

Key Elements of Long-Term Stewardship for RCRA Corrective Action

Corrective Action 2030 Vision, Mission, Goals

Goal 4 Part 1

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Corrective Action 2030 Vision, Mission, Goals

Goal 4

By 2025, the RCRA Corrective Action Program will **identify the key elements of effective Long-Term Stewardship (LTS) for Corrective Action cleanups**, and regions and states will have approaches in place to ensure implementation of the key elements.

EPA LTS for Corrective Action Workgroup

- EPA LTS Workgroup formed to implement Goal 4
- Developed a Straw that includes nine key elements
- Not intended to be requirements
 - Framework
 - Promote consistency
 - Resource for program implementers
 - Flexible to accommodate variations among states and facilities

Key Elements of Effective LTS for RCRA Corrective Action

- Element 1 – Legal Authorities
- Element 2 – Information Regarding Engineering and Institutional Controls
- Element 3 – Long-Term Facility Oversight, Monitoring, and Maintenance
- Element 4 – Recordkeeping and Tracking
- Element 5 – Meaningful Engagement and Consultation
- Element 6 – Funding
- Element 7 – Enforcement
- Element 8 – Enforceable Mechanisms
- Element 9 – Dedicated Resources

Thoughts for Feedback and Discussion

- Which of the elements are most challenging for corrective action program implementers?
- Would expanding the elements and providing more detailed guidance on the elements be of value?
 - If so, for which elements is guidance most needed?
- Do you have any practices or procedures in place for LTS that you would be willing to share?
- Other comments or suggestions?

LTS Element 1 – Legal Authorities

- Corrective action program implementers should understand the legal authorities that are available at the federal, state, and local level to require, maintain, and enforce engineering controls (ECs) and institutional controls (ICs) at the facilities in their region or state.
- Routine and formal coordination among regulators exercising authority at the federal, state, and local levels, as necessary, will assure effective implementation of ECs and ICs.

LTS Element 2 – Information Regarding Engineering and Institutional Controls

- Regulators should have internal practices to assure that accurate and updated information regarding ECs and ICs is readily available to program implementers involved in selecting and/or overseeing corrective action interim measure or remedies.
- Over time, implementation issues may arise that affect the implementation and/or effectiveness of controls that are relied on for corrective action remedies. Regulators should have internal practices to assure that those issues are brought to the attention of program implementers making remedy decisions. Information conveyed should include impacts of climate change on the performance of controls.

LTS Element 3 – Long-Term Facility Oversight, Monitoring, and Maintenance

- Facilities at which the remedy relies on ECs and ICs will likely require periodic oversight and monitoring to verify the continued effectiveness of those controls - for example, to identify and address the potential impacts of climate change. The type and frequency of oversight and monitoring needed will depend on site-specific factors.
- Where oversight and/or monitoring of a facility identify a failure or potential failure of a control, adjustment may be needed to maintain the effectiveness of the control. Where oversight identifies a noncompliance situation, enforcement may be needed.
- Note: Post-closure care and long-term remedies such as pump and treat, and natural attenuation and monitoring, have similar oversight needs.

LTS Element 4 -- Recordkeeping and Tracking

- Significant events in the implementation of ECs and ICs should be tracked as necessary to enable effective oversight and assure effective implementation. Tracking should typically begin when those controls are implemented and continue until the controls are no longer needed.
- The location of controls at a facility should be clearly identified and documented, and that information should be shared as necessary to assure their effective implementation.
- Records regarding controls at a facility should be maintained as necessary to assure continued effectiveness of controls and access to information about the facility.

LTS Element 5 -- Meaningful Engagement and Consultation

- All regulators including federal, state, local and tribal governments that will play a role in the implementation of the remedy and/or implementation and enforcement of the controls, should be involved in the process as soon as it becomes evident that controls may be used at a facility. These parties should have opportunity to provide meaningful input on the use of long-term controls particularly where they will assume long-term responsibilities.
- The community should be informed early in the process, have opportunity to provide meaningful input at remedy selection and, as necessary for effective implementation, continue to be kept aware of the importance of the controls until the controls are no longer needed for their protection.
- Regulators should identify and effectively communicate with affected communities and particularly consider vulnerable communities and environmental justice concerns throughout the process of selecting and implementing ECs and ICs.

LTS Element 6 -- Funding

- The costs to implement and oversee controls at a facility should be estimated and understood when they are selected.
- Regulators should consider how costs associated with maintenance and necessary adjustments and responses in the event of failure will be covered.

LTS Element 7 -- Enforcement

- A party with authority to enforce ECs and ICs at the facility should be identified. Agreement by that party to take responsibility for enforcement of the controls will help assure their effective implementation.
- Enforcement authority should include necessary access to the facility, access to information, and ability to compel compliance and/or impose sanctions.

LTS Element 8 – Enforceable Mechanism

- An enforceable mechanism will help assure effective implementation of the key elements of long-term stewardship.
- Examples of enforceable mechanisms include permits, orders, or covenants.
- An enforceable mechanism should cover a number of areas, as necessary at a particular facility.

LTS Element 8 – Enforceable Mechanisms (cont.)

For example, it should include, as necessary, some or all of the following:

- Identify and bind the parties who have authority to, and who have agreed to require, maintain, and enforce controls at the facility.
- Provide necessary access to the facility for oversight.
- Anticipate potential failures of ECs and ICs at the facility and include a plan to address them.
- Require adequate reporting and recordkeeping to support effective oversight.
- Assure funding for LTS activities.
- Include provisions to assure public awareness.
- Provide a process for effective transfer of responsibility for the ECs or ICs, as necessary, where responsibility at the facility changes, such as upon completion of corrective action or transfer of the property.
- Provide for enforcement of its provisions.

LTS Element 9 – Dedicated Resources

Implementation of effective LTS program requires a commitment of resources to support necessary program activities including:

- Adequate qualified staff to select and to oversee implementation of effective controls.
- Ongoing training on all aspects of long-term stewardship to develop and maintain staff skills.
- Records development and management.
- Tracking of ECs and ICs and data management.
- Outreach efforts to assure access to recent information.
- Coordination with relevant federal, state, local and tribal governments.
- Meaningful public involvement and tribal consultation.

Discussion Questions

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- Would expanding the elements and providing more detailed guidance on the elements be of value?
 - If so, for which elements is guidance most needed?
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- Other comments or suggestions?

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