

RCRA Subtitle C Corrective Action Program

Ongoing Work to Address

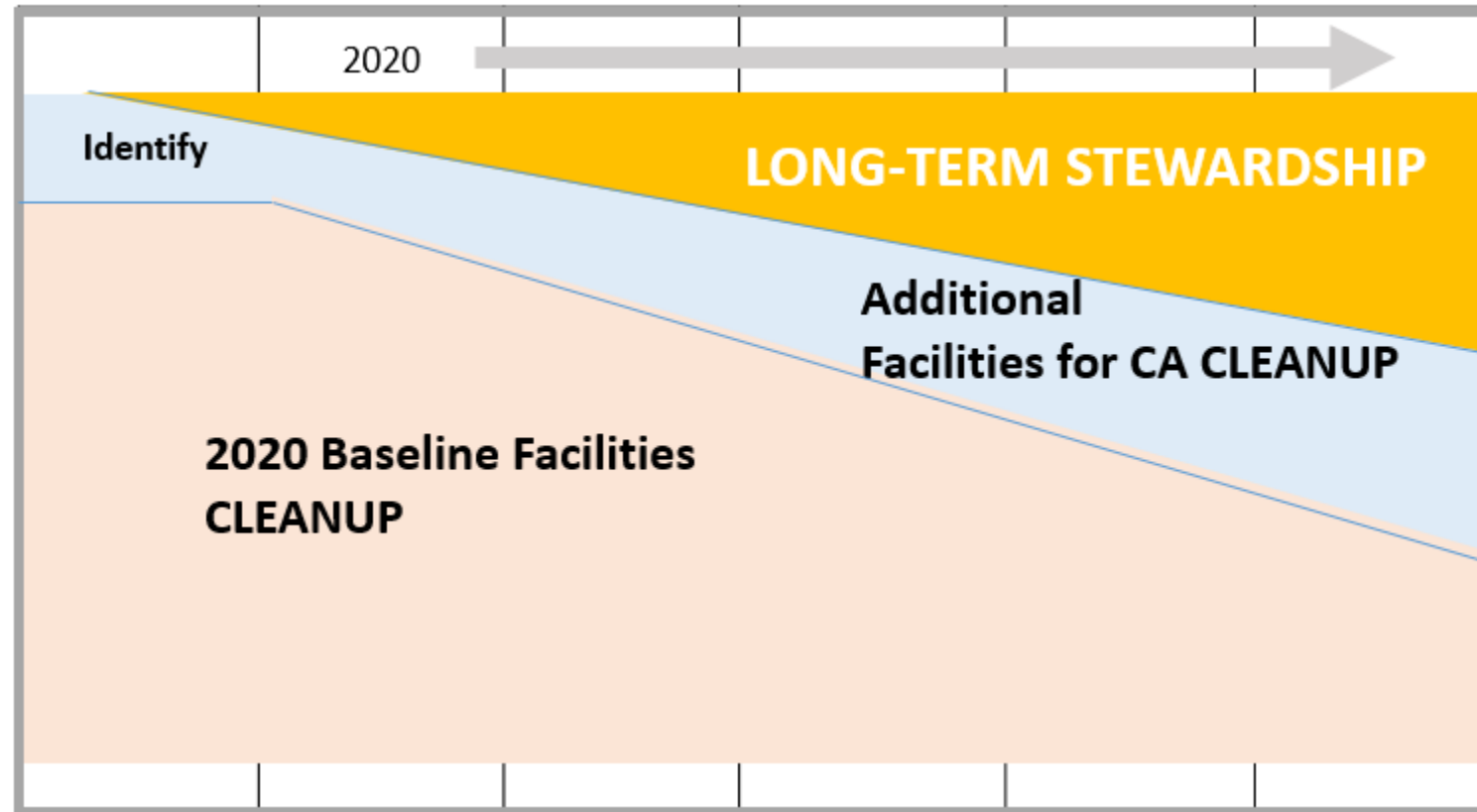
Long-Term Stewardship

July 24, 2019

Charlotte Mooney

US EPA

RCRA Subtitle C Corrective Action Program Long-Term Stewardship (LTS)



Ongoing Work to Address Long-Term Stewardship

- Initiated with a workshop – the Long-Term Stewardship for RCRA Corrective Action (LTS) Workshop held on August 28-29, 2018
 - 63 participants from:
 - EPA Headquarters
 - EPA Regions
 - States
 - Corrective Action and Permitting (CAP) Task Force of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO)
- Summary available with agenda, background LTS slides from the opening session, day-2 slides including draft proposed next steps, and participant list

Long-Term Stewardship for RCRA Corrective Action Workshop

- Welcome and opening remarks highlighting the importance of Long-Term Stewardship for RCRA Corrective Action cleanups to ensure protection of human health and the environment for communities into the future
 - Barnes Johnson, Director, EPA Office of Resource Conservation and Recovery (ORCR)
 - Steven Cook, Deputy Assistant Administrator, EPA Office of Land and Emergency Management (OLEM)
 - Charlotte Mooney, EPA ORCR Cleanups Program Branch Chief
 - Joe Cisneros, Branch Chief, EPA Region 5, and Regional Sub-lead for the RCRA Corrective Action Program
 - Paula Bansch (Indiana), Chair, Corrective Action and Permitting (CAP) Task Force, Association of State and Territorial Solid Waste Management Officials (ASTSWMO)

Long-Term Stewardship for RCRA Corrective Action (LTS) Workshop

- Topics covered included:
 - Definition of key components of Corrective Action LTS
 - LTS assessment and monitoring
 - Database development and utilization
 - Mapping and other digital tools
 - Checklists
 - Standard Operating Procedures (SOPs) and other implementing procedures
 - Policy, legal and authority issues
 - Finding resources and solutions for LTS
 - State and federal coordination
 - Information dissemination and communications
 - Addressing remedy failure
 - Program goals and metrics, using RCRAInfo

Long-Term Stewardship for RCRA Corrective Action (LTS) Workshop

- Discussion of registration questions:
 - Does your region/state have an LTS program for corrective action? Cross-programmatic LTS program? LTS Webpage?
 - Do you work on corrective action facilities that have LTS needs?
 - Do you have LTS tools/best management practices to share?
 - What additional LTS tools would you like to have?
 - How many years have you worked in RCRA corrective action?

Long-Term Stewardship for RCRA Corrective Action (LTS) Workshop

- Examples - presentations from state and regional participants:
 - Connecticut's stewardship program
 - Region 1's LTS checklist, database, and LTS assessment business process
 - In North Carolina, LTS is a process, not a program
 - Region 3 mapping
 - Arizona management of long-term legacy sites

Long-Term Stewardship for RCRA Corrective Action (LTS) Workshop

Next Steps - Four Areas for Collaboration

1. Definition of LTS and flow diagram of LTS process components
2. Collaborative Work Space
3. Continued sharing of expertise
4. Ongoing dialog and future meetings

Four Areas for Collaboration

1. Agree upon a definition of RCRA Corrective Action LTS. Construct a **flow diagram** illustrating the components of the LTS process (build on “LTS Process Considerations” diagram).
2. Develop a **collaborative work space** for EPA and States to share and access LTS tools, expertise, and resources
 - Use flow diagram and “live” links to present resources

Four Areas for Collaboration

3. Facilitate **webinars and information exchanges** on key topics, including:

- Assessment and monitoring
- Databases, mapping and digital tools
- Communication and information dissemination strategies and tools
- Others

4. **Ongoing dialogue**, including future meetings.

Topics identified:

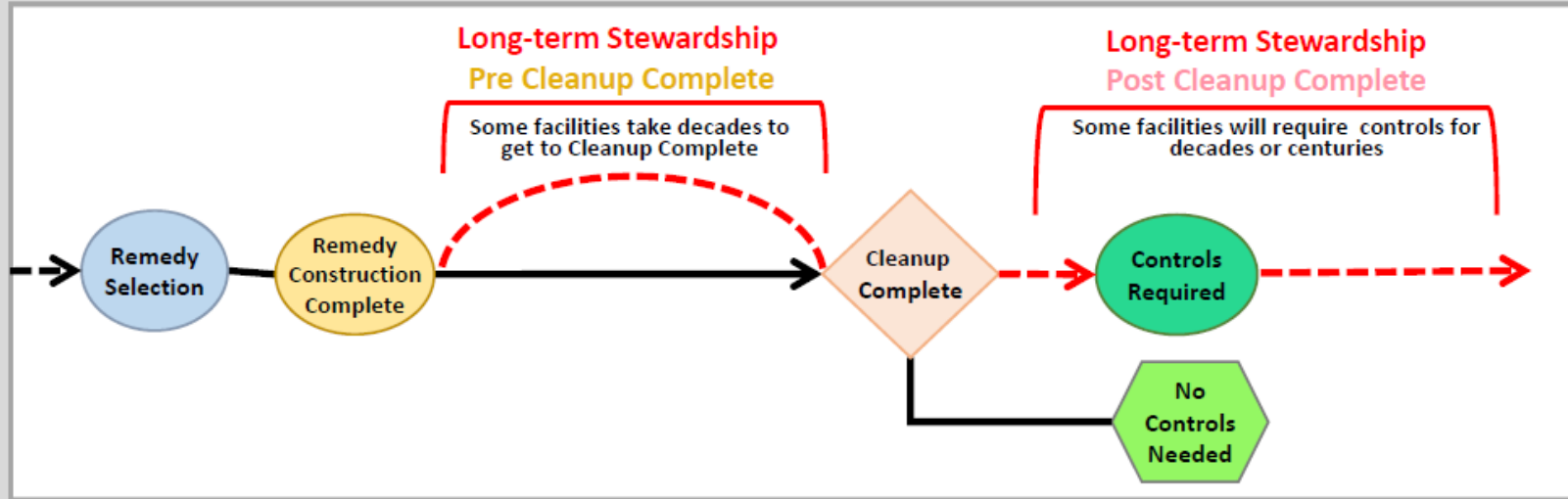
- Legal and administrative challenges/opportunities: permits, orders, and other authorities
- Resources and funding for LTS work

Area 1: Definition and Flow Diagram

- *“LTS generally includes the establishment and maintenance of physical and non-physical controls, implementation entities, authorities, accountability mechanisms, information and data management systems and resources that are necessary to ensure that cleanup sites with residual contamination that does not allow for unrestricted use or with ongoing waste management responsibilities after completion of response action remain protective.”*

Memorandum of Understanding on Long-Term Stewardship at Federal Facilities in the United States: Between the Environmental Council of the States, United States (U.S.) Department of Defense, U.S. Department of the Interior, U.S. Department of Energy, [and] U.S. Environmental Protection Agency. April 2003.

Area 1: Definition and Flow Diagram



Remedy Selection
Final remedies chosen. (CA400)

Remedy Construction Complete
All final remedies have been built. Sites vary in the amount of time to achieve final cleanup goals. Some achieve goals immediately, (e.g. dig and haul), some take decades of operation & maintenance. (CA550)

Cleanup Complete (CA900s) Performance Standards Attained

No Controls Needed
Safe for all uses. (CA900 NC)

Controls Required
These sites have remaining contamination, & often require Engineering Controls (ECs), Institutional Controls (ICs), use restrictions, and long-term stewardship. (CA900 CR)

Long-Term Stewardship
Sites that have remaining contamination and require treatment or controls for extended periods also require periodic monitoring and verification to ensure that controls are effective and that the site remains safe.

Example From Workshop Slides

Area 2: Collaborative Workspace

- Objectives
 - Facilitate collaboration within EPA and between EPA and the states
 - Project and product development collaboration
 - Single point resource and reference repository for RCRA LTS for regulatory agencies - Community of Practice (COP)
 - Dissemination of information appropriate for public/regulated community

The screenshot displays a SharePoint workspace titled "RCRA Corrective Action Long-Term Stewardship - Home". The interface includes a navigation pane on the left with options like Home, About, Members, and Documents. The main content area features a "Project Summary" section with a Gantt chart showing a task "Complete Test Website" due 22 days ago. Below this is a calendar for June 2019 with highlighted events such as "1:00 pm - CA LTS St" and "8:30 am - LTS Steer". To the right, there are sections for "Announcements" (e.g., "The First Draft LTS Collaborative Space is now live!") and "Documents" (e.g., "INACTIVE FILES", "Practitioner's Calls Memos").

Area 2: Collaborative Workspace

- Status
 - Initial site established – facilitating work of LTS Steering Committee
- Next
 - Further development of site architecture
 - Compile LTS related resources
 - Solicit input from wider COP on what would be helpful
 - Address administrative/policy steps for wider participation
 - Support the Community of Practice!



Area 3: Information Exchange: Existing LTS Training

Course Title	Source	Program	Link	Year	Synopsis
RCRA Corrective Action Long-Term Stewardship - EPA/ASTSWMO Taskforce Workshop	Trainex	Corrective Action	https://www.trainex.org/offeringlist.cfm?courseid=1782&all=yes	2018	This workshop being jointly held by the US EPA RCRA Program and ASTSWMO Corrective Action and Permitting Task Force.
Long-Term Stewardship at Corrective Action Sites - Brown Bag Series	CLU-IN	RCRA	https://clu-in.org/conf/tio/RCRAExpert_030718/	2018	As the National RCRA Corrective Action (CA) program matures many of the priority sites have achieved construction complete. While this is an important milestone in the CA process, many sites will have contamination that remains in place and requires long term treatment or controls. Long-Term Stewardship (LTS) is a term that refers to the care of such sites, and in particular to the monitoring needed to make sure that those controls remain in place, operational, and protective. This webinar will include discussion on why LTS is needed at CA sites, work EPA has been doing in this area, and share some of our thoughts on moving forward and look to the audience for any ideas and input on how to do so.
State Statutory Efforts to Implement Institutional Controls/Proprietary Controls - OSRE Institutional Controls and Long-Term Stewardship Series	CLU-IN (OSRE)	RCRA CERCLA	https://clu-in.org/conf/tio/ICsan dLTS1/	2018	This webinar will explore the fundamentals of the Uniform Environmental Covenants Act (UECA) and how it is utilized in restricting activities at sites where some contamination remains in place. The webinar will focus on how UECA is used in federal practice at Superfund sites and RCRA corrective action facilities to overcome traditional common law obstacles to implementing proprietary controls. Limitations and caveats on the use of environmental covenants will also be explored.
Evaluating and Monitoring IC Effectiveness - OSRE Institutional Controls and Long-Term Stewardship Series	CLU-IN (OSRE)	Broad	https://clu-in.org/conf/tio/ICsan dLTS2_031517/	2017	This session will cover procedures and considerations for monitoring and evaluating ICs, once implemented, for the purpose of IC compliance assurance. Procedures for monitoring IC effectiveness range from IC reviews during the Five Year Review process to ongoing, sometimes even daily, efforts to monitor land activities (e.g., where local government permits or one-call monitoring addresses IC areas on an ongoing basis).

Area 3: Information Exchange

- Today's webinar
- Plans for future LTS webinars
 - November 6, 2019
 - March 4, 2020
- If you are interested in presenting your state's LTS program in a future webinar, contact Don Lininger of U.S. EPA at Lininger.Don@epa.gov

