparing a proposal for a design–build highway project. A three-dimensional BIM model has been developed for both the underground and above ground construction, and the model has been placed on a collaborative project website for use by the design and construction teams. The website also contains estimating software that is being used to price various design options for the project and scheduling software that is being used to develop preliminary construction schedules. During the time the proposal was being developed, Henry attended a construction professionals dinner meeting that was attended by project managers from several construction companies. Several of the project managers sitting at Henry’s table engaged in discussion regarding the highway project including design options being considered and cost implications of the various design options. Is this discussion considered ethical?

Ethical Challenges

Ethical Challenge: Protection of Company Proprietary Information

Because construction is a competitive industry, it is important to protect a company's business information. Confidential information about a company's plans for future bids, bidding strategies, employee data, customer information, and business plans should not be disclosed to anyone outside the company. Company-developed documents should be stored in protected web locations unless they are intended for public dissemination. Disclosure of company proprietary information is considered unethical.

Ethical Challenge: Protection of Shared Project Information

Many contractors are using project websites and cloud-based data sharing to facilitate collaboration among project participants. These project websites often contain project specifications, construction drawings, project coordination meeting minutes, requests for information, BIM models, documentation management logs, construction schedules, and project budget information. It is critical that only authorized individuals make changes to any of these documents and that any proprietary information not be accessed by unauthorized individuals. It is unethical to grant unauthorized individuals access to project websites.

Ethical Challenge: Protection of Private or Confidential Information

Digital information is both easily accessed and highly portable. Companies often rely on confidentiality agreements to set boundaries on what can and cannot be shared outside of the firm. Confidentiality or non-disclosure agreements are legal contracts that restrict people from sharing sensitive information to which they may have been granted access for business purposes. By signing such a document, an employee agrees to protect and not disclose the information described in the agreement. Employees have an ethical and legal obligation to comply with the requirements of any confidentiality or nondisclosure agreements by not intentionally revealing protected information. Non-disclosure requirements may extend to subcontractors and vendors who have access to proprietary project information. Sharing confidential information that is protected by a non-disclosure agreement is not only a violation of a legal contract; it is also a breach of accepted business ethics and a betrayal of trust.

Ethical Challenge: Use of Email

Email is widely used in construction as an efficient means of communicating with internal and external recipients. To protect against abuse, many companies have developed email policies to ensure that employees use their email in a manner

that is aligned with the companies' aims. These policies are adopted to ensure that employees are informed that they will be held accountable for their actions via email, safeguard the reputation of the company, and protect against data breaches and corruption of company computational equipment. It is considered unethical to use email to transmit offensive or defamatory material, copyright material, or proprietary information.

Ethical Challenge: Use of Social Media

The growing popularity of social media-based information comes with ample opportunity for unethical behavior including misrepresenting oneself or others; or posting abusive, embarrassing, or harassing comments, links, or photos. Firms that rely on social media as a marketing tool need to have policies and procedures in place to help employees know what is and is not appropriate to post and link to. Company social media sites need to be carefully monitored and administered to prevent inappropriate content. Firms that use social media in their recruitment efforts need to verify posted credentials, and have a healthy suspicion of information that appears either overly complimentary, or unjustifiably negative.

Applicable Standards

With most company records now stored electronically, firms can be at great risk if sensitive or confidential information is accessed by unauthorized personnel or used by authorized personnel in violation of the company's code of conduct. Technical design information, construction methods and sequences, client lists, marketing strategies, and historical job cost data are examples of confidential and proprietary information that give a company its competitive advantage. Employee records and human resource data that contain Social Security numbers, bank account numbers for direct deposit of paychecks and other private data must also be safeguarded against exposure or theft. All employees should receive training to help them recognize sensitive information and know how to use it appropriately. Construction companies need to develop corporate policies for protection of company information and use of email and social media.

Construction Participant Perspectives

A first level of data protection is often the company's private intranet, accessible only by employee login. There may be different permission levels so that employees only have access to the data that they require to perform their jobs. Electronic data must be backed up securely and frequently, not only to protect against loss, but also to allow access to previous versions of documents that may have been inadvertently or inappropriately changed or edited. Employee training should include instruction on creating secure passwords and emphasize the importance of not sharing or revealing login or password information.

In the construction industry, any competitive advantage can mean the difference between winning or losing a bid or proposal. The more you know about the way your competitors win projects, the better you can design your own winning strategy. The most obvious legitimate source of competitive information is that which is publicly available, including news articles and press releases, company newsletters and brochures, public filings, and information available on a company's public website. There is a simple rule of thumb to determine whether competitive information has been ethically obtained: if the means used to obtain the information involve lying, misrepresentation, or deception, the tactic is probably unethical.

Although a company may enjoy a short-term benefit by illegally or unethically obtaining information about a competitor, such practices never pay off in the long run. Stealing confidential information is not a successful long-term business strategy, and is no substitute for developing sound marketing and business development practices based on satisfied clients and a solid reputation for high quality performance.

Confidentiality agreements or contractual clauses are particularly important on projects that use a collaborative approach. A BIM model is an example of a collaborative effort that relies on massive data sharing. If a project will require the use of a model that is jointly created and shared, it is crucial for all parties involved to understand and agree upon who owns the model, who are the authorized users, and when each user's access to the model begins and ends.

When multiple parties participate in the planning and creation of the BIM model, who is ultimately responsible for errors in design or code compliance? During the planning stage, if a contractor finds a design error that can potentially lead to a substantial change order in his or her favor, that contractor has an ethical obligation to communicate the error to the other parties. An ethical check would most certainly reveal that the contractor would not wish to be held responsible if he or she were the one who ended up paying for the mistake.

Ethical issues can also arise when multiple parties have access to and can make changes to a BIM model if one party decides to make changes to their own advantage without communicating those changes to the other parties. For example, a mechanical contractor who decides to alter the configuration of piping or ductwork could negatively impact the performance of the electrical contractor if those alterations are not communicated and agreed upon ahead of time. The project's BIM protocol should anticipate such challenges and make sure all parties are aware of and committed to following appropriate procedures.

Many people have an account on a social networking website and may use social media at work. Even if social networking sites are blocked on the company network, employees can still gain access via smartphones or other personal devices. Although some employees may only connect to their social network during breaks, many others may check in more frequently or are constantly connected.

Unless an employee has the specific job function to use and monitor social media for the company, it's probably safe to assume that very little (if any) of the

time spent by most workers on social networks during work hours is required to accomplish their jobs. Personal time spent on social networks might have nothing to do with the employer, or could include commentary about the employer, work projects, colleagues, or clients. This commentary could not only compromise company confidential information, but social networks also present a potential outlet for retaliation, and could inhibit workers' freedom to report workplace misconduct.

So far, most companies do not perceive use of social networks by employees to be a significant risk, although it has close ties to data privacy and confidentiality, which companies almost universally identify as a significant risk. Firms are developing policies and training about the use of social networks in the workplace, as well as addressing social media use in the company code of conduct. Some companies are taking the initiative to incorporate social media as a component of their ethics and compliance training as another way to engage employees. With the rapidly changing landscape of social networks, company policies should focus more on general behavior guidelines and ethical use of social media and less on the features of specific networks.

In addressing social networking in a company code of conduct, employers might consider adding another question to their ethics checklist: "Would you feel comfortable if you read about this action in a post on a social network?" Ultimately, training employees about appropriate use of social media is just another aspect of professional communication in general. From an ethical standpoint, social networking policies often refer to the golden rule—that is, employees should consider the potential consequences and impacts that a post or comment on a social network might have on the company or a coworker, and imagine being on the receiving end of that action.

Questions and Scenarios for Discussion

Evaluate the following scenarios.

- 1 Tom Smith is a cost estimator for a commercial construction company that self-performs rough carpentry and concrete scopes of work on all of their major projects. Tom has created a database of historic crew productivity information from the company's past projects. He uses this historic data to prepare cost estimates for contract change orders and for project cost proposals. A cost estimator recently hired by a competing construction company asked Tom to share his productivity data.
 - What action should Tom take regarding the request? Why do you make this recommendation?
- 2 Sarah Brown is project manager on a construction project involving the construction of a major hospital sited in a congested metropolitan area. To facilitate collaboration on the project, a BIM model has been developed showing both the underground foundation and parking garage as well as the above ground structure. The curtain wall subcontractor has requested access to the

model including the ability to modify some structural elements to facilitate the installation of the curtain wall elements.

- Should Sarah allow the curtainwall subcontractor to modify BIM model structural elements?
 - What action should Sarah take? Why did you make this recommendation?
- 3 Thomas Jackson is interested in seeking employment as a project superintendent for Stellar Construction. To be able to request an appropriate salary, he is interested in determining the monthly salaries of the project superintendents currently employed by the company. He asks the company hiring manager for the salaries of the company's project managers.
- Should the hiring manager provide the salary data to Thomas?
 - What would you do if you were the hiring manager?
- 4 A project engineer was accidentally copied on an email from a friend who works for one of the company's current clients. The email included cost detail plus owner analysis and comments on four contractors bidding on an unrelated project. The four contractors are all competitors of the project engineer's company.
- What action should the project engineer take?
- 5 Janet White is a project manager for Allied Construction, a contractor that specializes in the construction of mixed-use high-rise buildings. She also has a personal business in which she works on weekends as a real estate agent. She is using her Allied Construction email address to advertise and conduct her real estate business.
- Is Janet's use of her Allied Construction email to conduct personal business ethical?
 - What action should Allied Construction take regarding Janet's use of her employer's email account?
- 6 Alpha Construction has just started a blog to highlight its current projects. The blog, which is linked to the company website, features photos of different projects with brief descriptions. The company's webmaster and the marketing manager both have administrative rights to the blog site. The marketing manager thought it would help boost the company's reputation if the blog posts received some positive comments. She created a half dozen email accounts with different usernames and used them to post comments to the blog praising the company for their high-quality work and dedication to the community. Shortly afterwards, Alpha was contacted by two new prospective clients inviting the construction company to bid on upcoming work.
- Is this an ethical marketing strategy?
- 7 Trisha Brown is Baxter Construction Company's project manager for the construction of a water treatment plant. She conducts project coordination meetings weekly with the project team to address issues and coordinate work on the project. The minutes of these weekly meetings are posted on the project website as a record of topics discussed and decisions made. The

project manager for the mechanical subcontractor participates in the weekly meetings and has requested authorization to edit the meeting minutes posted on the project website.

- Should Trisha allow the mechanical subcontractor project manager to edit published meeting minutes?
- Is it ethical for the subcontractor project manager to modify published meeting minutes that have been approved by meeting participants?

12 Construction during Crisis

Chapter Outline

- Learning Objectives
- Introduction
- Introductory Case Study
- Ethical Challenges
- Applicable Standards
- Construction Participant Perspectives
- Questions and Scenarios for Discussion
- Note

Learning Objectives

After reading this chapter you should be able to:

- Give examples of crisis situations that can occur on a construction project due to events happening within a company or project (internal factors) or outside the company or project (external factors).
- Describe the ethical challenges that can occur when a construction company or project is confronted with a crisis situation.
- Imagine and evaluate potential consequences resulting from ethical decisions made during the response to a crisis situation.

Introduction

What constitutes a crisis in the construction industry? In general, a crisis can be anything that disrupts the flow of business as usual, necessitates a change in plan, or poses a threat to the project or workforce. We typically think of a crisis as resulting from external factors beyond our control such as natural disasters (weather events, earthquake, floods), human-caused acts of violence or terrorism, or the appearance of contagious disease epidemics. But a crisis can also result from internal factors, such as changes in company management, key project personnel, or employment policies.

Construction project budgets often contain contingency funds that are held in reserve in order to respond to unforeseen conditions. However, merely having a contingency fund available does not by itself prepare a project team for implementing an appropriate and timely response to a crisis.

Just as with the project itself, a crisis can be defined by its scope, magnitude, and duration. And just as with the project, there are common elements of effective crisis response no matter what the size or type.

What is the difference between crisis management and risk management? The topic of identifying risk on a construction project is discussed in Chapter 2. Identifying risk means understanding where the wrong decision might negatively impact your project's work plan, compromise your company's core values, weaken your reputation, or even lead to illegal actions. That is, poor risk management can result in a crisis. Even large firms with decades of experience can quickly find themselves mired in a crisis situation as a result of unforeseen events.

An example of this occurred during the Fall 2020 hurricane season. The Civil Southeast division of Skanska USA had the contract to rebuild the Pensacola Bay Bridge in Florida. In September 2020, as Hurricane Sally approached Florida, Skanska notified the Florida Department of Transportation (FDOT) to let it know that emergency preparations were under way and the company would be requesting additional time and money for associated delays. As Hurricane Sally made landfall in Alabama on September 16, the storm generated wind gusts in the Pensacola area as high as 92 mph. Barges being used by Skanska in construction of the span broke loose from their moorings and damaged not only the bridge but other nearby property as well.¹

In a court filing, attorneys for several businesses alleged that Skanska did not follow procedures outlined in its own hurricane preparedness plan and, instead, continued to work on the bridge project despite warnings from the National Weather Service that tropical storm-force winds were on the way. Skanska pledged to work with FDOT on inspections and to develop a repair plan for the bridge.

How can a company prepare for the unexpected? The key is not to try and anticipate every possible crisis event, but to prepare response strategies that are robust and adaptable to a variety of situations. Preparing for crisis means identifying possible scenarios, ranking the severity, assigning responsibility, and establishing a timeline to keep people safe and informed. A designated crisis response team should include (at a minimum) a leader, a safety coordinator, and a communications coordinator who can handle public relations, traditional and social media, and website content. An example of effective crisis preparation is presented later in this chapter, under Construction Participant Perspectives.

In this chapter, we are making a distinction between crisis preparation and response and customary safety preparedness, although there can certainly be crossover. For the purposes of this chapter, a crisis is considered to be something unforeseen and not addressed in the project health and safety plan (ethical issues

related to job site safety are discussed in Chapter 6). However unexpected a crisis situation may be, management still has a duty to be prepared with a general response protocol, including a chain of command and communications guidelines that can be applied to many different situations.

Introductory Case Study

The general contractor on a large stadium expansion project sent 32 of the project's 275 daily workers home after they tested positive for the novel coronavirus. After ordering the affected workers off the job so that they could isolate, the contractor issued additional personal protective equipment (PPE) to the remaining crews but did not shut down the project. Steps were taken to sanitize the site, and everyone entering the facility was required to attend a training session about social distancing and the proper use of PPE. An email announcement was sent out to subcontractors with boilerplate language stating that the affected workers were wearing proper COVID-19 PPE at all times while on site. Did this response adequately address the concerns of all project personnel and the related community? If the affected workers were all equipped with proper PPE, then how did so many workers become infected? Was the PPE unavailable or not used correctly? Was there a lack of supply or a lapse in training? Did workers become infected offsite, bringing the disease to the project, or were they infected on the job, spreading the disease to the community? It is likely that the contractor did not have the answers to these questions. What additional steps could they have taken to protect and reassure their workers and the community?

During a crisis, effective communication can be difficult due to conflicting emotions and priorities. There may be unverified rumors and misinformation. There may be people who have a high level of concern for themselves and their family members, and others who have little concern and consider their coworkers to be overreacting. It is very challenging to manage a response that will satisfy such a wide range of views. Above all, those in charge of the response must be straightforward, stick to the known facts, avoid speculation, and provide consistent and honest messaging.

Ethical decisions that must be made include how much information should be divulged, who should be informed, and when the information should be conveyed. These decisions are closely related to the level of trust between a company and its employees. Employers must ask themselves, has our management established a track record of open and honest communication so that our employees trust us to tell them what they need to know to keep themselves safe?

Ethical Challenges

In the following sections, we will examine some of the common ethical challenges encountered by construction companies in response to crisis situations.

Ethical Challenge: How Much Information Is Enough?

It's not uncommon for company management to withhold information in the belief that whatever people don't know won't hurt them. If you put yourself in the shoes of the employees or the community however, this tactic appears selfish and deceptive. It assumes that people will not be able to understand and will not make informed decisions about their actions. The most straightforward approach is to share known facts and the company's planned response. It is never right to guess, speculate, share unverified information, or make something up. Not only do these approaches mislead people, but when the real facts do become known, the sharing of misinformation will result in eroded trust and a tarnished reputation.

A company can only speak to the scope of work it is responsible for. In communications, company management must discuss only what is known rather than make guesses, assumptions, or theories. A company can only be credible when it is communicating facts. A company may believe that repeating unverified rumors makes them look more informed and in control. In reality, the most authoritative and trustworthy statements begin with the words, "This is what we know."

In a crisis situation, there may be great pressure to take immediate action. The emphasis on doing something may overshadow the ethical aspects of the situation, an occurrence known as "ethical fading." There may be so much focus on the appearance of being in charge of the situation that important ethical concerns fade into the background and are overlooked. A project manager may believe it is in the best interest of the project to withhold information and keep the work going in the event that the worst will not come to pass. This should be seen for what it is—a business decision in which ethical aspects take a backseat to what is perceived to be the best possible business outcome. In the Introductory Case Study, the contractor rushed to release a generic press release that stressed the adherence to safety protocols but provided no evidence that those protocols were effective. The business decision was to downplay the risk in order to keep trained workers on the job. The result was a quick but ineffective approach that ended up putting people in danger. Box 12.1 presents a different case study where honest and sincere messaging demonstrated the company's integrity and trustworthiness in the aftermath of a terrible event.

Box 12.1 Overland Park Fire

A massive eight-alarm fire started by welding torch sparks destroyed two apartment buildings under construction at CityPlace, a multimillion-dollar mixed use development in Overland Park, Kansas on March 20, 2017. The fire, spread by high winds, also damaged 25 nearby residences, a city fire truck, and other fire equipment.

The cause of the fire was captured on surveillance camera photos that appeared on the website of OxBlue, a surveillance security service that focuses exclusively on monitoring construction sites. For almost 24 hours, the photos were publicly available and were viewed and reported on by local media, before being removed from public view. The photos showed what appeared to be someone at the construction site with a gray or silver pickup truck carrying mobile welding equipment. In another photo at the same scene, taken 30 minutes later, the person and truck were gone, but a small fire was visible at the same location. Nearby residents reported hearing a large boom and seeing smoke at almost the exact time of the photos.

About 24 hours after the fire, Ken Block, managing principal with project developer Block Real Estate Services released this statement:

All of us at Block Multifamily and The Royale at CityPlace owe an enormous debt of gratitude to the numerous firefighters, police and first responders who were onsite immediately and who worked around the clock. We credit them with saving lives and property. They are genuine heroes.

Relief agencies, churches and hotel partners leapt into action immediately to provide comfort and care to those affected. We truly live in a compassionate, supportive community.

We at Block plan to remain in the neighborhood, for as long as needed, to provide assistance to all of those affected and to support them in their time of need.

Our hearts are heavy over the loss of cherished family pets and personal property.

For those residents affected who need assistance or who seek more information, Block has set up an email address and phone number specifically for these inquiries.

We are sincerely humbled by all of the offers to provide assistance to those displaced. We encourage donations to The American Red Cross, which has been providing direct assistance to those affected.

We continue to keep all of those impacted in our thoughts and prayers.

The General Contractor for the project, Titan Built, also issued a statement at the same time:

We are deeply saddened by the circumstances of yesterday's fire at CityPlace. Our dedicated team has worked diligently on construction of the development, and were heartbroken by the destruction on the property and in the adjacent neighborhoods.

Our primary concern is for the health and welfare of employees and the surrounding neighbors. We are very grateful for the heroic efforts of the various fire departments that responded to the situation.

Titan Built has meticulous safety protocols in place; in our 42 year history, we have never experienced an incident such as this. We are closely working with the Fire Department and actively participating in the investigation to determine the cause, all toward implementing preventative processes in the future.

Titan Built partnered with Block Multifamily Group, a division of Block Real Estate Services, created a relief fund to provide assistance to those displaced by the fire, and also reimbursed the city for the damaged fire equipment.

Following the fire, Titan Built modified their work procedures for the project, moving the “hot work” welding activity off-site and transporting the completed work to the jobsite.

This event shows effective crisis communications in the aftermath of a terrible accident. Both the developer and the general contractor took immediate responsibility and responded together with statements that expressed concern, compassion, and support for the workers and the community. The general contractor’s follow-up change in work procedures demonstrates a commitment to corrective action to prevent similar incidents from happening in the future.

Sources: Block, Contractor Issue New Statements on CityPlace fire, *Kansas City Business Journal*, March 21, 2017; Surveillance Pictures Show Figure at Overland Park Construction Site Just Before Fire, *Fox4 News Kansas City*, March 21, 2017; Huge CityPlace Fire a Year Ago Held Lessons for Overland Park, *Kansas City Star*, March 20, 2018

Effective messages are empathetic and address values. It is vital to anticipate the need for risk communication and to prepare for it. It is very difficult to make empathetic statements. They often do not come naturally, hence the need to prepare.

Ethical Challenge: Who should be informed?

We’ve all heard the phrase that something is on a “need to know” basis. Who needs to know about an impending crisis situation? Should the information stay within the company? Should the community be informed? What about upper management or shareholders? The answer to this is similar to that concerning how much information is enough. Information spreads quickly, especially on

social media. Issuing a timely statement to project personnel, company management, suppliers and subcontractors, and the local community helps assure that the facts spread faster than the rumors. Because information is shared so readily, everyone should receive, or have access to, the same set of facts.

In the rush to be responsive and establish a positive message, crisis communicators should also be aware of ways in which their messaging may overlook non-English speakers. In some parts of the United States, a large part of the construction workforce is Spanish speaking. Communication strategies should include preparing bilingual messages to make sure the information is inclusive.

Ethical Challenge: When to Inform?

As an employee, would you want to receive immediate, factual information about a critical situation even if there were still unknowns? Or would you prefer to be left in the dark until your company is ready to issue a statement that has been reviewed and approved by the corporate office? If you are the employer, would you rather make sure all the known facts are made public as soon as possible, or wait until you have more information that might cast the situation (and your company) in a better light? Once again, the answer lies in communicating the facts, and only the facts, as they are known. Establishing trust early on means that concerned employees, business partners, and the community will continue to rely on you for accurate information.

When people are upset, they may have difficulty hearing, understanding, and remembering information. They tend to focus on the negative and distrust that others are listening, caring, or competent. They may turn to social media to find out what's going on, where they can be exposed to more rumors and hearsay than facts. Knowing this, a company can use social media to their advantage to communicate factually and honestly with their employees and with the public. Box 12.2 presents tips for using social media in a crisis situation.

Box 12.2 Crisis Communications

Best practices for responding to social media reports:

- Prepare a website in advance that can go live when needed and keep news of the incident separate from the company's main website.
- Keep reporters in the loop with available facts. Even minimal news in the early hours of an incident will reduce the risk of reporters looking to social media to fill in the blanks.
- Use "buy time" statements that contain basic information and that let the media know that company representatives are working on getting answers to their questions.

- Designate an employee to monitor the media for disinformation and quickly correct anything that's false, whether in print, broadcast, or social media.
- Provide media training for employees, who are often the first line of information in a crisis.
- Make sure subcontractors and other partners are on the same page. Consider requiring subcontractors to obtain company approval before releasing any information, statements, or images to the media or on social media.
- Consider all types of risks to a contractor's reputation, beyond the predictable weather events and employee accidents.
- Realize that negative social media posts or comments don't always warrant a response. Avoid responding directly to negative comments on social media that will only escalate a bad situation. Instead, consider balancing the negative by posting other stories showing the company's positive culture, benefits, and community outreach.

Source: Jenn Goodman, Deconstructing a Crisis: After an Accident, 1 Tweet Could Ruin a Contractor's Reputation, *Construction Dive*, November 25, 2019, www.constructiondive.com/news/deconstructing-a-crisis-after-an-accident-1-tweet-could-ruin-a-contractor/567062 (accessed March 11, 2021)

Depending on the nature of the crisis, the communications process may continue for weeks or months after the event. In particular, and especially if a fatality is involved, follow-up communications with family, friends, and coworkers may require counseling for grief, post-traumatic stress, suicidal thoughts, and other mental or emotional distress. Construction personnel are typically not trained to provide these types of communications. Knowledge of and access to the right resources is therefore a critical component of preparedness planning.

Applicable Standards

The General Duty Clause of the Occupational Safety and Health Act (OSHA) of 1970 requires employers to furnish to each worker "employment and a place of employment, which are free from recognized hazards that are causing or are likely to cause death or serious physical harm."

OSHA's PPE standards for construction (29 CFR 1926 Subpart E) are relevant to preventing occupational exposure to infectious disease in general, and COVID-19 specifically. These standards require using gloves, eye and face protection, and respiratory protection when job hazards warrant it.

In addition, the provisions of OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) offer a framework that may help control some sources of a virus, including exposures to respiratory secretions.

Construction Participant Perspectives

The Associated General Contractors (AGC) provides abundant links and resources on their website related to crisis management, including presentation slides, articles, and podcasts (<https://risk.agc.org/crisis-response-resources>). Through these materials, company representatives share their best practices and lessons learned. One of the firms sharing what they have learned from their experiences handling crises is JE Dunn Construction Company.

Preparation for crisis situations is a top priority for JE Dunn at the highest level of company leadership, and was reimagined with the construction of their new Kansas City headquarters in 2009. With a large number of employees now located in a single office building, company executives felt it was their duty to have a robust crisis response plan in place. Possible scenarios that launched their planning process included weather events, a bomb threat, or an active shooter. Planning then expanded to include not just their home office, but all their regional offices as well as project job sites, which were particularly challenging due to their constantly changing nature.

Beginning with volumes of available research, the JE Dunn team applied their experience in lean construction practices, refining their plan until they had an easily navigated framework with clear details on who, how, and what to communicate in a crisis situation. The plan incorporates company guidelines and structure, but is also flexible enough to be readily adapted to a specific field office or job site. In essence, the JE Dunn crisis response plan has two main components: communication protocols and training.

Within any organization, a crisis at JE Dunn initiates a flow of communication between the site of the event and the company's higher management. Opportunities for miscommunication are numerous as different people become involved. The company helpfully visualizes the project site, regional office, and national headquarters as separate "swim lanes" recognizing that the best way to maintain focus, and prevent confusion and mixed messages is to make sure people don't jump from lane to lane as they try to assist before fully understanding a situation. Simplicity is key. A complicated, lengthy procedures manual will not be workable in a crisis situation when time is of the essence. To streamline communications, JE Dunn created pocket cards identifying core duties and including brief statements to serve as reminders of what people had already learned in training sessions. Responsibilities are identified by position rather than by specific individual to avoid having to issue updates every time someone changes assignments or phone numbers. The company's communication plan also looks beyond the crisis situation itself, to consider how employees or the community might be impacted psychologically after an event. This is especially important in the case of a fatality, when professional, and perhaps bilingual crisis

counseling may need to be considered to help people process the events and be able to re-engage with the worksite.

A critical aspect to preparedness is conducting regular trainings for those who are in a position to be a crisis response leader. At JE Dunn, crisis response trainings are conducted at least annually, but could occur more frequently if there are major changes in organization, policies or conditions.

Throughout the planning, preparing, implementing, and improving their crisis response plan, JE Dunn strives to address the ethical challenges of who should be informed, when to inform, and how much information is enough.

Questions and Scenarios for Discussion

Evaluate the following scenarios:

- 1 You are the owner of Professional Riggers, Inc., operating leased cranes for downtown high-rise projects. During one of your projects, the crew operating the crawler crane to install rooftop equipment observed high wind gusts and decided to lower the boom to a secure level. During the descent, the crane toppled onto the street, killing one pedestrian and injuring three others. The damage from the fall caused leaks in a water main and in multiple gas lines. The crane had been inspected by city officials earlier in the week and found to be in full compliance with all requirements. It was rated to withstand wind gusts of up to 25 miles per hour. Daily log entries showed that wind gusts were measured at 20 mph when the crew decided to secure the crane.
 - Following the emergency response, what is your company's immediate public statement and who should be responsible for making it?
 - What are your priorities and concerns for communicating with the crew that was operating the crane during the accident?
- 2 A project manager learns that her superintendent has been posting racist comments on his personal social media account. By the time she finds out about it, screenshots of the comments have already been captured and distributed widely among project personnel and have made their way to the local television news. A variety of comments across social media are expressing outrage, not only at the superintendent, but also at the project manager, the field office, and the entire company for allowing a culture of racism.
 - Who do you think should communicate with the media and the public in this situation? What would your message be?
 - Who do you think should communicate with project personnel and what message would be important to deliver internally? Is internal messaging different from public communication? Should it be?
 - What follow-up would you recommend, and who would you inform about follow-up actions?
- 3 During the peak of the COVID-19 crisis, a company decided to use worker tracking technology to ensure their workers were maintaining social

distancing and to enable contact tracing in the event a worker contracted the virus. Each worker was required to wear a location tracker, which logged his or her location continuously while on the job. The company has since decided to continue using the trackers in the interest of improving project safety. The company insists that the data provided by the trackers is valuable for preventing accidents and near misses but some workers feel the trackers pose a serious invasion of privacy.

- While workers might have accepted wearing trackers during the peak of the pandemic because they believed it to benefit their own personal health and safety, they might be unwilling to continue doing so once they perceive the urgency has passed. How might the company keep using the technology while addressing privacy concerns?
 - Should there be consequences for workers who refuse to wear the trackers? Should the consequences be the same for long time versus new employees? For craft workers versus staff such as field engineers?
- 4 The field office for a solar energy construction project in a rural location received a series of phone calls warning of a bomb on the job site. The caller also threatened to shoot workers from a nearby wooded area unless work on the project stopped immediately. Work on the project was halted for over a week until an investigation resulted in the arrest of the individual responsible for the threats.
- Following the arrest, how can the contractor address their workers' and subcontractors' heightened concern for their safety at work? What responsibility, if any, might the contractor have to workers' families and residents in the local community? What steps might the contractor take to prepare for a similar event in the future and who do you think should be assigned a responsible role?
 - What do you think the project owner's role or responsibility should be in this scenario?

Note

- 1 ENR. (2020). Skanska Will Work with Florida on Barge-Caused Damage to Pensacola Bay Bridge, *ENR*, September 20. Retrieved from www.enr.com/articles/50108-skanska-will-work-with-florida-on-barge-caused-damage-to-pensacola-bay-bridge.

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