

**CONSTRUCTION IN A FRAGILE WORLD:
ENVIRONMENTAL ISSUES' REVIEW & CHECKLIST**

By Kelly M. McQueen¹

I. Introduction

Environmental matters cut a wide swath across the construction industry. Primarily administered through the federal Environmental Protection Agency (EPA) and the Arkansas Department of Environmental Quality (ADEQ), the construction industry has to comply with numerous laws and regulations addressing environmental matters including such things as construction site storm water runoff, dredge and fill activities in U.S. waters and wetlands, oil and chemical spills, air emissions, discharges to waters, asbestos handling, and solid/hazardous waste storage and disposal. Other areas of concern for the construction industry are indoor air quality, materials recycling, energy use, and vegetation and habitat quality.

While an in-depth discussion of the environmental laws with an application to the construction industry is certainly worthwhile, it is beyond the scope of this presentation, as are the topics green construction / sustainability and environmental management systems (EMS). Instead, this presentation's aim is to provide a brief overview and checklist of the variety of environmental issues which may be encountered during a construction project. Primary emphasis is placed on due diligence as it is the time before a project begins to evaluate and recognize the environmental risks of the project. A list of issues to look for during due diligence is provided, as is a list of permits and approvals which may be required once the project is underway. Exhibit A to this outline gives the names and cites of selected state and federal statutes which may be applicable to a construction project.

There is a wealth of other resources available for those interested in learning more about environmental issues for the construction industry. A few of those resources are included in section IV, below. One such resource is the EPA and its construction industry section webpage, www.epa.gov/sectors/construction/index.html, which has numerous links and helpful documents. Exhibit B is the EPA sponsored pamphlet "Federal Environmental Requirements for Construction – What Do You Need to

¹ Kelly McQueen is Of Counsel with the Little Rock law firm Perkins & Trotter, PLLC, where her practice focuses on environmental law & litigation.

Consider?”, a good summary of the major federal environmental requirements for construction projects.

II. Environmental Due Diligence

Due diligence is the process of identifying and evaluating a project’s potential environmental problems in an effort to allocate or minimize financial and health-based risks and to qualify for statutory defenses under Superfund (CERCLA²) and its state counterparts. In its most basic form, due diligence should allow you to answer whether there is contamination on the property from activities conducted on it or from those on a neighboring property, what may be required to cleanup the property, what the likely cost of cleanup is, what is the likelihood of future liability for contamination to the government or third-parties, and whether there will be restrictions on the use of the property or additional environmental compliance costs for developing / occupying it.

The requirement of performing due diligence, specifically environmental site assessments (ESAs), came about in large part because of CERCLA, its strict, joint and several liability scheme, and its narrow defenses, which generally require that a party have conducted “all appropriate inquiry” into a property’s environmental condition prior to ownership or use.³ The ASTM standard for Phase I Site Assessments is currently the one most commonly used. A Phase II ESA (subsurface investigation) may be required if facts and conditions warrant. A Phase II ESA is usually very project and site specific.

A 2002 amendment to CERCLA directs EPA to issue a rule defining “all appropriate inquiry” (AAI).⁴ The final rule is expected later this year. For property purchased after May 31, 1997, but before the effective date of the final rule, the procedures set forth in either the 1997 or 2000 ASTM standard for Phase I ESAs will satisfy the AAI requirement. Once adopted, the AAI rule will define the necessary due diligence required to qualify for three of CERCLA’s statutory defenses and the Brownfields grant program.⁵ AAI is just one of several conditions required for these defenses. While exactly what the final rule will look like is not yet clear, the steps for an adequate AAI will likely be similar to the ASTM standard (interviews, historical source review, liens search, records review, visual inspection, etc.) One difference, however, will be that the AAI final rule will require the investigation to be performed by or under the supervision of an “environmental professional”, a term which is still being debated.

² Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. § 9601 *et seq.*

³ 42 U.S.C. §9607(35)(A) and (B).

⁴ For additional information on AAI, see EPA’s webpage on the subject, www.epa.gov/swerosps/bf/regneg.htm.

⁵ The defenses are: (a) the innocent landowner defense (§ 101(35)); (b) the contiguous landowners exclusion (§ 107q); and (c) the bona fide prospective purchaser exclusion (§107(r)). The grant program is codified in § 104(k).

Neither the ASTM standard nor the final AAI rule cover all possible environmental conditions of a subject site which may otherwise be very important to the potential purchaser or operator so it is vital to have a good idea of what to look for during due diligence. ESAs should be studied and questioned, not relied upon as some sort of panacea. For example, neither standard requires investigation into possible asbestos containing materials, the presence of wetlands, workplace safety violations, or endangered ecological or cultural resources.

Checklist of issues during due diligence:

- Historic uses of and practices on property
 - Hazardous waste generation
 - Chemical and hazardous material storage
 - Likelihood of environmental contamination
 - Pesticides / herbicides / fungicides
- Environmental databases review
- Adjacent property review
- Evidence of environmental contamination / spills
- Historic / cultural resources (e.g. Indian burial grounds)
- Protected ecological resources/endangered species
- Soils
- Asbestos containing materials
- Lead based paint
- Above ground storage tanks
- Underground storage tanks
- Urea formaldehyde insulation
- On-site refrigerant systems (ozone depleting substances)
- Indoor air quality/mold/radon
- PCB containing transformers and equipment
- Floodplain
- Wetlands
- Local zoning and other ordinances applicable to the site

- Worker safety requirements

III. Permitting & Approvals

The list of potential permits and approvals which you must get to successfully (and legally) complete a construction project is, to say the least, daunting. The checklist below includes several items which you may not traditionally think of as an environmental permit. While the list is intended to be fairly comprehensive, it cannot be absolutely inclusive of all possible permits which may be required for a given situation. After the type or name of the permit, the agency which administers the program is provided in parentheses.

A. Water Supply / Use:

- Comfort letter (ASWCC⁶)
- Riparian water use registration (ASWCC)
- Non-riparian water use permit (ASWCC)
- Water well construction & registration (AWWCC⁷)
- Compliance with Safe Drinking Water Act (EPA⁸)
- Water plan compliance certificate (AHD⁹)

B. Discharges to Waters:

- Storm water permit for construction (ADEQ)
- Storm water permit for operation (ADEQ)
- NPDES discharge permit (not for storm water)(ADEQ)
- Wastewater treatment / disposal system construction permit (ADEQ, AHD)
- Sewage disposal systems registration (AHD)
- Hydrostatic test water discharge permit (ADEQ)
- Underground injection control permit (EPA)
- Wetlands: nationwide permit (USACE¹⁰)

⁶ Arkansas Soil and Water Conservation Commission, www.arkansas.gov/aswcc

⁷ Arkansas Water Well Construction Commission, www.accessarkansas.org/awwcc

⁸ www.epa.gov/safewater/

⁹ Arkansas Department of Health, contact person: Robert Hart, 501-661-2623

- Wetlands: Clean Water Act § 404 permit (USACE)
- Wetlands: Clean Water Act § 401 certification
- Water body crossings approvals (ADEQ, ASWCC)
- Wild & Scenic Rivers permit to cross/impact (AW&SRC¹¹)
- Irrigation district approvals for use of waterways/right of ways

C. Air Emissions:

- Clean Air Act PSD Construction Permit (EPA, ADEQ)
- Clean Air Act Title V Operating Permit (EPA, ADEQ)
- State Air Permit (ADEQ)
- Boilers – air emissions permit may be necessary

D. Ecological and Cultural Resources:

- Endangered species consultation & approval (USF&W¹²)
- Cultural resources review & approval (ARSHPO¹³)
- State listed species consultation & approval (ARSHPO, AGFC¹⁴)
- Wildlife impact approval (AGFC)
- Necessary approvals in federal forests (USFS)

E. Other:

- Underground & above ground storage tank registration (ADEQ)
- Flood plain approvals (FEMA¹⁵)
- Asbestos containing materials permit for demolition or renovation (ADEQ)
- Spill Prevention Containment & Countermeasures Plan (EPA)
- Hazardous waste generator status and registration (EPA)

¹⁰ U.S. Army Corps of Engineers, Little Rock, Memphis or Vicksburg Districts, www.usace.army.mil

¹¹ Arkansas State Wild & Scenic Rivers Commission

¹² U.S. Fish & Wildlife Service, <http://www.fws.gov>

¹³ Arkansas State Historic Preservation Officer (Arkansas Department of Heritage), www.arkansaspreservation.org

¹⁴ Arkansas Game & Fish Commission, www.agfc.com

¹⁵ Federal Emergency Management Administration, www.fema.gov

- Pesticides, etc. – necessary registration and approvals (EPA, ASPB¹⁶)
- Registration of purchase of farmland by non-US foreign corporation per A.C.A. § 2-3-101 *et seq.* (county)
- State lands / parks approvals (ASLC¹⁷, ADPT¹⁸)
- Federal project approvals per NEPA¹⁹ (appropriate federal agency)

IV. Resources:

“Federal Environmental Requirements for Construction – What Do You Need to Consider?”, Exhibit B hereto, also available on EPA’s construction industry section webpage (see below)

www.adeq.state.ar.us – ADEQ’s website

www.epa.gov/region6/index.htm - EPA Region 6’s website

www.epa.gov/sectors/construction/index.html - EPA’s construction industry webpage

Peter Truitt, EPA point of contact for construction industry, (202) 566-2970, truitt.peter@epa.gov

www.constructionenvironment.org – Associated General Contractors of America’s environmental resources webpage

<http://cicacenter.org/> - Construction Industry Compliance Assistance Center webpage

www.nahb.org/page.aspx/category/sectionID=211 – National Association of Home Builders environmental resources webpage

<http://peakstoprairies.org/p2bande/construction/index.cfm> - Pollution Prevention Information Center residential construction webpage

Construction Guidebook for Managing Environmental Exposures, available through AGC’s website

¹⁶ Arkansas State Plant Board, www.aspb.arkansas.gov

¹⁷ Arkansas State Lands Commissioner, www.cosl.org

¹⁸ Arkansas Department of Parks & Tourism, www.arkansas.com/state-federal-parks

¹⁹ National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*

American Bar Association, Environmental Aspects of Real Estate Transactions (Witkin, Ed. 1995)

www.epa.gov/epaoswer/non-hw/debris-new/index.htm - EPA construction and demolition debris page

“Building Savings: Strategies for Waste Reduction of Construction and Demolition Debris from Buildings”, brochure,
www.ilsr.org/recycling/buildingdebris.pdf

“Guidance for Controlling Asbestos Containing Materials in Buildings”,
www.epa.gov/opptintr/asbestos/buildings.html

www.epa.gov/otaq/retrofit, EPA’s Voluntary Diesel Retrofit Program webpage

Exhibit A

SELECTED ENVIRONMENTAL LAWS AFFECTING THE CONSTRUCTION INDUSTRY IN ARKANSAS

Hazardous Substances / hazardous waste:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or “Superfund”), 42 USC §§ 9601 *et seq.*
- Resource Conservation & Recovery Act (RCRA), 42 USC §§ 6921 *et seq.*
- Oil Pollution Act (OPA), 33 U.S.C. §§ 2701 *et seq.*
- Emergency Planning & Community Right-to-Know Act (EPCRA), 42 U.S.C. §§ 11001 *et seq.* (hazardous chemical reporting)
- Arkansas Remedial Action Trust Fund Act (RATFA), A.C.A. §§ 8-7-501 *et seq.*

The Arkansas Emergency Response Fund Act (ERFA), A.C.A. §§ 8-2-401 *et seq.*, was repealed by Act 1824 of 2005.

- Arkansas Pollution Control & Ecology Commission (ADPC&E) Regulation 22 - Hazardous Waste Management
- ADPC&E Regulation 29 - Brownfields Redevelopment
- ADPC&E Regulation 30 – RATFA Hazardous Substances Site Priority List

Regulated Storage Tanks:

- RCRA Subtitle I and associated regulations (40 CFR 280)
- Arkansas Regulated Substance Storage Tanks Act, A.C.A. §§ 8-7-801 *et seq.*
- Arkansas Petroleum Storage Tank Trust Fund Act, A.C.A. §§ 8-7-901 *et seq.*
- ADPC&E Regulation 12 - Storage Tank Regulations

Water, Wetlands and Discharges to Water :

- Federal Water Pollution Control Act (FWPCA or Clean Water Act), 33 U.S.C. §§ 1344
- Arkansas Air and Water Pollution Control Act, A.C.A. § 8-4-101 through § 8-4-315
- ADPC&E Regulation 6 - Regulations For State Administration Of The National Pollutant Discharge Elimination System (NPDES)
- ADPC&E Regulation 4 - Regulation to Require a Disposal Permit for Real Estate Subdivisions in Proximity to Lakes and Streams

- Safe Drinking Water Act (SDWA), 42 U.S.C. §§ 300f *et seq.*

Air Emissions:

- Clean Air Act (CAA), 42 U.S.C. §§ 7401 *et seq.*
- Arkansas Air and Water Pollution Control Act, A.C.A. § 8-4-101 through § 8-4-315
- ADPC&E Regulation 18 - Arkansas Air Pollution Control Code
- ADPC&E Regulation 19 - Regulations of the Arkansas Plan of Implementation for Air Pollution Control
- ADPC&E Regulation 26 - Regulations of the Arkansas Operating Air Permit Program

Solid Waste:

- Arkansas Solid Waste Management Act, A.C.A. §§ 8-6-201 *et seq.*
- Arkansas Litter Control Act, A.C.A. §§ 8-6-401 *et seq.*
- ADPC&E Regulation 22 - - Solid Waste Management

Asbestos:

- Titles I & II of the Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601 *et seq.*
- Title I of the CAA, § 7412, hazardous air pollutants
- 40 CFR 763 – Asbestos
- 40 CFR 61 - The standards for asbestos are contained in 40 CFR 61.140 through 61.157
- ADPC&E Regulation 21 - Arkansas Asbestos Abatement Regulation

Lead Based Paint

- Title IV of TSCA, 15 U.S.C. §§ 2601 *et seq.*
- 40 CFR Part 745
- Arkansas Lead-Based Paint-Hazard Act A.C.A. §§ 8-4-401 *et seq.*
- ADPC&E Regulation 25 - Arkansas Lead-based Paint Hazard Regulation

Polychlorinated Biphenyls (PCBs):

- TSCA, 15 U.S.C. 2605

- 40 CFR 761 - Manufacturing, Processing, Distribution in Commerce and Use Prohibitions.

Other:

- Federal Insecticide, Fungicide, & Rodenticide Act FIFRA 7 U.S.C. §§ 136 *et seq.*
- National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*
- Endangered Species Act (ESA), 7 U.S.C. § 136; 16 U.S.C. §§ 460 *et seq.*