

**American Bar Association  
Forum on the Construction Industry**

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**Don't Tell Me What I Should Have Done – What Do I Do Now?  
Confronting the Unexpected**

**Debate, Mitigate or Wait: Addressing Unexpected Environmental  
Issues on the Construction Site**

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## I. INTRODUCTION

In the 1998 film *A Simple Plan*,<sup>1</sup> three men – Hank, Jacob, and Lou – stumble upon a small crashed plane containing a duffel bag overflowing with over \$4 million in cash while pursuing a fox in the snowy woods of Minnesota. Almost immediately, the question arises: What should we do with the money? Jacob and Lou want to split the money among the three of them; Hank believes they should hand the money over to the appropriate authorities. Eventually, a compromise is reached: they will wait and not spend any of the money until the spring thaw, and hope that no one mentions the missing money when the plane is discovered.

The story plays out as a Shakespearean morality tale, as the “simple plan” devised by the three men becomes increasingly complicated. By the end of the story, several persons have been murdered, including Jacob and Lou. Hank is left penniless and miserable, forever regretting the fateful decision not to turn in the money.

Such is the dilemma that faces construction contractors when they encounter certain unanticipated environmental issues, like the discovery of endangered wildlife or hazardous waste, during a construction project. The consequences of choosing the wrong plan for dealing with those issues can be devastating. Federal statutes such as the Comprehensive Environmental Response, Compensation, and Liability Act<sup>2</sup> (“CERCLA”) and the Resource Conservation and Recovery Act<sup>3</sup> (“RCRA”) can impose wide-ranging administrative orders, stiff monetary penalties, civil liability for cleanups, and, even possible jail time for those who fail to react properly when encountering certain hazardous materials. Moreover, in addition to Federal laws and regulations, the states and many localities have enacted their own laws and regulations, which further

complicate the decision making process when unexpected environmental issues are encountered on construction projects. Likewise, parties who do not take the proper steps when encountering certain endangered species can face administrative penalties as well as civil enforcement and criminal liability. Citizens, moreover, are authorized to enforce certain requirements of many of these statutes, especially the federal ones, and the possibility of common law tort actions always lurks in the background.

In a perfect world, of course, parties would anticipate all such possibilities at the contracting stage, allocating risk and establishing responsibilities for dealing with these issues before the project is ever commenced. Unfortunately, developers, owners, and contractors rarely foresee and plan for many of these scenarios. This raises the question: What should we tell our construction clients to do when they encounter unexpected environmental conditions on a construction project and the contract terms are unclear, ambiguous, or simply non-existent – debate, mitigate, or wait?

## **II. ENVIRONMENTAL LAWS AND REGULATIONS IMPACTING CONSTRUCTION PROJECTS**

Since 1970, Congress as well as each state legislature has enacted numerous regulatory measures designed to protect public health and the environment from various kinds of environmental harms. These statutes apply to the construction industry in many ways, and, when viewed in their totality, have changed enormously the way in which the industry does business.

Of all of these statutory provisions, two federal statutes have the greatest impact upon construction: CERCLA and RCRA. These two statutes can impose notification requirements and strict, joint and several cleanup liability upon the parties involved in a

development or construction project. Such liability generally arises from soil or groundwater contamination, but it can also arise from contaminated river sediments or any other place where a hazardous material has come to rest. CERCLA is primarily retrospective in nature, providing mechanisms for responding to releases of hazardous substances and imposing Draconian levels of liability in the process.<sup>4</sup> RCRA, in contrast, primarily focuses upon the prospective regulation of hazardous waste: its generation, transportation, storage, treatment and eventual disposal.<sup>5</sup> In addition to CERCLA and RCRA, the regulation of certain dangerous substances like polychlorinated biphenyls (“PCBs”)<sup>6</sup> and asbestos are addressed by other statutes: the Toxic Substances Control Act<sup>7</sup> (“TSCA”) for PCBs, and the Clean Air Act (“CAA”)<sup>8</sup> and the Occupational Safety and Health Act (“OSHA”)<sup>9</sup> for asbestos.

The closer one looks, moreover, the more complex things become. Underground storage tanks that contain RCRA “hazardous waste” are dealt with under RCRA’s primary regulatory structure,<sup>10</sup> while storage tanks that contain petroleum or other hazardous substances (excluding RCRA “hazardous waste”) are subject to special regulations and a special cleanup program.<sup>11</sup> Not only does the Clean Water Act<sup>12</sup> regulate discharges of pollutants to waters of the United States, but it also regulates the placement of fill material in those waters, including wetlands.<sup>13</sup> In addition, the Clean Water Act<sup>14</sup> and the Oil Pollution Act of 1990<sup>15</sup> create an elaborate cleanup process, and stunning levels of liability, for oil spills that occur on water or adjoining shorelines.

The Endangered Species Act<sup>16</sup> (“ESA”) also may apply to construction activities. Section 9 of the Act prohibits the “taking” of any endangered or threatened species,<sup>17</sup> and “take” is defined to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or

collect.”<sup>18</sup> The term “harm”, however, is defined broadly to include “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”<sup>19</sup>

The states have also enacted a number of laws, some of which are intended to implement RCRA, while others create mini-Superfunds and special notification requirements. Not to be overlooked is another form of state law: common law tort. Many situations involving environmental hazards that are found or arise on construction sites have the potential to give rise to costly court cases sounding in negligence, trespass, and nuisance.

#### **A. CERCLA**

When CERCLA was passed in 1980, many people hoped that the program could be a short-term, one-time effort. Now, however, we know that the task of cleaning up sites where hazardous substances have been released will be with us well into the 21<sup>st</sup> century. Not only is it taking longer than expected to clean up sites (especially where groundwater has been contaminated), but new sites are constantly being discovered.

Under CERCLA, the U.S. Environmental Protection Agency (“EPA”) is empowered to clean up a site<sup>20</sup> whenever any “hazardous substance”<sup>21</sup> is released<sup>22</sup> or there is a substantial threat of such a release into the environment. Following such a federal response action, the EPA may bring an action in a U.S. District Court to recover its costs from the responsible parties.<sup>23</sup> The EPA also has the authority to issue administrative orders to force the responsible parties to study the site and possible cleanup options. EPA also may order responsible parties to actually cleanup the site as well.<sup>24</sup> These orders may be negotiated or issued unilaterally. If a responsible party fails

without sufficient cause to properly clean up a site, and EPA is forced to do so, EPA may seek punitive damages in an amount equal to three times the cost of cleanup.<sup>25</sup>

CERCLA casts a wide net of liability. The responsible parties who are potentially liable for cleanup costs (plus natural resource damages in some cases and the cost of health assessments carried out under the act) include:

1. Any person who owns or operates a site where hazardous substances have been released;
2. Any person who owned or operated a site in the past when hazardous substances were disposed;
3. Any person who transported hazardous substances to a site which he/she chose; and
4. Any person who arranged for the disposal or transportation for disposal of hazardous substances (commonly referred to as generator liability).<sup>26</sup>

Contractors, therefore, may become potentially responsible parties (“PRPs”) if they are deemed to have been operators due to their control over activities at that site.<sup>27</sup> PRPs may be liable even if the EPA is not the party that cleans up the site. States may also recover their response costs, if they are not inconsistent with the National Contingency Plan,<sup>28</sup> and any other person may recover any costs incurred that are consistent with the National Contingency Plan.<sup>29</sup>

Liability under CERCLA is retroactive. The date on which disposal took place is not a relevant factor. Liability is also strict. A party may be held liable even if its actions were legal at the time of disposal and even if the party exercised due care. Furthermore, CERCLA liability is joint and several, which means that any responsible party may be held liable for the entire cost of cleanup (unless the defendants can demonstrate that the

environmental “harm” at the site is divisible among them).<sup>30</sup> Responsible parties, however, may seek contribution from other responsible parties.<sup>31</sup>

A vitally important part of the CERCLA program is the requirement that persons in charge of a structure or site must immediately notify the National Response Center (1-800-424-8802 – located at the headquarters of the U.S. Coast Guard) of any release of a “reportable quantity” of a hazardous substance in any 24 hour period as soon as it is discovered.<sup>32</sup> The list of reportable quantities (which range from 1 to 5,000 pounds) is found at 40 C.F.R. Part 302. Penalties for failing to immediately notify the government of such releases are potentially severe, ranging from administrative penalties to civil penalties assessed by federal district courts<sup>33</sup> to criminal actions.<sup>34</sup>

## **B. RCRA**

RCRA governs the disposal of hazardous waste throughout the United States. RCRA creates a control and tracking scheme that applies to hazardous waste from its generation to disposal. RCRA also authorizes the EPA to compel the cleanup of sites if the past or present handling, storage, treatment, transportation, or disposal of hazardous waste presents a threat of imminent and substantial danger to human health or the environment.<sup>35</sup> The EPA or authorized states may issue corrective action orders to remedy releases caused by leaking underground storage tanks containing gasoline or hazardous substances not governed as hazardous waste under RCRA. Should the EPA or a state incur cleanup costs, the owner or operator of the tank is liable for those costs as well as any costs stemming from a government exposure assessment.<sup>36</sup>

As is the case with many environmental statutes, RCRA contains a citizen suit provision. In addition to authorizing “private attorneys’ general” actions against those

who breach permits and other regulatory requirements, this citizen suit provision permits private citizens to obtain injunctive relief to abate an activity that is creating an imminent hazard and to require any necessary remedial action. Such liability may be imposed on any person “who has contributed or who is contributing” to the hazard.<sup>37</sup>

**C. Clean Air Act and OSHA (Asbestos)**

Various federal requirements exist for both construction and renovation work that may disturb asbestos and for its removal. First, OSHA has established detailed worker protection measure for activities involving the demolition or renovation of structures containing asbestos, the installation of asbestos-containing materials, or the removal or encapsulation of asbestos in a structure.<sup>38</sup> Second, under the CAA, the EPA has promulgated regulations applying to work practices, handling, and disposal of asbestos. These regulations explicitly apply to the demolition or renovation of structures containing asbestos. They require notice before any friable asbestos is removed or otherwise disturbed and set forth detailed instructions on removal and disposal.<sup>39</sup> Of course, CERCLA will apply to any site at which asbestos has been improperly dumped.

**D. Clean Water Act (Wetlands/Dredge and Fill)**

Section 404 of the Clean Water Act restricts the placement of dredged or fill material into “waters of the United States,”<sup>40</sup> a term which is defined by regulation to include “wetlands.”<sup>41</sup> Wetlands are not limited to coastal areas since fresh water systems are included. Wetlands are defined by the regulations as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated conditions. Wetlands generally include swamps, marshes,

bogs and similar areas.”<sup>42</sup> It may not be easy to determine whether property to be developed contains a wetland subject to Clean Water Act jurisdiction, and, if so, what the boundaries of it are. The primary factors are hydrology, vegetation, and soils, as well as its adjacency or other relationship to a navigable stream or water.<sup>43</sup> The U.S. Army Corps of Engineers will make jurisdictional determinations upon application.

Anyone proposing to discharge dredged or fill material into a wetland or any water of the United States must first obtain a section 404 permit.<sup>44</sup> Such permits are issued by the U.S. Army Corps of Engineers but are subject to an EPA veto.<sup>45</sup> Furthermore, the Corps must comply with the National Environmental Policy Act<sup>46</sup> (“NEPA”) before issuing a section 404 permit. In some cases, therefore, an environmental impact statement (“EIS”) may have to be prepared. An EIS is required for “major federal actions significantly affecting the quality of the human environment.”<sup>47</sup> In most cases, however, the Corps will satisfy NEPA by doing an environmental assessment (“EA”) followed by the issuance of a finding of no significant impact (“FNSI”), which is a quicker and less expensive process than the production of a full-blown EIS.

Certain construction projects involving minimal wetland disturbance may avoid the necessity of receiving an individual section 404 permit if they meet the requirements of general permits which have been issued on a national basis. Coastal areas and wetlands along the coast are subject to additional regulation under the Coastal Zone Management Act<sup>48</sup> and its state counterparts. Many development activities in these coastal areas are subject to additional permitting or approval requirements.

**E. Clean Water Act and Oil Pollution Act (Oil Spills)**

The federal approach to oil spills strongly resembles CERCLA. Section 311 of the Clean Water Act authorizes the federal government (the EPA or the U.S. Coast Guard) to direct, monitor, or even clean up smaller spills and to either direct or clean up spills that pose a substantial threat to public health or welfare.<sup>49</sup> The Oil Pollution Act, in turn, subjects the responsible parties to strict, joint and several liability for the removal costs as well as damages to natural resources, real or personal property, lost revenues, and lost profits.<sup>50</sup> Any spill of oil into waters of the United States or adjoining shorelines in quantities that are harmful (the “sheen” test applies) are also subject to administrative penalties, civil penalties,<sup>51</sup> and even criminal prosecution.<sup>52</sup> Of utmost importance is the requirement that any person “in charge” of an onshore facility or vessel give immediate notice of a spill of a reportable quantity of oil (creating a sheen) to the National Response Center (1-800-424-8802 – located at the headquarters of the U.S. Coast Guard).<sup>53</sup>

**F. Endangered Species Act**

Construction activities also may be regulated by the Endangered Species Act. Section 9 of the Act prohibits the “taking” of any endangered or threatened species,<sup>54</sup> and “take” is defined to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.”<sup>55</sup> The term “harm”, in turn, is defined broadly to include “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”<sup>56</sup> Incidental take permits may be obtained; however, the steps and conditions involved in obtaining such a permit are rather involved.<sup>57</sup> Penalties for violation of the Act can be severe. The federal government can assess administrative penalties, which are

enforceable in district court; the federal government may undertake a criminal prosecution for knowing violations; and citizens may seek to enjoin anyone who is in violation of the Act.<sup>58</sup>

#### **G. State Laws and Regulations**

Every state has legislation and regulations which enable them to operate portions of the RCRA regulatory scheme. In addition, many states have enacted mini-Superfund statutes. Some states also have adopted laws that require provision or planning for the clean up of industrial sites before ownership can be transferred. A number of other states require sellers to disclose the presence of hazardous waste or hazardous substances to purchasers. Several states also have enacted “superlien” statutes, which give the state a first priority lien on contaminated property to cover the cost of a clean up.

#### **H. Common Law Tort**

A person responsible for contamination may become liable for third party claims under a variety of common law theories, including the following:

##### **a. Trespass**

When pollutants physically invade the property of another, liability may be premised on a theory of trespass.<sup>59</sup>

##### **b. Negligence**

A negligence action may arise with respect to environmental injuries when the plaintiff can prove that one’s actions or inactions were below legal standards, industry standards, or any other reasonable standard of care. Although a toxic tort negligence action is subject to ordinary negligence analysis, the plaintiff’s burden of proof may be

heightened by the difficulty of showing that a particular pollutant caused the health or property damage in question.

**c. Nuisance**

Private nuisance actions require a showing of significant injury. In addition, the interference with one's property rights must be both intentional and unreasonable. While such showings may result in the award of pecuniary relief, a balancing test will be engaged in before a court issues an injunction to stop the polluting activity. This balancing test will pit the environmental damage against the value of the polluting activity.

A public nuisance, on the other hand, is an unreasonable interference with a right common to the general public.<sup>60</sup> In deciding whether an activity is unreasonable, the Restatement of Torts (Second) directs courts to consider whether the conduct: (1) involves a significant interference with public health; (2) is illegal; or (3) is of a continuing nature or has produced a long-lasting impact on the public right that the defendant has reason to know will be significant.

**d. Strict Liability**

Damages arising from abnormally dangerous conduct or activities may give rise to strict liability; in other words, liability without a showing of fault.<sup>61</sup>

**III. ANTICIPATING AND PROVIDING FOR POSSIBLE ENVIRONMENTAL ISSUES**

**A. Contract Rights and Remedies**

In a perfect world, parties to a construction contract would identify any and all potential environmental issues that could possibly arise during each and every phase of a

construction project. Then, a seasoned team of business professionals (owners, developers, and contractors), financial lenders, lawyers, risk managers, and insurance representatives, to name a few, would roll up their sleeves and meticulously address and negotiate each issue. Finally, the team would reach a consensus and create the consummate construction contract. This never happens – it is impracticable. In fact, the “consummate construction contract” is a nothing more than a fairy tale.

In reality, however, many opportunities exist for participants in a construction project to anticipate and provide for potential environmental issues and hazards before entering into a contract to perform work. Some of these opportunities include preliminary site investigations; review of geotechnical reports, prior land use and property ownership; negotiation of contract terms; and the purchase of insurance. Contractors should seek proactively as much information about a project site as possible from both the owner and from public records.

Generally, participants in a construction project have some ability to negotiate contractual provisions that allocate environmental risks. Ideally, risks should be allocated to the party most willing or best suited to bear those risks. In transactions for the sale and financing of property, it is commonplace for the buyer and seller or lender and borrower to negotiate vigorously over environmental representations and warranties, covenants, and indemnities. Each party endeavors to apportion the risk of future environmental liabilities to the other, which may result in a “fair” risk allocation. Even if acceptable warranties, covenants, and indemnifications are negotiated, each party should keep in mind that they are only as good as the bound party’s financial capacity to pay in the event that they are breached, and the same is true of covenants that allow the

purchaser or lender to demand in certain instances that the seller or borrower clean up the property. In addition to negotiating contract provisions to address environmental issues, a detailed scope of work may provide contractors with another layer of limited protection when faced with unexpected environmental issues on construction projects.<sup>62</sup>

When one of the goals of negotiating a construction contract is to limit liability for potential environmental hazards (planned or unplanned) during the course of a construction project, there are several key provisions that the parties should consider, including, but not limited to, hazardous conditions, indemnification, differing site conditions, and changes. The following is a brief discussion of select provisions that may be used to limit liability (shift the risk to one party or the other) for environmental hazards encountered (planned or unplanned) during the course of a construction project.

**a. Hazardous Conditions**

Hazardous conditions on a construction site may take many forms ranging from dust to toxic substances with a myriad of conditions in between. Some of the most common hazardous conditions include: underground storage tanks, contaminated soil, containers holding hazardous substances or residue, asbestos, old equipment filled with PCBs, and contaminated groundwater. As previously discussed, addressing the possibility of a hazardous condition during contract negotiations is the best way to avoid being placed in the precarious situation of having to “debate, mitigate, or wait.” Below is an example of a hazardous substance clause that may be considered in a cost plus environmental management contract as opposed to a traditional fixed price construction contract:

Hazardous Substances and Conditions. Owner agrees to advise Contractor of all known hazardous substances and conditions existing on or near a project site that present a potential danger to health, the environment or Contractor equipment, if any. Should Contractor encounter conditions on or near any project site which were not reasonably anticipated and/or which increase the risk involved in Contractor's performance of the services, upon notice to Owner, Contractor, in its sole discretion, may (i) continue to perform the services to completion, (ii) suspend activities and prepare a change order request prior to proceeding or (iii) terminate all services. Such termination shall not be a breach of this Agreement by Contractor. In the event that the unanticipated condition is the presence of any hazardous substance or other condition that presents a potential danger to health, safety, the environment or Contractor's equipment, Contractor has no obligation to assume, and does not assume, control of or responsibility for the project site or the person(s) in charge of the project site, or responsibility to report to appropriate federal, state or local agencies, except as required by law. Owner acknowledges that Contractor may be required to provide such notice or to make such disclosures if Owner fails to do so and agrees to hold Contractor harmless therefore.

Hazardous conditions clauses are commonly found in form construction contracts such as those promulgated by The American Institute of Architects ("AIA"). Below are samples of some of the newly revised clauses found in the 2007 version of AIA Document A201:

The Contractor is responsible for compliance with any requirements included within the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents, and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.<sup>63</sup>

Upon giving notice of hazardous materials encountered on a construction site that were not contemplated in the AIA Contract Documents, the burden of taking the next steps shifts to the owner, as set forth in Article 10.3.2:

Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless...When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.<sup>64</sup>

If the contractor suspects the possibility of hazardous conditions on the construction site, negotiating contract clauses that address hazardous substances and hazardous conditions is recommended.

#### **b. Indemnification**

In addition to contract clauses specifically addressing hazardous substances and conditions, another well-known and widely used risk-shifting clause found in construction contracts is an indemnity clause. Parties to a construction contract should carefully review indemnity provisions, especially if there is potential for exposure to liability for environmental issues on a project. Standard construction contract indemnification clauses, however, generally do not fully cover environmental risks. A sample of a general indemnification clause is as follows:

Indemnity. Contractor hereby agrees to indemnify and hold harmless Owner, its officers, directors, employees, and agents from any and all liability, loss, penalty and cost, including cost of defense, which Owner may incur, be obligated to incur, or to which it may be subjected, with respect to: (i) destruction of or damage to property of any kind and by whomsoever owned; (ii) any violation of any statute, law, or ordinance or any provision of this Agreement arising out of or related to, or in any way associated with the performance of any work or services covered by this Agreement, to the extent caused, occasioned, or contributed to by acts or omissions, whether negligent or not, of Contractor, its agents, servants or employees, or by acts or omissions, whether negligent or not, of any of the subcontractors of Contractor or agents, servants, or employees of any such subcontractor. Contractor agrees, upon receipt of notice from Owner, to

assume and conduct at its sole expense the defense of Owner against any such claim.

An indemnification clause that embraces environmental issues may be warranted on some projects. An example of such a clause, running in favor of the contractor, is as follows:

Environmental Indemnity. To the maximum extent permitted by applicable law and for additional consideration of \$10.00 from Contractor, the receipt and sufficiency of which is hereby acknowledged, Owner (i) hereby releases Contractor, its parent, subsidiaries, affiliates and subcontractors, including their respective officers, directors, employees, principals, partners, agents, successors and assigns (“Indemnitees”) from and against all claims, judicial and administrative proceedings, demands, damages, liabilities, losses, settlements, judgments, awards, penalties, costs and expenses, including reasonable attorneys’ fees and experts’ fees related to or arising out of exposure to or release of asbestos, toxic or any hazardous constituents at or from the project site, before, during or after performance of Contractor’s services (“Environmental Liabilities”) and (ii) shall defend, indemnify and hold Indemnitees harmless from and against all Environmental Liabilities, except to the extent such Environmental Liabilities are determined to have been caused solely by the negligence, or the willful violation of any applicable environmental law by Contractor.

To maximize protection and avoid disputes related to the extent of protection provided by an indemnification provision, the contractual language should be explicit to demonstrate the parties’ intent to assign or shift the risk of environmental liabilities. This is particularly critical with regard to indemnification agreements between parties related to hazardous waste cleanups under CERCLA.<sup>65</sup>

Contractors providing services to the United States Government should be aware of Public Law 85-804, the National Defense Contracts Act,<sup>66</sup> which provides a means by which the United States can indemnify contractors against “unusually hazardous or nuclear” risks when such an action would facilitate national defense. The extent of

protection afforded contractors for environmental liability is unclear. Further details and application of Public Law 85-804 are beyond the scope of this paper.<sup>67</sup>

**c. Differing Site Conditions**

Typically, environmental issues on a general construction project (setting aside environmental remediation projects and the like), are hidden from plain view. Unexpected subsurface conditions, contamination, or the existence of other hazardous substances on a site (above or below ground) may increase the time and cost for completion of the project.<sup>68</sup> Parties to construction contracts may be able to rely upon the procedures set forth in a differing site clause to address situations of this nature. Below is an example of such a clause:

Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or in time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15 [Claims and Disputes].<sup>69</sup>

In essence, owners attempt to balance the cost of extensive site investigations and research against the risk of little or no site investigation and research at all. Theoretically, if a construction contract contains a differing site conditions clause, an

owner will receive lower construction bids, and, in turn, the contractor is afforded a level of protection against the unexpected conditions. In theory, the owner will pay no more than if it knew about the conditions before breaking ground. The use of a differing site conditions clause does not always guarantee this to be the case. In fact, significant delays, disruption, and increased costs may be encountered on a project governed by a differing site condition clause. It is, however, commonly used for the purpose of shifting liability for unexpected conditions on construction projects. A differing site clause may provide a contractor with a means and method for dealing with liability for unanticipated environmental substances, hazards, or issues encountered on a project; however, the extent to which a differing site condition clause may apply likely will depend upon the presence or absence of other contract clauses, including, but not limited to, clauses relating to compliance with laws and regulations, site management and control, guarantees, and warranties.

#### **d. Changes**

Most construction projects undergo changes after the contract is executed. Where the volume or nature of work, the time for performance, or the manner of performance differs from the understanding in the original contract, a change may result. Changes occur for multitudes of reasons – value engineering, re-design by an architect or major equipment supplier, code compliance, force majeure events, differing site conditions, delay by other contractors or suppliers – the possibilities are limitless. Certainly, the discovery of a hazardous material on a project site may result in a contract change.

In the traditional design-bid-build context, a construction bid is essentially an offer to perform a certain scope of work for a certain amount of money. The scope of

work includes not only some understanding of the breadth and nature of the work, but also an understanding as to timing, the way in which the work will be performed, and other factors. A changes clause provides the parties with a means and method for changing the original scope and adjusting the contract price and schedule to reflect the change.

In federal contracts, the formal changes procedure begins with a written order from the contracting officer.<sup>70</sup> The contractor must then price the cost of the change, calculate any additional time needed, and submit his request for an equitable adjustment to the contracting officer. In the event the parties cannot agree on the amount of the contract adjustment, the Government may direct the contractor to perform the changed work and defer resolution of price and time.

Private construction contracts provide the parties with additional flexibility in developing a change procedure. The provisions in AIA Standard Form A201 General Conditions of the Contract for Construction regarding the origination of changes are similar, however, to the federal procedures described above. Article 15.1.1 of AIA Standard Form A201 provides, in part:

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in questions between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

For a changes claim to be considered timely, it must be submitted within twenty-one days of the underlying event or from the time when the party submitting the claim learns of it.<sup>71</sup> If the parties agree on the fact and price of the change, the owner, architect/engineer ("A/E"), and contractor sign a change order.<sup>72</sup> The drafters of the AIA

documents recognize that a situation involving an emergency may require the parties to a contract to act differently with respect to changes. Depending upon the environmental issue encountered on the construction site, it may constitute an emergency. In the event it does, Article 10.4, of AIA Document A201 states:

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of the emergency shall be determined in Article 15 [Claims and Disputes] and Article 7 [Changes in the Work].

Contract language designed to allocate risk for changed or unexpected conditions that may or may not constitute an emergency are essential to allocating risks associated with potential environmental issues that may arise on construction sites.

## **B. Insurance**

In addition to considering contractual modifications, parties to a construction contract should evaluate their current insurance coverage and investigate new coverages that may be available. This is especially true if, after reviewing the scope of work, there appears to be a risk of damages for environmental substance, hazards, or other related issues. Insurance products for environmental and pollution risks vary in breadth of coverage, exclusions, and costs – each party should conduct a risk benefit analysis and carefully evaluate options prior to making a decision on each construction project – one size does not fit all. Moreover, parties to a construction contract should be aware that costs and liabilities associated with environmental hazards may not be covered by standard Comprehensive General Liability (“CGL”) policies.<sup>73</sup>

Many current policies include a pollution exclusion clause that deprives an insured of this type of coverage. In general, the costs associated with environmental

losses fall into two broad categories: (1) the cost of defense and (2) liability for damages and cleanup. Upon discovering the existence of a situation that may result in such costs, businesses frequently find that their CGL policy is not as “comprehensive” as originally believed. A basic understanding of both the principles underlying insurance law and the particular portions of the standard CGL policy related to pollution will help a business to prepare for what is certain to be a battle with the insurance company.

In recent years, insurance companies have begun to offer expanded environmental insurance coverage through specialized environmental policies. Although many of these policies are relatively new and, in some cases, quite expensive, those attempting to address environmental risks should investigate the availability of these products. Among the emerging forms of coverage are policies directed at:

- (a) Underground Storage Tanks;
- (b) Closure/Post-Closure;
- (c) Brownfields;
- (d) Cost Cap or Stop Loss Coverage ( “Finite Risk Policies”);
- (e) Secured Creditor Coverage;
- (f) Property Transfer Coverage; and
- (g) Commercial Pollution Legal Liability Coverage.

Although environmental insurance can, in the correct circumstances, present an effective way of managing environmental risks, it is important to note that insurance should not be considered as a replacement for standard environmental due diligence.

#### **IV. HANDLING AN UNEXPECTED ENVIRONMENTAL ISSUE**

Construction plans and bids are based on certain assumptions, sometimes unstated, regarding current conditions both above and below ground. In many cases, the owner conveys information about those conditions to bidders to assist them in evaluating the cost of the work. When conditions encountered during construction differ from those

anticipated, additional costs and delay may result. For example, a planned method or means of construction may be rendered impossible, and an alternate means may have to be devised.

The contractor who encounters such an unexpected condition during construction must immediately decide what to do. Often, the impatient (and not to mention, heavily-leveraged) owner, developer, or both may encourage the contractor either to ignore the condition and continue working, or to try to mitigate the condition quickly and continue working. But as we have already seen in Section II, above, ignoring or disturbing such an environmental hazard may expose a contractor to criminal or civil liability, or both.

Environmental risks lurk in all phases of construction. Day-to-day operations on a construction project can lead to complicated environmental issues. Some examples include: the use of chemicals, solvents, and sealants; site preparation and grading work; use of materials which emit off gases; portable above ground storage tanks; refueling and use of equipment; demolition and renovation activities which disturb asbestos or lead-based paint; drilling, excavation, and dewatering operations; incomplete or improper heating, ventilating, and air conditioning system (“HVAC”) connections – (Indoor Air Quality); misclassification of construction debris; painting; and unexpected accidents, such as a truck backing into a utility pole with a PCB-filled transformer or workers innocently pumping “rain water” into a bay.<sup>74</sup>

Pre-existing conditions on a construction site may also pose environmental risks that may impede a contractor’s performance. Common pre-existing site conditions include: asbestos, lead-based paint, PCBs, former landfills, underground storage tanks,

buried drums/containers, unknown pipelines and drainage lines, mold/bacteria in HVAC systems, unknown past releases of solvents, chemicals, or petroleum compounds.

When faced with the dilemma of what to do when the unexpected is encountered, it is generally advisable for contractors to follow some basic, common-sense steps: (1) stop work in the affected area, (2) secure the affected area, (3) provide immediate notice to the owner, legal counsel, and any possible regulatory agency having jurisdiction (if initial notice is verbal, follow up with written notice as soon as practicable), and (4) do not resume work in the affected area without proper authorization.

To avoid a negligence action and ensuing liability, great care should be taken to secure the area properly – as the contractor in *Unocal Corp. v. U.S.*,<sup>75</sup> discovered. In *Unocal*, Kruze and Kruze (“K&K”) entered a contract with Metrolink to construct a new railway station.<sup>76</sup> During site excavation, a subcontractor for K&K, ECCO, punctured an oil pipeline with the bucket of a Caterpillar, causing oil to flow out of the pipeline onto the surrounding ground.<sup>77</sup> Located about 40 feet from the spill was an inlet to an underground storm drain.<sup>78</sup> K&K employees and the local fire department installed a piece of plywood over the storm drain inlet and piled dirt on top of it to contain the oil in a pool to prevent it from migrating away from the immediate area.<sup>79</sup> This effort to secure the area, unfortunately, had dire consequences.

When representatives from Unocal arrived at the site to evaluate the situation, the storm drain was completely hidden from view, and the Unocal representatives were not told of the storm drain by either K&K or the fire department.<sup>80</sup> It was not until hours later, while consulting maps of the area, that Unocal representatives realized the pool of oil, now approximately 200 feet by 20 feet, was directly over the inlet drain, which led to

a nearby creek. By that time, the oil had entered the drain and contaminated the creek.<sup>81</sup> After performing the cleanup and exhausting possible sources of reimbursement of cleanup costs, Unocal filed a complaint against Metrolink, K&K, ECCO, and others seeking damages under various theories including tort, contract and the Oil Pollution Act. The court awarded Unocal over \$4.5 million dollars in damages, assigning 80% of the liability to Metrolink and 20% to K&K, the contractor.<sup>82</sup> The lesson to be learned is that although a contractor should act quickly to mitigate damages to protect its workers, the public, and the environment, the mitigation must be performed without negligence: The contractor should fully disclose to the other parties all measures taken or being taken to mitigate the damages and information which the contractor knows about the area.

What if, after securing the affected area, notifying the owner, and disclosing all information, the owner does not assume responsibility for the environmental issue? In this circumstance, the contractor may consider undertaking the investigation to ascertain the type and extent of environmental hazard that has been encountered. Determining the nature of the environmental issue encountered can be a crucial step toward a sound course of action, which may or may not allow the construction project to proceed in a timely manner – a major concern for a contractor potentially facing breach of contract claims, delay damages, etc.

If the contractor elects to investigate, but is not in the business of environmental assessment/remediation, the contractor would be well advised to retain an environmental specialist to identify and determine the extent of the environmental issue. There may come a time when the contractor's decision to stop work will be scrutinized to determine if the decision was justified. This question can turn on various factors including what can

be reasonably regarded as hazardous. The problem, in short, cannot be properly handled until the scope of the problem is known – what engineers often call a form of “root cause” analysis. In undertaking this analysis, the contractor will incur costs, which it may or may not recover through a change order or some form of dispute resolution.

Generally, it is advisable for a contractor to move quickly to investigate the type and extent of the environmental hazard and report the matter to the proper regulatory agency. Waiting can lead to disaster. In *U.S. v. Sims Brothers Construction, Inc.*,<sup>83</sup> the decision by a general contractor and subcontractor to wait to deal with canisters found during the demolition phase of a construction project ultimately led to the death of an individual, who had nothing to do with the project. In that case, contractors discovered two pressurized gas canisters – painted yellow with a label bearing a skull and crossbones and the word “poison” – in a building scheduled to be demolished.<sup>84</sup> The superintendent of the general contractor, Sims Brothers Construction, Inc. (“Sims”), and the president of the subcontractor, Amtek of Louisiana, Inc. (“Amtek”), along with others, removed the canisters from the building and placed them in an open area on the site.<sup>85</sup> Sims’ superintendent and Amtek’s president discussed the proper removal of the canisters from the site; however, no action was taken.<sup>86</sup>

The canisters remained on the site for nearly a month before an Amtek employee took them without Sims’ or Amtek’s knowledge.<sup>87</sup> The Amtek employee gave the canisters to his cousin, Edith Rome, who had the canisters connected to her propane stove.<sup>88</sup> The canisters contained methyl bromide, which leaked and made Ms. Rome and her son ill. Ms. Rome eventually died from methyl bromide poisoning.<sup>89</sup> Sims, Sims’ project supervisor, Amtek, and Amtek’s president were indicted for the illegal storage of

hazardous waste in violation of RCRA. After unsuccessful motions to dismiss, the defendants pled guilty to the indictment, but reserved their right to appeal.<sup>90</sup> The Fifth Circuit Court of Appeals rejected the defendants' arguments on appeal, affirmed the findings of the district court, and affirmed the acceptance of the guilty pleas.<sup>91</sup> Clearly, in this case, the defendants waited too long to take proper action.

When an unexpected environmental issue is encountered on a construction project, some facts are unavoidable: the construction schedule will be impacted, additional costs may be borne, extensions of time may be needed, and breach of contract claims may even arise. But other, more devastating results can be avoided – if the contractor can resist the pressure to ignore the problem and, instead, act quickly and decisively to deal with it. The contractor should stop, secure, inform, wait for proper authorization to return to work in the affected area, and if necessary, investigate. As evidenced by both *Unocal* and *Sims Bros. Const.*, a contractor's failure to take these common-sense steps can be exceedingly costly.

## **V. LIABILITY WHEN THINGS GO WRONG AND RISKS ARE NOT ALLOCATED IN CONTRACT**

Liability stemming from environmental issues on construction projects can take many forms, including, but not limited to, damages for bodily injury and property damage, cleanup costs, damages for economic loss (delay, loss of use, loss of income, etc.), contract damages, natural resource damages, and defense costs.

The outlook is hazy at best for those contractors who are not protected by adequate contractual language and who fail to resolve these issues through negotiation. Short of the contractor having the contractual right and basis for terminating work under

the contract, there is little recourse other than litigation or an alternative dispute mechanism, such as mediation or arbitration. In a situation where the owner directs the contractor to remediate an environmental hazard without agreeing upon compensation or time extensions for the work, a contractor might turn to the doctrine of cardinal change for relief. In *Universal Contracting and Brick Pointing, Co., Inc. vs. U.S.*,<sup>92</sup> a contractor was able to avoid summary judgment of its claims because material issues of fact existed as to whether removal of asbestos and glue from exterior walls of a building constituted a cardinal change to a contract for the removal of paint from the walls of a Veterans Administration hospital.

If all else fails, the final line of defense may be the common-law defense of commercial impracticability (or, as traditionally known, “impossibility”). At first glance, the impracticability/impossibility defense may appear promising for the contractor. The Second Restatement defines the defense as:

Where, after a contract is made, a party's performance is made impracticable without his fault by the occurrence of an event the non-occurrence of which was a basic assumption on which the contract was made, his duty to render that performance is discharged, unless the language or the circumstances indicate the contrary.<sup>93</sup>

Indeed, our initial fact pattern seems a perfect fit for this definition: it seems that a basic assumption of the parties was that no environmental hazards would arise, and certainly the innocent contractor is not to blame for such a hidden condition.

Unfortunately, most courts have defined the doctrine of impracticability or impossibility narrowly. As one court has said: “The doctrine[] of ... impossibility will relieve a party of his obligations under a contract only in extreme circumstances.”<sup>94</sup> How “extreme” must those circumstances be? Some courts require that “[a] party claiming

impossibility as a defense must demonstrate that it took virtually every action within its powers to perform its duties under the contract.”<sup>95</sup> Other courts are equally as harsh, finding that even “insolvency or bankruptcy” occasioned by the performance of one’s duties under a contract still does not excuse that performance.<sup>96</sup> While the impracticability/impossibility defense does not require “absolute or legal impossibility,” it only applies where there is “a real impossibility and not a mere inconvenience or unexpected difficulty.”<sup>97</sup> The increased cost of performance alone rarely meets the stringent standard of impracticability.<sup>98</sup>

Furthermore, the contractor who walks off the job after discovering an environmental hazard and pleads the defense of impossibility/impracticability runs the risk that a subsequent contractor will complete the work and undermine the defense.<sup>99</sup> The defense of impracticability, however, has occasionally been applied more broadly. A few courts have, at various times, defined the impracticability defense to include those circumstances in which an “unanticipated circumstance has made a performance of the promise *vitaly different* from what was reasonably expected.”<sup>100</sup> Although there appears to be no case directly addressing whether performance is made “vitaly different” by requiring a contractor to call in an environmental professional before resuming construction, an appealing argument can be made on the contractor’s behalf – assuming, of course, that a court accepts this more generous and less common definition of impracticability.

The defense of impracticability/impossibility is no ace in the hole for contractors who might consider walking away from a job after discovering an environmental hazard on site. Rather, its application is highly unpredictable at best and exceedingly unlikely at

worst:

The doctrines of Impossibility [or] Commercial Impracticability ... comprise unclimbed peaks of contract doctrine. ... In spite of attempts by all of the contract buffs and even in the face of eloquent and persuasive general statements, it remains impossible to predict with accuracy how the law will apply to a variety of relatively common cases.<sup>101</sup>

This is thin gruel, indeed, for the construction lawyer who seeks to assure a contractor client that it will be protected if the decision is made to walk away from a job upon the discovery of an environmental hazard.

## **VI. CONCLUSION**

Although the environmental regulatory structure is complex and sometimes bewildering, most of its basic strictures are a matter of good common sense, good housekeeping, safety practices, and common decency. Anyone who comes across or stumbles upon a substance that might well be hazardous in some way should have the good sense to simply stop and report the matter up the chain of command. Eventually, of course, the responsible corporate officials will have to report the matter to the government. They may also have to take some immediate steps to stabilize the situation, pending further assessment.

The decision whether to debate, mitigate, or wait will depend upon many factors, including, but not limited to, the type of environmental issue encountered, the extent of potential harm to human health or the environment, the relationship of the parties, and the duties and obligations imposed on the parties by any and all agencies having jurisdiction over the environmental issue. In a perfect world, contractors and owners would not face these dilemmas – there would be available to each a complete historical recording of all prior acts and occurrences on the site, and the risks associated with each would be

allocated at the time of contracting, before the first fistful of dirt is disturbed. That, however, is not reality.

To deal with reality, it is absolutely vital for contractors to educate their employees – those operating the backhoes and wielding the shovels – to recognize the tell-tale signs of hazardous situations. As important, perhaps more so, it is necessary to create a corporate environment in which workers at all levels feel free and unafraid to report these matters up the corporate chain of command. Going full circle back to our movie, if given the choice, “wait” can be the least desirable alternative.

## Endnotes

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<sup>1</sup> *A Simple Plan*. Dir. Sam Raimi. Perfs. Bill Paxton, Bridget Fonda, Billy Bob Thornton, Brent Briscoe. Film. Paramount Pictures, 1998. The film was based on Scott Smith's novel, *A Simple Plan*, which was published in 1993.

<sup>2</sup> 42 U.S.C. §§ 9601-9675. CERCLA (often referred to as Superfund) was passed during a lame-duck session of Congress in 1980 and was specifically designed to provide authority and funding for the federal cleanup of abandoned hazardous waste sites. See William L. Andreen, *The Evolving Law of Environmental Protection in the United States: 1970-1991*, 9 *Envtl. & Plan. L.J.* 96 (1992). As it has turned out, however, most cleanups have been undertaken either voluntarily or pursuant to administrative orders since those approaches generally prove beneficial to both the government and the responsible parties. The government is able to conserve Superfund resources, and the industry can generally cleanup a site at a lower cost than a government funded response action.

<sup>3</sup> 42 U.S.C. §§ 6901-6992k. RCRA was enacted into law in 1976 (actually as an amendment to the pre-existing Solid Waste Disposal Act) and provides for the so-called "cradle-to-grave" regulation of hazardous waste. See Andreen, *supra* note 2. It also provides the framework for the state regulation of solid waste (e.g., municipal garbage and construction waste) and regulates underground storage tanks containing certain hazardous substances and petroleum.

<sup>4</sup> See 42 U.S.C. §§ 9604-9607.

<sup>5</sup> See 42 U.S.C. §§ 6921-6939e.

<sup>6</sup> For many years, PCBs were used quite widely as a coolant in electrical transformers and capacitors. It was also often used in printer's ink and hydraulic fluids. When exposed to heat, PCBs can break down into highly toxic compounds that can cause cancer and birth defects. Construction Subcontracting: A Legal Guide for Industry Professionals § 18.6 (Overton A. Currie, et al. eds., 1991).

<sup>7</sup> 15 U.S.C. §§ 2601-2692.

<sup>8</sup> 42 U.S.C. §§ 7401-7671q.

<sup>9</sup> 29 U.S.C. §§ 651-678.

<sup>10</sup> 42 U.S.C. §§ 6921-6939e.

<sup>11</sup> 42 U.S.C. §§ 6991-6996k.

<sup>12</sup> 33 U.S.C. §§ 1251-1387.

<sup>13</sup> 33 U.S.C. § 1344.

<sup>14</sup> 33 U.S.C. § 1321.

<sup>15</sup> 33 U.S.C. §§ 2701-2761.

<sup>16</sup> 16 U.S.C. §§ 1531-1544.

<sup>17</sup> 16 U.S.C. § 1538.

<sup>18</sup> 16 U.S.C. § 1532(19).

<sup>19</sup> 50 C.F.R. §17.3.

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<sup>20</sup> 42 U.S.C. § 9604.

<sup>21</sup> A list of “hazardous substances” is set forth in 40 C.F.R. Part 302.

<sup>22</sup> A “release” is defined as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing an hazardous substance or pollutant or contaminant).” 42 U.S.C. § 9601(22). Excluded, however, are releases that result “in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons.” *Id.*

<sup>23</sup> 42 U.S.C. § 9607.

<sup>24</sup> 42 U.S.C. § 9604.

<sup>25</sup> 42 U.S.C. § 9607(c)(3).

<sup>26</sup> 42 U.S.C. § 9607(a).

<sup>27</sup> See *FMC Corp. v. U.S. Dept. of Commerce*, 29 F.3d 833 (3d Cir. 1994) (utilizing a “substantial control” test); *U.S. v. Brighton*, 153 F.3d 308 (6<sup>th</sup> Cir. 1998) (applying an “actual control” test); *U.S. v. Gurley*, 43 F.3d 1188 (8<sup>th</sup> Cir. 1994) (also adopting the “actual control” test).

<sup>28</sup> The National Contingency Plan provides the organizational structure and procedures applicable to cleanups under CERCLA (as well as oil spills under the Clean Water Act). It is found at 40 C.F.R. Part 300.

<sup>29</sup> 42 U.S.C. § 9607(a)(4).

<sup>30</sup> See *U.S. v. Monsanto*, 858 F.2d 160 (4<sup>th</sup> Cir. 1988).

<sup>31</sup> See *U.S. v. Atlantic Research Corp.*, 127 S.Ct. 2331 (2007).

<sup>32</sup> 42 U.S.C. § 9603(a).

<sup>33</sup> 42 U.S.C. § 9609(a)-(c).

<sup>34</sup> 42 U.S.C. § 9603(b).

<sup>35</sup> 42 U.S.C. § 6973.

<sup>36</sup> 42 U.S.C. § 6991(b).

<sup>37</sup> 42 U.S.C. § 6972.

<sup>38</sup> See 29 C.F.R. § 1926.58.

<sup>39</sup> See 40 C.F.R. Part 61.

<sup>40</sup> 33 U.S.C. § 1344.

<sup>41</sup> 33 C.F.R. § 328.3.

<sup>42</sup> 33 C.F.R. § 328.3(b).

<sup>43</sup> See *Rapanos v. U.S.*, 126 S.Ct. 2208 (2006).

<sup>44</sup> 33 U.S.C. § 1344(a).

<sup>45</sup> 33 U.S.C. §§ 1344(a), (c).

<sup>46</sup> 42 U.S.C. §§ 4321-4370f.

<sup>47</sup> 42 U.S.C. § 4332(c).

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- <sup>48</sup> 16 U.S.C. §§ 1451-1465.
- <sup>49</sup> 33 U.S.C. § 1321 (c).
- <sup>50</sup> 33 U.S.C. § 2702.
- <sup>51</sup> 33 U.S.C. § 1321(b).
- <sup>52</sup> 33 U.S.C. § 1319(c).
- <sup>53</sup> 33 U.S.C. § 1321(b)(5).
- <sup>54</sup> 16 U.S.C. § 1538.
- <sup>55</sup> 16 U.S.C. § 1532(19).
- <sup>56</sup> 50 C.F.R. §17.3.
- <sup>57</sup> 16 U.S.C. § 1539.
- <sup>58</sup> 16 U.S.C. § 1540.
- <sup>59</sup> *Martin v. Reynolds Metals Co.*, 342 P.2d 790 (Ore. 1959); *Borland v. Sanders Lead Co., Inc.*, 369 So.2d 523 (Ala. 1979); *Bradley v. American Smelting & Refining Co.*, 709 P.2d 782 (Wash. 1985).
- <sup>60</sup> REST. 2D TORTS §821B (1978).
- <sup>61</sup> *Fletcher v. Rylands*, L.R. 3 H.L. 330 (1868).
- <sup>62</sup> See Harlan M Hatfield & Mitchell H. Ferring, *Environmental Risks in Construction Contracting*, Construction Briefings No. 91-8 (July 1991).
- <sup>63</sup> AIA Document A201 General Conditions of the Contract for Construction, Art. 10.3.1 (2007).
- <sup>64</sup> *Id.* at Art. 10.3.2.
- <sup>65</sup> Parties may enter into agreements to indemnify or hold harmless another party for liability arising from hazardous waste cleanup required under CERCLA. See 42 U.S.C. § 9607(e) (1982).
- <sup>66</sup> 50 U.S.C. § 1431-1435 (1976).
- <sup>67</sup> For an article regarding the application of Public Law 85-804, see Patrick E. Tolan, Jr., *Environmental Liability Under Public Law 85-804: Keeping the Ordinary Out of the Extraordinary Contractual Relief*, 32 PUB. CONT. L. J. 215 (2003).
- <sup>68</sup> The application of Differing Site Condition clauses is not limited to unexpected subsurface conditions. For example, in *Frank Lill & Sons, Inc.*, ASBCA 35744, 88-3 BCA ¶ 20880, a contractor was entitled to additional compensation for the removal of asbestos located under a boiler casing because the Armed Services Board of Contract Appeals determined that the quantity of asbestos constituted a hidden physical condition materially different from the amount indicated in the contract documents.
- <sup>69</sup> AIA Document A201 General Conditions of the Contract for Construction, Art. 3.7.4 (2007). Article 3.7.4 of the 2007 version of the AIA Document A201 replaces Article 4.3.4 of the 1997 version of the AIA Document A201.
- <sup>70</sup> 48 C.F.R. § 52.243-1(a).
- <sup>71</sup> AIA Document A201 General Conditions of the Contract for Construction, Art. 15.1.2. (2007).
- <sup>72</sup> *Id.* at Art. 15.1.3.

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<sup>73</sup> See generally, Daniel E. Toomey, J. Kent Holland, Jr., & Lawrence F. Delmore, *Surety, Insurance, Construction and Hazardous Waste: A Toxic Mix?*, 14-JAN CONSLAW 31 (Jan. 1994).

<sup>74</sup> See 4 BRUNER & O'CONNOR CONSTRUCTION LAW § 14:16 (2002); *Id.* (Supp. 2007) (referencing cases related to various unanticipated environmental issues encountered on construction projects, including, but not limited to, hazardous wastes, endangered species, lead paint, asbestos, and contaminated groundwater).

<sup>75</sup> 222 F. 3d 528 (9<sup>th</sup> Cir. 2000).

<sup>76</sup> *Id.* at 531.

<sup>77</sup> *Id.* at 531-32.

<sup>78</sup> *Id.* at 532.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

<sup>82</sup> *Id.* at 533.

<sup>83</sup> 277 F.3d 734 (5<sup>th</sup> Cir. 2001).

<sup>84</sup> *Id.* at 737.

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> *Id.*

<sup>90</sup> *Id.* at 738.

<sup>91</sup> *Id.* at 742. Each defendant was sentenced to five years probation. Additionally, Sims was ordered to pay a fine of \$100,000 and a special assessment of \$400; Sims' superintendent was ordered to pay a special assessment of \$100; Amtek was ordered to pay a special assessment of \$400; and Amtek's president was ordered to pay restitution of \$14,628, a fine of \$10,000, and a special assessment of \$100. *Id.* n. 2.

<sup>92</sup> 19 Cl.Ct. 785 (1990).

<sup>93</sup> REST. 2D CONTRACTS § 261.

<sup>94</sup> *Island Dev. Corp. v. District of Columbia*, 933 A.2d 340, 350 (D.C. 2007).

<sup>95</sup> *Asbury v. Crawford Elec. Co-op, Inc.*, 51 S.W.3d 152, 158 (Mo.App. 2001).

<sup>96</sup> *DiScipio v. Sullivan*, 30 A.D.3d 660, 661 (N.Y.A.D. 3 Dept. 2006).

<sup>97</sup> *Island Dev. Corp.*, 933 A.2d at 250.

<sup>98</sup> See, e.g., *Karl Wendt Farm Equipment Co. v. Int'l Harvester Co.*, 931 F.2d 1112 (6th Cir. 1991) (stating that "economic unprofitableness [sic] is not the equivalent to impossibility of performance. Subsequent events which in the nature of things do not render performance impossible, but only render it more difficult, burdensome, or expensive, will not operate to relieve [a party of its contractual obligations].") (alterations in original).

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<sup>99</sup> See, e.g., *Joseph W. O'Brien Co. v. Highland Lake Constr. Co.*, 307 N.E.2d 761, 764 (Ill. 1974) (where contractor was able to complete work abandoned by subcontractor due to alleged impossibility, noting that “[i]f the plaintiffs themselves were able to accomplish what the defendant asserts was impossible, regardless of the difficulty encountered, then ipso facto performance was not impossible and the defense is non-meritorious”) (declining to apply more “liberal” construction of “impossibility” that would include “impracticability because of extreme and unreasonable difficulty, expense, injury or loss involved.”).

<sup>100</sup> Richard A. Lord, WILLISTON ON CONTRACTS § 77:16 (4<sup>th</sup> ed. 2004) (citing *Florida Power & Light Co. v. Westinghouse Elec. Corp.*, 826 F.2d 239 (4th Cir. 1987)) (emphasis supplied).

<sup>101</sup> James J. White & Robert S. Summers, *Uniform Commercial Code* § 3-9, at 155 (3d ed. 1988).