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## CHAPTER 20

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# Arkansas

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### Introduction

The Arkansas Department of Environmental Quality (ADEQ) regulates hazardous substances in Arkansas.<sup>1</sup> ADEQ is vested with the authority granted by the EPA,<sup>2</sup> specific state statutes, and the Arkansas Pollution Control and Ecology Commission (PC&E Commission). The PC&E Commission adopts the rules and regulations that are implemented by ADEQ.<sup>3</sup> This chapter will address the context in which Arkansas utilizes institutional controls to mitigate environmental contamination. For purposes of this chapter, the term “institutional controls” is used to encompass institutional, engineering, activity, and use limitations, and land use controls.

Arkansas has not adopted the Uniform Environmental Covenants Act, which governs environmental covenants and provides a streamlined mechanism to implement institutional controls. Arkansas does not have a statutory scheme for the use of institutional controls. Instead, ADEQ has been given broad latitude in state statutes to take such actions as ADEQ deems appropriate or necessary to protect the environment in Arkansas.<sup>4</sup>

Although not defined in the statutes or in ADEQ’s regulations, the concept of institutional controls appears routinely. A definition of institutional controls used by ADEQ can be found in a write-up of an ADEQ enforcement action:

Administrative/Institutional Controls—This alternative provides a means to restrict access and/or restrict the land use of contaminated

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*Editor’s note:* The terminology for these restrictions varies from program to program and jurisdiction to jurisdiction. The most commonly used terminology includes “institutional controls,” “land use controls,” “environmental covenants,” and “activity and use limitations.” The program discussed in this chapter uses the terminology “institutional controls,” “restrictive covenants,” and “land use controls.” It is important to understand how this terminology may differ from that used in other programs or jurisdictions. *See generally* chapter 1.

areas that may pose an unacceptable risk. This alternative may require institutional controls to be implemented on a temporary or permanent basis and may include means to restrict access to the contaminated areas by physical engineered barriers (signs, fences, etc.) or legal (property purchases, deed restrictions, etc.) means. This alternative also requires monitoring to evaluate if such controls remain adequate in the future. Administrative/institutional controls are typically implemented in conjunction with other alternatives.<sup>5</sup>

Institutional controls in Arkansas are primarily used in four situations: (1) remediation plans implemented during the settlement of an enforcement action; (2) solid waste management; (3) management of mining facilities; and (4) as part of the Arkansas Brownfields Program. This chapter will discuss the use of institutional controls in each of these situations.

### **Settlement of an Enforcement Action**

A violation of Arkansas' environmental laws can result in severe criminal and civil penalties. In some cases, criminal violations can result in punishment of up to 20 years of imprisonment and fines of \$250,000 per day that the violation exists.<sup>6</sup> Most violations result only in civil penalties, but those can be severe as well, including civil penalties of up to \$10,000 per day for any violation of rules, regulations, permits, or plans.<sup>7</sup> However, the amount can be higher if the perpetrator benefited financially from the offense.<sup>8</sup> Arkansas law permits civil penalties in excess of the \$10,000-per-day limit; if the person found liable "derived pecuniary gain from commission of the offenses, then he or she may be ordered to pay a civil penalty equal to the amount of the pecuniary gain."<sup>9</sup>

Given the potential severity of the penalties for violations, violators frequently negotiate a settlement with ADEQ. The settlement will typically be structured to punish the violator while remediating the violation.<sup>10</sup> Arkansas law specifically grants ADEQ flexibility in structuring the required remediation. Arkansas law allows ADEQ to "approve requests which allow an applicant to use alternative methods to comply with an Arkansas Pollution Control and Ecology Commission rule regarding the control or abatement of pollution."<sup>11</sup> The alternative method must be designed to control or abate pollution in a manner that is:

- (A) Quantifiable, measurable, and enforceable;
- (B) At least as protective of the environment and the public health as the method prescribed by the requirement or commission rule that would otherwise apply; and
- (C) Consistent with federal law.<sup>12</sup>

The statutory flexibility allows ADEQ to structure remediation plans that include institutional controls. These controls may include placing restrictive covenants on the polluted property. The restrictive covenants may include,

among other things, prohibiting installation of water wells, requiring certain areas to be covered with pavement, prohibiting use as a residential structure, limiting the types of crops that can be grown, prohibiting use as a day care, or prohibiting use as a school.

The type of restriction depends heavily on the type and extent of contamination. For instance, if the property is affected by high cadmium application rates, ADEQ may require a restriction on agricultural land so that only animal food or nonfood chain crops may be produced.<sup>13</sup> Furthermore, the restrictive covenant in this situation must require an operating plan that demonstrates how animal-feed crops will be distributed to preclude ingestion by humans.<sup>14</sup>

Many enforcement actions arise under PC&E Commission Regulation No. 23, Hazardous Waste Management (Regulation 23). Regulation 23 "serves as the basic regulation for administration of the state's hazardous waste management program."<sup>15</sup> Regulation 23 "mirrors, to the greatest extent possible, the Federal hazardous waste management regulations published at 40 CFR Parts 260-266, 268, 270, 273, and 279."<sup>16</sup> Regulation 23 was adopted to support the Arkansas Hazardous Waste Management Act<sup>17</sup> and the Arkansas Resource Reclamation Act.<sup>18</sup>

ADEQ has adopted an Elective Site Clean-Up Agreement (ESCA) form for the settlement of enforcement actions arising under Regulation 23. The ESCA form contemplates use of institutional controls as part of the remediation plan. If required as part of the plan, the ESCA requires the participant to file a restrictive covenant on the property in a "form acceptable to ADEQ that provides notice to successors in title that use of the Property is restricted to activities and compatible uses that will protect the integrity of any remedial action measures implemented on the Property."<sup>19</sup> The ESCA form contemplates that the required restriction will limit the "specific property use (residential, industrial or commercial) and might include land use controls that include, but are not limited to: 1) maintenance of existing pavement or ground cover; 2) use of air monitoring instruments during excavation; and 3) a deed restriction on use of groundwater beneath the Property for any use."<sup>20</sup>

### **Solid Waste Management**

PC&E Commission Regulations also contemplate the use of institutional controls for the management of solid waste. If a landfill detects a release of a regulated contaminant, the landfill is required to take remedial actions.<sup>21</sup> The appropriate remedy depends on the nature of the release and the threat to human health and the environment.<sup>22</sup> Specifically, the owner or operator of the landfill is required to consider the "long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following":<sup>23</sup>

- (i) Magnitude of reduction of existing risks;
- (ii) Magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;
- (iii) The type and degree of long-term management required, including monitoring, operation, and maintenance;
- (iv) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal or containment;
- (v) Time until full protection is achieved;
- (vi) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment;
- (vii) Long-term reliability of the engineering and institutional controls;<sup>24</sup> and
- (viii) Potential need for replacement of the remedy.<sup>25</sup>

Additionally, when the operator closes the landfill, PC&E Regulations require a restrictive covenant to be filed in the real property records of the county where the facility is located.<sup>26</sup> The restriction must notify any potential purchaser of the property about the history of the property and the restrictions imposed by ADEQ, including:

- (1) The past use of the land as a landfill facility;<sup>27</sup>
- (2) Future land uses shall comply with Pollution Control and Ecology Commission regulations and shall not disturb the integrity of the final cover system, the liner system, or any other components of the containment or monitoring system; and
- (3) In accordance with A.C.A. § 8-6-1404, it shall be unlawful for any person, partnership, company, corporation or other entity to build, erect, or construct any house, home, or building to be used for a residential purpose.
- (4) The land has been used for the disposal of asbestos containing waste material; and
- (5) The survey plot and record of the location and quantity of asbestos containing waste disposed of within the disposal site required in Regulation Number 21, Arkansas Asbestos Abatement Regulation, have been filed with the Department [i.e., ADEQ].<sup>28</sup>

The law imposes similar requirements for sites used for the disposal of hazardous wastes.<sup>29</sup> Also, any facility that is used for the disposal of asbestos-containing waste material must be marked with a notation in the real property records identifying the location and quantity of asbestos-containing waste.<sup>30</sup>

For hazardous waste disposal sites, the restrictive covenants may be removed only with permission from ADEQ.<sup>31</sup> To remove the restriction, the

owner or operator of the site must seek permission from ADEQ to remove the hazardous substances.<sup>32</sup> After removal of the hazardous substances, ADEQ may either: (1) approve removal of the restrictive covenant; or (2) authorize an additional notation to the records that the hazardous substances have been removed.<sup>33</sup>

### **Mining Facilities**

As part of the application process to open certain mines, the applicant must file a copy of the application with the office of the circuit clerk for the county where the mine will be located.<sup>34</sup> The records of the office of the circuit clerk are routinely searched as part of a title examination, so the existence of the application should be made apparent to any person inspecting the title.

After the completion of mining operations, the regulations place significant limitations on post-mining land uses without the approval of ADEQ.<sup>35</sup> The regulations do not specify that a restrictive covenant has to be filed following the completion of mining operations to control future land uses. However, ADEQ staff members overseeing the cessation of the mining activities and the reclamation of the property may require a recorded restriction so that future owners are aware of the restrictions and limitations.

### **Brownfields Program**

The Arkansas Voluntary Clean-Up Act provides the statutory structure for the Brownfields Program in Arkansas.<sup>36</sup> The PC&E Commission Regulations for the Brownfields program are found in Regulation 29. The Brownfields Program is also shaped by a December 2000 Memorandum of Agreement between the Arkansas Department of Environmental Quality and Region 6 of the United States Environmental Protection Agency (the MOA).

The purpose of the Brownfields Program is to encourage and facilitate the redevelopment of abandoned sites affected by pollution.<sup>37</sup> As stated in the Arkansas Brownfields Program User's Guide (the User's Guide), "The Brownfields Program will benefit all Arkansans by encouraging the cleanup and reuse of abandoned or underutilized properties while continuing to protect human health and the environment."<sup>38</sup> The User's Guide also states, "The program is intended to accelerate the pace of cleanups and, when possible, to reduce governmental involvement."<sup>39</sup>

From a regulatory and statutory perspective, the use of institutional controls is critical to the implementation of the Brownfields Program.<sup>40</sup> The MOA with the EPA requires the Brownfields Program to have clean-up measures that include one or more of the following:

1. treatment of contaminated media to acceptable exposure levels;
2. containment of contaminated media to acceptable exposure levels;

3. transport to off-site treatment and/or disposal; or
4. restricted access to and/or use of the site through institutional controls.<sup>41</sup>

In addition to the EPA's requirements, the state statute requires the remedial action under ADEQ to consider:

- (A) The intended and allowable use of the abandoned site;
- (B) The ability of the contaminants to move in a form and manner which would result in exposure to humans and the surrounding environment at levels considered to be an unacceptable health risk as described in subdivision (h)(1) and (2) of this section [which includes the risk of the contaminant causing acute or chronic illness or the risk of the contaminant degrading water resources];
- (C) Consideration of the potential environmental risks of proposed alternative remedial action and its technical feasibility, reliability and cost effectiveness;
- (D) When an imminent and substantial endangerment is posed; and
- (E) Whether institutional or engineering controls eliminate or partially eliminate the imminent and substantial endangerment or otherwise contain or prevent migration.<sup>42</sup>

In response to the regulatory and statutory requirements, the Brownfields Program requires a potential purchaser of contaminated property to work with ADEQ to identify the potential risk.<sup>43</sup> The determination of risk includes considering "'real world' factors such as receptors, realistic exposures and land use scenarios."<sup>44</sup> The User's Guide states, "It is the intention of the Department [i.e., ADEQ] to practice sound, practical risk management procedures which provide protection of human health and the environment while allowing for clean-up decisions based on realistic risk."<sup>45</sup> To accomplish these goals, ADEQ and the potential purchaser (or an existing owner who qualifies for the Brownfields Program based on filing a notice of intent with ADEQ prior to acquiring the property) work together to develop an appropriate plan for redevelopment of the site.<sup>46</sup>

One of the first steps to create an appropriate plan is to perform a Comprehensive Site Assessment (CSA).<sup>47</sup> The CSA "identifies the location and extent of contamination, type of contamination, if any, the quantity or level of contamination, type of contamination, probable source of contamination and the level of risk associated with the contamination. The CSA will also identify the intended land use of the property."<sup>48</sup> The CSA also identifies current institutional controls, past and current land use controls, and future planned land use.<sup>49</sup>

Following the CSA, ADEQ and the Brownfields participant enter into an Implementing Agreement.<sup>50</sup> The Implementing Agreement "establishes the Participant's legal and financial environmental liability parameters for the Brownfields property."<sup>51</sup> Since the future use of the property is critical to the

CSA, the implementing plan will prohibit using "the property in a manner which differs from the intended use identified in the [Implementing] Agreement unless the Department [i.e., ADEQ] and the purchaser agree to a modification of the [Implementing] Agreement."<sup>52</sup>

After completion of the CSA and the Implementing Agreement, ADEQ and the Brownfields participant enter into a Property Development Plan.<sup>53</sup> The participant may elect in the Property Development Plan *not* to require any clean-up activities if the risks can be managed in another way, such as through control of the property's land use.<sup>54</sup> The Property Development Plan must include:

- 1) selection and rationale for preliminary remediation levels for protection of human health and the environment;
- 2) summary of preferred remedial alternative with technical justification and discussion of compliance with regulatory requirements;
- 3) plans, designs and specifications for remedial activities and construction;
- 4) location of off-site disposal facilities, if any;
- 5) schedule of implementation of remedial activities;
- 6) operation and maintenance plan; and
- 7) future land use assumptions and justifications.<sup>55</sup>

After creation of the Property Development Plan, ADEQ issues a Property Development Decision Document (PDDD). The PDDD "describes the proposed plans for clean up and development submitted by the Participant in their [Property Development Plan]."<sup>56</sup> Once finalized, the PDDD becomes a supplement to the Implementing Agreement.<sup>57</sup> The PDDD approval process considers the following factors:

- 1) the intended and allowable use of the site;
- 2) the ability of any contaminants to migrate in a form and manner which could result in exposure to humans and the surrounding environment at levels considered to be an unacceptable risk based upon risk management decisions by the Department [i.e., ADEQ];
- 3) the potential environmental risks posed by the proposed remedial alternative(s);
- 4) technical feasibility, reliability and cost effectiveness of the remedial alternative(s);
- 5) whether or not a risk to human health and the environment is posed by site conditions;
- 6) whether institutional or engineering controls will eliminate or partially eliminate the risk to human health and environment or otherwise contain or prevent migration of contaminants from the site; and
- 7) comments received from the public.<sup>58</sup>

Since so much of the risk assessment and ultimate remediation plans for a Brownfields property depend on the intended use of the property, the Brownfields Program takes several steps to control future uses through notices and restrictions filed in the real estate records. Within 30 days after acquiring legal title to the property, the Brownfields participant is required to file a copy of the Implementing Agreement with the circuit clerk of the county where the property is located.<sup>59</sup> The Brownfields participant must also file notice of any subsequent amendments to the Implementing Agreement in the same manner.<sup>60</sup>

Depending on the plan selected for the site, ADEQ will also require the Brownfields participant to record a restrictive covenant in the real estate records.<sup>61</sup> The restrictive covenant must be enforceable by ADEQ and will limit "the use of the property to activities and compatible uses which will protect the integrity of any remediation or other actions implemented on the property."<sup>62</sup> The Brownfields participant is required to incorporate the terms of the restrictive covenant into any lease agreement for the property.<sup>63</sup> The restrictive covenants may not be amended or removed without the approval of ADEQ.<sup>64</sup>

ADEQ will periodically audit the project to identify problems, including whether the Brownfields participant is adhering to the operation, maintenance, and institutional controls.<sup>65</sup> If the restrictive covenant is not adhered to, ADEQ may void the Brownfields participant's liability protection provided by the Implementing Agreement.<sup>66</sup> The failure to adhere to the engineering controls, land use designations, and institutional controls will also void any protection provided by the MOA with the EPA.<sup>67</sup>

A review of existing Brownfields Program projects gives an idea of some of the institutional controls required by ADEQ. Restrictions required in actual projects included limiting the property to industrial use only<sup>68</sup> or commercial use only,<sup>69</sup> prohibiting site excavation without ADEQ approval,<sup>70</sup> requiring notification of past environmental issues to future owners,<sup>71</sup> and prohibiting water wells.<sup>72</sup>

## Conclusion

Although Arkansas does not have a detailed statutory or regulatory structure for using institutional controls, in practice, institutional controls are common tools used by ADEQ to address environmental contamination issues. Institutional controls are used in the context of settling enforcement actions, regulating solid waste management, regulating mining operations, and implementing the Brownfields Program.

The existing regulatory and statutory structure in Arkansas gives ADEQ significant flexibility to design and implement institutional controls to fit the needs of a particular situation. Typically, institutional controls are designed to protect human health by limiting the risk of exposure to potentially dangerous contaminants. Institutional controls are seen as an alternative to more costly contaminant removal activities when ADEQ determines that it is appropriate and safe.



### Notes

1. ADEQ's predecessor entity, which is mentioned in some older cases and articles, was the Arkansas Department of Pollution Control and Ecology (ADPC&E).

2. For instance, the Federal RCRA program is delegated to the state of Arkansas because the state has demonstrated that it has implemented a hazardous waste management program that is equivalent to and no less stringent than the minimum standards published in 40 C.F.R. Parts 260-279, PC&E Commission Regulation 23, Introduction.

3. ARK. CODE ANN. § 8-1-103.

4. ARK. CODE ANN. §§ 8-1-101 *et seq.*

5. Language quoted from the Remedial Action Decision Document (RADD) for Corrective Action in the Matter of Parker Solvents Company, Little Rock, Pulaski County, Arkansas, February 2007.

6. ARK. CODE ANN. § 8-4-103(i)(4).

7. *Id.* § 8-4-103(b) and (c).

8. *Id.* § 8-4-103(e).

9. *Id.* § 8-4-103(e).

10. *Id.* § 8-11-103.

11. *Id.* § 8-11-103.

12. *Id.* § 8-11-103(a)(2).

13. PC&E Commission Regulation 23, § 264.276(b).

14. *Id.* § 264.276(b).

15. *Id.* Introduction.

16. *Id.*

17. ARK. CODE ANN. §§ 8-7-201 *et seq.*

18. *Id.* §§ 8-7-301 *et seq.*

19. ESCA form promulgated by ADEQ.

20. *Id.*

21. PC&E Commission Regulation 22.1206.

22. *Id.* 22.1207(b).

23. *Id.* 22.1207(c)(1).

24. This is the only use of the specific phrase "institutional controls" in the PC&E Regulations, though the concept is clearly contemplated in many places.

25. PC&E Commission Regulation 22.1207(c)(1).

26. *Id.* 22.1301(j).

27. The same restrictions contained in PC&E Commission Regulation 22.1301 apply to open dumps and unpermitted facilities. In such cases, the Regulations require a notation in the real property records stating that the property was used as a dump site. PC&E Commission Regulation 22.1303.

28. PC&E Commission Regulation 22.1301(j).

29. PC&E Commission Regulation 23, § 264.119(b).

30. PC&E Commission Regulation 21.1104(L).

31. PC&E Commission Regulation 23, § 264.119(c).

32. *Id.*

33. *Id.*

34. PC&E Commission Regulation 20, § 778.20.

35. *Id.* § 780.23 and § 816.133.

36. ARK. CODE ANN. § 8-7-1101 *et seq.*

37. PC&E Commission Regulation 29, § 29.102.

38. Arkansas Brownfields Program User's Guide, Page 1.

39. *Id.*
40. See the December 2000 Memorandum of Agreement between the Arkansas Department of Environmental Quality and Region 6 of the United States Environmental Protection Agency and ARK. CODE ANN. § 8-7-1104(j)(2).
41. December 2000 Memorandum of Agreement between the Arkansas Department of Environmental Quality and Region 6 of the United States Environmental Protection Agency.
42. ARK. CODE ANN. § 8-7-1104(j)(2).
43. Arkansas Brownfields Program User's Guide, Page 5.
44. *Id.*
45. Arkansas Brownfields Program User's Guide, Pages 5-6.
46. Arkansas Brownfields Program User's Guide, Page 6.
47. Arkansas Brownfields Program User's Guide, Page 9.
48. *Id.*
49. Comprehensive Site Assessment Program Outline, January 2006.
50. Arkansas Brownfields Program User's Guide, Page 10.
51. *Id.*
52. *Id.*
53. Arkansas Brownfields Program User's Guide, Page 12.
54. *Id.*
55. Arkansas Brownfields Program User's Guide, Pages 12-13.
56. Arkansas Brownfields Program User's Guide, Page 14.
57. *Id.*
58. Arkansas Brownfields Program User's Guide, Pages 14-15.
59. Arkansas Brownfields Program User's Guide, Page 16.
60. *Id.*
61. *Id.*
62. *Id.*
63. *Id.*
64. *Id.*
65. Arkansas Brownfields Program User's Guide, Page 20.
66. Arkansas Brownfields Program User's Guide, Page 16.
67. December 2000 Memorandum of Agreement between the Arkansas Department of Environmental Quality and Region 6 of the United States Environmental Protection Agency.
68. See Brownfield Project Information Form, AFIN Number 66-0061, Arkla Industrial Park, Fort Smith, Sebastian County, Arkansas and Brownfield Project Information Form, APIN Number 35-00410, Dancy Oil Truck Stop, Pine Bluff, Jefferson County, Arkansas.
69. See Brownfield Project Information Form, AFIN Number 12-00269, Heber Springs—T&S Sawmill, Heber Springs, Cleburne County, Arkansas.
70. See Brownfield Project Information Form, AFIN Number 56-00160, Phillip Matthews Trust #1 Property, Trumann, Poinsett County, Arkansas and Brownfield Project Information Form, AFIN Number 75-00450, Plainview Conoco Station, Plainview, Yell County, Arkansas.

71. *See* Brownfield Project Information Form, AFIN Number 58-00410, Old Post Road, Russellville, Pope County, Arkansas. Interestingly, this project specifically permitted residential use of the property.

72. *See* Brownfield Project Information Form, AFIN Number 75-00450, Plainview Conoco Station, Plainview, Yell County, Arkansas and Brownfield Project Information Form, AFIN Number 52-00366, Camden—Thrower's Service Station, Camden, Ouachita County, Arkansas.