



مدیران حرفه‌ای صنعت ساخت (بر اساس سندی از انجمن مدیریت ساخت آمریکا (CMAA))

فصل دوم: پیاده‌سازی رفتار حرفه‌ای در صنعت ساخت

بخش سوم: مدیریت روابط با کارفرما

ارائه دهنده:

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What we will learn?

- ☐ Learning objectives
- ☐ Introduction
- ☐ Introductory case study
- ☐ Ethical challenges
- ☐ Applicable regulations and standards
- ☐ Construction participant perspectives
- ☐ Questions and scenarios for PRACTICE
- ☐ Notes

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CONSTRUCTION PARTICIPANT PERSPECTIVES

Ethical clients

- ❑ 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.*

- ❑ 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.*

Ethical contractors

- ❑ 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**
 1. A code of business ethics and conduct,
 2. A compliance training program, and
 3. Procedures for reporting and taking corrective action.

QUESTION AND SCENARIOS FOR DISCUSSION

- ☐ 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?*

- ☐ 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?*

- ☐ **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?*

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- ❑ 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?*

- ☐ **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 and further reading

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

Ethisphere Institute. (2021). The 2021 World's Most Ethical Companies Honoree List. Available from <https://worldsmostethicalcompanies.com/honorees>.

James, R. (2009). *The Integrity Chain*. 3rd edition. Raleigh, NC: FMI Corporation.

Cornell University Law School Legal Information Institute. U.S. Code. Available from www.law.cornell.edu/uscode/text.



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- ☐ Further reading

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Learning objectives

❑ After reading this section, you should **be able** to:

- ❖ **Describe** the **ethical challenges** that can occur **when executing** a construction project in a foreign country.
- ❖ **Describe**
 1. **Basic requirements** of the foreign corrupt practices act of 1977 and
 2. **Its impact** on the conduct of international business.

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INTRODUCTION

Ethical behavior in international projects

- ❑ In this section, 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
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.

Ethical behavior in international projects

- ❑ **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
 1. **Understand the risks** to be faced and
 2. **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.

Who are project owners in international projects?

Project owners in international construction projects

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

1. United states government agencies;
2. Multinational corporations;
3. International government agencies;
4. Local government agencies; and
5. Local private companies.

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Contracts with international owners

- ❑ Each of these project owners presents **different levels of risk**.
 1. Contracts with **U.S. government agencies** will comply with the Federal Acquisition Regulation.
 2. 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 International Des Ingénieurs-Conseils).
 3. Contract provisions used by local government agencies and local corporations may **not be well known** to **U. S. construction firms**.

How about execution part?

International project execution

❑ 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

1. **Lead** to **foreign country terminating** the construction company's ability to **conduct business in the country** and/or

2. **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.

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Case #1

- ❑ 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

- ☐ 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 choose to select **countries with ethical**
business practices.

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.

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, 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 **a duty of the construction firm** to determine safe means for control and proper disposal for all hazardous waste.
- ☐ **Failure to do so** represents unethical behavior.

- ❑ **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.

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.

Work hours

- ☐ 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 STANDARDS

Foreign Corrupt Practices Act (FCPA)

- ❑ 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 Foreign Corrupt Practices Act (FCPA), which prohibits both United States and foreign corporations and nationals from offering or paying, or authorizing the offer or payment, of anything of value to a foreign government official, foreign political party, party official, or candidate for foreign public office, or to an official of a public international organization in order to obtain or retain business; and

- ❑ 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.

Foreign Corrupt Practices Act (FCPA)

- ☐ 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.**”

What are the exemptions?

Exemptions of the act

❑ 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.

"Routine governmental action" does not include any decision by a foreign official to award new business or to continue business with a particular party.

Employees in FCPA

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

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Applicable ethical standards

- ❑ 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 **legal framework** for resolving disputes.

CONSTRUCTION PARTICIPANT PERSPECTIVES

Become successful

- ❑ **To be successful** in international construction,
construction firms must understand
the contracting and business practices of
 1. **Project owners**
 2. **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

- ❑ **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**.

QUESTION AND SCENARIOS FOR PRACTICE

- ❑ **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?*

- ❑ **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?*

- ❑ **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?*

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.

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بخش پنجم: مدیریت تکنولوژی و اطلاعات دیجیتال

ارائه دهنده:

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Learning objectives

❑ After reading this section, 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

What is the issue?

❑ As we have seen in **previous sections**, ethical issues faced by the construction industry, as for business in general,

deal largely with matters **pertaining** to

1. Honesty and fairness in the performance of work,
2. Rights of employees in the workplace, and
3. Personal and corporate conflicts of interest.

What are new issues construction companies facing?

- ❑ 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**.

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Our focus in this section

❑ In this section,

we will **explore** some of the **ethical issues** related to use of technology,

but **not** the technical protective measures needed for **cybersecurity**.

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Construction technology

- ❑ **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

What are the major uses of mobile devices?

Mobile devices

- ❑ 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.

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- ❑ 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**.

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INTRODUCTORY CASE STUDY

Case #1

- ❑ **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
 1. **Design options** being considered and
 2. **Cost implications** of the various design options.
- ❖ *Is this discussion considered ethical?*

ETHICAL CHALLENGES

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.

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.

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.

Protection of private or confidential information

- ❑ 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**.

- ❑ **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
 1. Held **accountable** for their actions via email,
 2. **Safeguard** the reputation of the company, and
 3. Protect against data breaches and corruption of company computational equipment.

☐ It is considered **unethical to use email** to transmit

1. Offensive or defamatory material,
2. Copyright material, or
3. Proprietary information.

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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.

Use of social media

- ❑ **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
 1. Verify posted credentials, and
 2. Have a healthy suspicion of information that appears either
 - a) Overly complimentary, or
 - b) Unjustifiably negative.

APPLICABLE STANDARDS

Company records

- ❑ With **most company records** now stored electronically, firms can be at **great risk** if sensitive or confidential information is
 1. Accessed by **unauthorized personnel** or
 2. 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

☐ **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.

Competitive advantage

- ❑ 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**.*

Long-term vs. short-term benefits

- ❑ 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
 1. Satisfied clients and
 2. A solid reputationfor high quality performance.

Confidentiality agreements

- ☐ 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
 1. Who owns the model,
 2. Who are the authorized users, and
 3. 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?

Contractors finding

☐ 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.

Multiple parties access

❑ **Ethical issues** can also arise when

1. **Multiple parties have access** to and
2. **Can make changes** to a BIM model
3. If **one party decides** to make changes to their **own advantage** without communicating those changes to the other parties.

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Multiple parties access

- ❑ 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
 1. Not communicated and
 2. Agreed uponahead 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.

Multiple parties access

❑ The **project's BIM protocol** should

1. Anticipate such challenges and
2. Make sure all parties are

aware of and **committed** to following appropriate procedures.

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Employees on social media

- ❑ **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.

What decision a company should make?

Employees on social media

❑ 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.

Employees on social media

❑ This **commentary** could **not only compromise** company confidential information,

but **social networks** also

1. Present a potential outlet for retaliation, and
2. Could inhibit workers' freedom to **report workplace misconduct**.

Is it a risk to the companies?

Employees on social media

❑ 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.

What is the solution?

Employees on social media

- ❑ 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.

Employees on social media

- ❑ 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

1. The **potential consequences and impacts** that a **post or comment** on a social network might have on the company or a coworker, and
2. Imagine being on the receiving end of that action.

QUESTIONS AND SCENARIOS FOR PRACTICE

- ❑ 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 curtain wall subcontractor to modify BIM model structural elements?*
 - ❖ *What action should Sarah take? Why did you make this recommendation?*

- ❑ 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?*

- ❑ 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?*

- ❑ 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?*



مدیران حرفه‌ای صنعت ساخت (بر اساس سندی از انجمن مدیریت ساخت آمریکا (CMAA))

فصل دوم: پیاده‌سازی رفتار حرفه‌ای در صنعت ساخت

بخش ششم: مدیریت ساخت در بحران

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دانشگاه Illinois Tech آمریکا

What we will learn?

- ☐ Learning objectives
- ☐ Introduction
- ☐ Introductory case study
- ☐ Ethical challenges
- ☐ Applicable standards
- ☐ Construction participant perspectives
- ☐ Questions and scenarios for practice
- ☐ Note

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Learning objectives

- ❑ After reading this section, you should **be able** to:
 - ❖ Give **examples** of crisis situations that can occur on a construction project due to **events happening**
 1. Within a company or project (internal factors) or
 2. 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

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.

Crisis results from internal or external factors?

Crisis from internal or external factors

- ❑ 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.

Contingency funds

- ❑ 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.

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Crisis response

- ❑ 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.

Difference between crisis management and risk management?

Crisis vs. risk

What is the difference between crisis management and risk management?

❑ **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.

Crisis vs. risk

- ❑ 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.

Crisis vs. risk

- ❑ 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 the company be prepared?

Company preparation for unexpected events

- ❑ 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**.

What does preparing for crisis mean?

Company preparation for unexpected events

❑ Preparing for crisis means

- ❖ Identifying possible scenarios,
- ❖ Ranking the severity,
- ❖ Assigning responsibility, and
- ❖ Establishing a timeline to keep people safe and informed.

Who should be part of crisis team?

Company preparation for unexpected events

❑ 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 section, under Construction Participant Perspectives.

Focus of this section

- ❑ In this section, 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 section, a crisis is considered to be
 1. Something unforeseen and
 2. Not addressed in the project health and safety plan
- ❖ 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?

Is it possible to have effective communication during crisis?

Effective communication during crisis

- ❑ 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.

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Effective communication during crisis

- ❑ Above all, those in **charge of the response** must be straightforward,
stick to the known facts,
avoid speculation, and
provide consistent and honest messaging.

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Ethical decision during crisis

☐ **Ethical decisions** that must be made include

1. How much information should be divulged,
2. Who should be informed, and
3. 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

Introduction

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

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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.

So what is the proper action?

How much information is enough?

- ☐ 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

How much information is enough?

- ☐ 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**.
- ☐ In reality, the most **authoritative and trustworthy statements** begin with the words, “This is what we know.”

What should be done in crisis situations?

Act in crisis situation

- ☐ 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**.

Act in crisis situation

- ❑ 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**.

Act in crisis situation

- ☐ 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**.
- ☐ **Next Box** 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.

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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.

your
BUTE

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

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**?

What is the answer to these questions?

Who should be informed?

- ☐ 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.

Who should be informed?

- ☐ 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**.

When to inform?

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?

What if you are an employer?

When to inform?

☐ If you are the **employer**,

1. Would you **rather make sure** all the known facts are **made public** as soon as possible, or
2. **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 to inform?

- ❑ 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**.
- ❑ Next Box **presents tips** for using social media in a crisis situation.

When to inform?

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)

ذکر مطالب فوق تنها در صورت ذکر منبع بلامانع است.

APPLICABLE STANDARDS

Occupational Safety and Health Act (OSHA) of 1970

- ❑ 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.”

OSH Act of 1970

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General Duty Clause

Complete OSH Act Version ("All-in-One")

SEC. 5. Duties

(a) Each employer --

- (1) shall furnish to each of his employees 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 to his employees;

29 USC 654

- (2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

<https://www.osha.gov/laws-regs/oshact/section5-duties>

OSHA's PPE standards

- ❑ 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.

• Part Number:	1926
• Part Number Title:	Safety and Health Regulations for Construction
• Subpart:	1926 Subpart E
• Subpart Title:	Personal Protective and Life Saving Equipment
• Standard Number:	<u>1926 Subpart E</u>
• Title:	Personal Protective and Life Saving Equipment
• GPO Source:	<u>e-CFR</u>

<https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XVII/part-1926/subpart-E>

OSHA's Bloodborne Pathogens standard

- ❑ 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.

<https://www.govinfo.gov/content/pkg/CFR-2013-title29-vol6/pdf/CFR-2013-title29-vol6-sec1910-1030.pdf>

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

- ❑ 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**.

JE Dunn response plan

- ❑ 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:
 1. Communication protocols and
 2. Training.

JE Dunn response plan

- ❑ 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.

JE Dunn response plan

- ❑ 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**
 1. **Identifying** core duties and
 2. **Including** brief statementsto 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.

JE Dunn response plan

❑ 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.

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JE Dunn response plan

- ❑ This is especially important in the **case of a fatality**,
when **professional**, and perhaps bilingual crisis counseling may need
to be considered to
 1. **Help** people process the events and
 2. Be **able to re-engage** with the worksite.

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JE Dunn response plan

- ❑ 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.

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JE Dunn response plan

- ❑ **Throughout** the planning, preparing, implementing, and improving their crisis response plan,

JE Dunn **strives to address** the ethical challenges of

1. Who should be informed,
2. When to inform, and
3. How much information is enough.

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QUESTIONS AND SCENARIOS FOR PRACTICE



Q&S #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?

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- ☐ 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?*

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- ☐ 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.

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- ☐ *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?*

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- ❑ 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-skanskawill-work-with-florida-on-barge-caused-damage-to-pensacola-bay-bridge.

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موسسه مهندسی و مدیریت ساخت علوی پور (ACEMI)

دفتر آموزش



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