Quick Reference Guide
Community Considerate Cleanups (C3)

March 2025

The goal of this Quick Reference Guide (QRG) is to encourage the development of Community Considerate Cleanups (C3), which are designed through the lens of the people who live, work, play, and learn in the community where cleanup will take place and where the waste might be taken for treatment and/or disposal.

The QRG is a framework recommended for the Department of Toxic Substances Control (DTSC) Project Teams to foster cleanup approaches that align with environmental justice goals. The United States Environmental Protection Agency (USEPA) defines these goals as "*the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.*" It should be noted that this QRG does not replace existing guidance or regulations.

C3 encourages regulators and contaminated site stakeholders to actively engage and clearly communicate with the community and share their expertise, proactively and interactively, throughout the cleanup process.

The following sections describe the C3 approach and lay out major components that should be evaluated and incorporated throughout the project. The C3 QRG has been prepared to assist Project Managers with topics to be discussed with the Project Team during scoping meetings held prior to major document submittal. The C3 QRG is focused on cleanup planning and implementation; however, the concept of C3 should be introduced to the Project Team early and should be revisited as the project progresses. The Project Team includes both DTSC technical staff and the external consultant/proponent.

Community Considerate Cleanup Site:
Former Ramona Elementary School Site.
San Bernardino, CA. July 2023

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Why Community Considerate Cleanup Plans Are Needed

Over the past few decades, the immense number of brownfields that are managed by state regulatory agencies have faced challenges with the incorporation of environmental justice principles. One contributing factor may be that cleanup plans are written by technical professionals for technical professionals, who may not have considered community understanding or involvement in the cleanup plan. Without a cohesive strategy that binds science and communication together, cleanup plans struggle to address community concerns and incorporate their aspirations for their spaces.

Sharing details about the cleanup directly with community members in an understandable and audience-driven manner is vital. Currently, only highly scientific information is provided in cleanup plans without including plain language that clearly and deliberately describes how the cleanup affects community members.

C3 helps us understand and emphasize community concerns and provides concepts that are important to evaluate when developing and implementing cleanup plans.

C3 Approach: Community Considerate Cleanup Summary

The C3 Summary is a plain language summary to be included at the beginning of the cleanup plan that should directly answer key questions that may be of interest to neighbors, such as:

1. Why is the cleanup necessary?
2. How will people be protected during the cleanup?
3. What will happen in my neighborhood during and after the cleanup?
4. How can a community member stay informed about the cleanup?
5. Is my drinking water safe?
6. Is the air safe to breathe?
7. Can I eat the fruit and vegetables grown at my home?
8. Who can I contact if I have a concern?

These questions should be modified as needed based on community priorities and concerns.

C3 Approach: Cleanup Alternative Evaluation

Through collecting feedback from environmental groups who advocate for communities, a few priorities for cleanups have been identified. Although, it should be noted that communities are not monolithic and there may be multiple, and perhaps even opposing, views that need to be considered.

Generally, communities may prefer:

1. A complete cleanup that doesn't require engineering or administrative controls.
2. Long-term management of any waste left in place to ensure community safety.

3. To destroy contamination in place without environmental or health impacts.
4. To avoid moving contamination from one neighborhood to another.

Incorporating community considerations like these is the backbone of environmental justice. The C3 framework helps evaluate how viable these options are during the cleanup planning process. The C3 Pre-Submittal Scoping Meeting section prompts regulators to address community preferences for cleanup alternatives by encouraging consideration of the following:

1. Cleaning up to unrestricted land use levels is preferred, allowing the land to be safely used for any use.
2. Alternatives that do not achieve unrestricted (residential) land use levels should include long-term management and include the full cost of long-term management.
3. Bundling multiple cleanup technologies to address all contaminants and contaminated media, when feasible.
4. As a baseline for comparison, the "no action" alternative should discuss the impact of "no action" on the community.

C3 Approach: Encouraging Evaluation of Comprehensive Cleanup Strategies

Cleanup technologies continue to be developed to address new contaminants, and to more efficiently and completely address known contaminants. Practitioners and regulators should stay up to date on emerging technologies and support the evaluation and use of these technologies where applicable to achieve environmental justice aspirations. Where suitable, pilot studies of new technology should be encouraged, and multiple cleanup strategies could be bundled together (such as excavating highly contaminated areas and performing soil vapor extraction in less contaminated areas) to more efficiently achieve cleanup goals and aspirations.

In addition, practitioners can refer to existing technology screening matrices for additional cleanup technologies, such as the:

- Federal Remediation Technologies Roundtable (https://frtr.gov/matrix/default.cfm),
- Interstate Technology Regulatory Council (https://itrcweb.org/home),
- USEPA's Contaminated Site Cleanup-Up Information (https://clu-in.org/default.cfm),
- Appendix D of the USEPA Brownfields Road Map (https://www.epa.gov/brownfields/brownfields-road-map).

C3 Approach: Safer Excavation and Disposal Cleanups

Excavation is a commonly proposed cleanup strategy that affects both the community surrounding the Site and the community surrounding the eventual disposal facility. Due to the prevalence of excavation and disposal, and specific concerns voiced by

environmental justice advocates, the Cleanup Implementation section has been developed with a focus on projects where excavation is part of the selected remedy. This section aims to evaluate key community concerns commonly related to cleanups and to improve implementation.

Pre-Submittal Scoping Meeting and Implementation

The C3 QRG is not intended to be a comprehensive guide for all cleanup planning requirements, but rather a way to evaluate and implement the project through a community lens and emphasize community concerns. This does not replace public participation or cleanup planning requirements but rather serves to provide additional depth to existing proven practices.

C3 Cleanup Plan Scoping Meeting

Once adequate characterization has been achieved and moves to cleanup planning, the Project Manager should use this section to develop a robust scoping meeting agenda, which should be held before a cleanup document is submitted. Using C3 QRG will clearly lay out expectations and identify any areas of disagreement. Without concurrence on these topics, approval of the cleanup plan may be delayed.

It is recommended that this QRG be shared with the Proponent ahead of the scoping meeting and that they (or their consultant) are asked to present on the following topics. The goal is to develop consensus. After the cleanup plan is submitted, you may use this QRG again to verify these components are adequately addressed.

Background and Project Information

1. Current and past uses
2. Proposed reuse, if applicable
3. Construction deadlines
4. Community profile and level of interest in cleanup and reuse

Determine Type of Cleanup Plan

1. Removal Action Workplan (RAW) (under $2M)
2. Remedial Action Plan (RAP) (over $2M)
3. Response Plan (CLRRA)

Conceptual Site Model (CSM) and Cleanup Goals

1. The CSM should include a narrative and diagram/flowchart that addresses the following:
    a. Sources
    b. Areas of concern
    c. Impacted media defined
    d. Contaminants of concern
    e. Migration Pathways
    f. Exposure routes and receptors
    g. Data gaps

2. The updated CSM presented in the cleanup plan should support the selection of site cleanup goals.
3. The cleanup goals should be clearly stated and measurable.

Evaluation of Cleanup Alternatives

The subsection of the C3 QRG prompts regulators to address community preferences for cleanup alternatives by encouraging consideration of the following:

1. All alternatives selected should be technically appropriate and viable at the site.
2. The 'no action' alternative should discuss the impact of 'no action' on the community.
3. All alternatives should be sufficiently evaluated against the nine criteria in 40 CFR 300.430(e)(9).
4. Consider evaluating an "unrestricted" cleanup, or cleanup that does not require engineering or administrative controls.
5. Consider alternatives that avoid taking contaminated soil to a landfill where it has the potential to exacerbate the pollution burden and quality of life of residents near the landfill.
6. Consider alternatives that avoid leaving waste in place that could compromise community safety if not managed correctly.
7. Consider contaminant treatment methodologies that could safely destroy chemicals on-site without negative environmental or health impacts.
8. Consider evaluating a combination of cleanup technologies and approaches to address specific media and common contaminants. For example, combining excavation/source removal with in-situ approaches to optimize disposal volumes.
9. Ensure the full cost of continuing obligations when long-term stewardship is a component of the cleanup are considered and that all costs included.

Proposed Alternative

1. Will the selected remedy allow for unrestricted land use at the site following implementation? If not, will the selected remedy be protective relative to site reuse (commercial/industrial vs. residential)?
2. Will the selected remedy protect groundwater?
3. Have the following details of the preferred alternative been included?
    a. Cost for cleanup implementation
    b. Cost for long term stewardship (land use covenant, OM&M, etc.)
    c. Safety measures for workers
    d. Safety measures for neighbors

C3 Summary Section

This subsection of the QRG describes the components of a new section that should be included in cleanup plans, written in plain language, that answers key questions that may be of interest to neighbors. The C3 Summary should be tailored for each project and the topics discussed should be adjusted based on the results of the community survey and any other information gathered from other forms of community engagement.

The C3 Summary Section should:

1. Be placed at the beginning of the document
2. Be brief and written in clear plain, easy-to-understand language
3. Include specific references such as page or section numbers to the parts of the Cleanup Plan most relevant to the community
4. Answer the following questions, add and adjust as needed based on knowledge of community interest and priorities:
    a. Why is cleanup necessary?
    b. How will I be protected during the cleanup?
    c. What will happen in my neighborhood during and after the cleanup?
    d. How can I stay informed about the cleanup?
    e. Is drinking water safe?
    f. Is the air safe to breathe?
    g. Can I eat fruits and vegetables grown at my home?
    h. Who can I call if I have a concern?

Closeout Questions

The scoping meeting should be closed out by evaluating the following questions. The goal is to develop consensus among the Project Team before the cleanup plan is submitted for review.

1. Are most aspects of the cleanup plan agreed upon?
    a. Is there an agreement on cleanup goals?
    b. Is there an agreement on the conceptual site model?
    c. Is there an agreement on the alternatives and approaches that will be evaluated?

A Community Considerate Cleanup in action: Former Ramona Elementary School, San Bernardino, July 2023

Cleanup Implementation Checklist

Planning and Permitting

1. Is the selected remedy suitable for the contaminant/contaminated media?
2. Is the extent of contamination accessible? Are structures in the way? Are off-Site access agreements required? Is the depth technically feasible?

3. Has a cost estimate been prepared? Does it include any long-term costs?
4. Have grading or construction permits been obtained?
5. Is a Stormwater Pollution Prevention Plan required? Has it been obtained?
6. Is a geotechnical evaluation required, and has it been prepared?
7. Is shoring required for any required excavations, and has a design been prepared?
8. Has a community air monitoring plan been developed?
9. Has a truck route plan been developed for any large truck traffic through the community?
10. How loud will the remedy be? How close is the nearest community? How will noise be monitored and controlled?
11. Could the remediation create odors? How close is the nearest community? If needed, how will odors be monitored and controlled?

Waste Disposal

1. Has all waste been characterized; will it be hazardous?
2. Has a disposal facility for any waste been identified?
3. Can waste be treated/regenerated, either on-Site or at an external facility?
4. Is stabilization being proposed for any waste? If so, have reagents been field tested? How will it be field verified?

Remedy Implementation

1. What backfill will be used for any excavations? Will it comply with the Clean Fill advisory?
2. Will the remediation be executed safely?
3. How secure will the site be while remediation is occurring?
4. Is there enough space to stage/stockpile material or equipment? Have these spaces been identified?

Remedy Completion

1. Is the confirmation sampling plan robust? Are samples collected in all directions? Are multiple depths required for vertical compliance?
2. Is long-term maintenance required, and has it been included?
3. What is the contingency plan if additional contamination is discovered?

At the Start of the Project

This portion of the C3 QRG should be referred to during the initial stages of the project to introduce and emphasize the C3 framework to the Project Team, which includes both DTSC and external team members. The Project Manager should work with the Office of Environmental Equity (OEE) or the Proponent to ensure the following questions are evaluated.

Discuss the C3 approach with the Project Team and emphasize the importance of evaluating the project through a community lens.

1. Has a site walk been conducted?
2. Has the Project Manager, or someone on the Project Team, identified who in the community might be interested in the cleanup?
3. Who has the Project Manager met from the community? (Examples are neighbors, City Planning Department, City Communication Office, etc.)
4. Are there any meetings or events the Project Team can attend to share cleanup information? (Examples are neighborhood watch meetings, HOA meetings, senior centers, etc.)
5. Has the Project Team identified and/or reached out to any Community Based Organizations (CBOs) that would be interested in learning about the cleanup?
6. Are there active community members that should be engaged?
7. Is the site reuse planned and is any community support or opposition noted?
8. Has the Project Manager engaged with the OEE to use the updated public participation plain language tools and the Office of Brownfields C3 example?
9. Has the Project Manager checked in with other agencies (Water Board, AQMD, etc.) for any community engagement of the site that might not be connected to the cleanup?
10. Are there any known community concerns regarding the cleanup and have they been discussed with the Project Team?
11. Are there any time-critical components to the project (construction deadlines, tax credits)? Discussing these early with the Project Team may help avoid last-minute requests for expedited reviews.
12. Is there an agreement to use the C3 QRG to enable meaningful community engagement? If not, why?

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