

MEMORANDUM

SUBJECT: Guidance on Completion of Corrective Action Activities at RCRA Facilities

FROM: Robert Springer, Director
Office of Solid Waste

Susan E. Bromm, Director
Office of Site Remediation Enforcement

TO: RCRA Division Directors, Regions I-X
Enforcement Division Directors, Regions I-X
Regional Counsel

Introduction

This memorandum provides guidance to the Regions and authorized States on acknowledging completion of corrective action activities at RCRA treatment, storage, and disposal facilities. It describes two types of completion determinations -- "Corrective Action Complete without Controls" and "Corrective Action Complete with Controls." It provides guidance on when each type of completion determination is appropriate. It also discusses completion determinations for less than an entire facility. Finally, it provides guidance on procedures for EPA and the authorized States when making completion determinations.

This document provides guidance to EPA Regional and State corrective action authorities, as well as to facility owner or operators and the general public on how EPA intends to exercise its discretion in implementing the statutory and regulatory provisions that concern

RCRA corrective action. The RCRA statutory provisions and EPA regulations described in this document contain legally binding requirements. This document does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA and State decisionmakers retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate. Any decisions regarding a particular facility will be made based on the applicable statutes and regulations. Therefore, interested parties are free to raise questions and objections about the substance of this guidance, and the appropriateness of the application of this guidance to a particular situation. EPA will consider whether or not the recommendations or interpretations in the guidance are appropriate in that situation. The Agency welcomes public comment on this document at any time, and will consider those comments in any future revision of this guidance document.

Background

EPA recognizes the importance of an official acknowledgment that corrective action activities have been completed. An official completion determination, made through appropriate procedures, benefits the owner or operator of a facility, the regulatory agency implementing the corrective action program, and the public. Official recognition that corrective action activities are complete can, among other things, promote transfer of ownership of the property and, in some cases, can help return previously used commercial and industrial properties, such as “brownfields,” to productive use. Further, once the regulatory agency implementing corrective action makes a determination that corrective action activities are complete, it can focus agency resources on other facilities. Finally, if completion determinations are made through a process

that provides adequate public involvement, the process of making a formal completion determination will assure the public an opportunity to review and comment on the cleanup activities, and to pursue available administrative and/or judicial challenges to the agency's decision.¹

Under 40 CFR section 264.101, owners and operators seeking a permit for the treatment, storage or disposal of hazardous waste must conduct corrective action "as necessary to protect human health and the environment."² The ultimate goal of corrective action is to satisfy the "protection of human health and the environment" standard. Thus, a determination by EPA (or a State authorized by EPA to implement the Corrective Action Program) that corrective action activities are complete is, in effect, an announcement that the "protection of human health and the environment" standard has been achieved³.

With experience, the Agency has discovered that the universe of facilities subject to corrective action requirements includes facilities that vary widely in complexity, extent of contamination, and level of risk presented at the facility. To address this wide variation among corrective action facilities, the Agency has developed multiple approaches to achieving "protection of human health and the environment."

¹The Agency anticipates that at facilities where meaningful public involvement begins early in the corrective action process, challenges are less likely at the end of the process.

²Likewise, section 3008(h) establishes a standard of "protection of human health and the environment" for corrective action imposed through orders. This guidance is equally applicable at facilities where EPA addresses facility-wide corrective action through an enforcement authority, rather than a permit.

³Note that for facilities that continue to require a permit for the treatment, storage, or disposal of hazardous waste, a completion determination in no way affects the ongoing requirement to conduct corrective action for any future releases at the facility, and the Agency recommends that any completion determinations at such facilities be structured to make this clear.

When conducting corrective action, however, one of the key distinctions among remedies is the extent to which they rely upon controls (engineering and/or institutional)⁴ to ensure that they remain protective. In some cases, the Agency selects a remedy that requires treatment and/or removal of waste and all contaminated media to levels that allow the facility to be used in an unrestricted manner.⁵ At these facilities, no additional oversight or activity is required following cleanup. When implementation of the remedy is completed successfully, protection of human health and the environment is achieved.

In other cases, the Agency selects a remedy that allows contamination to remain on site, but imposes ongoing obligations concerning, for example, operation and maintenance of engineered controls (e.g., a landfill cap), and compliance with institutional controls (e.g., a restriction that land be used for industrial purposes only). Thus, in these situations, the goal of “protection of human health and the environment” often is achieved through use of a remedy

⁴EPA has defined institutional controls as “non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use.” They are almost always used in conjunction with, or as a supplement to, other measures such as waste treatment or containment. There are four general categories of institutional controls: governmental controls; proprietary controls; enforcement tools; and informational devices. (See Fact Sheet entitled “Institutional Controls: A Site Managers Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups,” September, 2000, OSWER Directive 9355.0-74FS-P).

⁵“Unrestricted use” refers to a walk-away situation, where no further activity or controls are necessary to protect human health and the environment at the facility. Generally, a cleanup of soil to residential standards and of groundwater to drinking water standards would be an example of an unrestricted use scenario. By comparison, a cleanup of soil to industrial soil levels, and/or containment or cleanup of groundwater to levels in excess of drinking water standards usually would not be an unrestricted use scenario. Under both scenarios, the Agency does not generally anticipate having to impose additional corrective action requirements because the remedy is protective of human health and the environment. The difference is that, under the second scenario, protection of human health and the environment is dependent on the maintenance of the remedy, including institutional controls.

(e.g., containment) that allows some contamination to remain in place, but requires controls (engineering and/or institutional) at the facility to prevent or to limit the risk of exposure through release of contamination that remains following cleanup. Following remedy implementation, maintenance of controls and continued corrective action related activities (such as monitoring) at such facilities are fundamental elements of meeting the standard of “protection of human health and the environment.”⁶

An example of a situation where the Agency typically chooses a remedy that relies on controls is a facility for which the reasonably foreseeable use is industrial.⁷ At those facilities, the Agency may offer the facility the option to achieve long-term protection of human health and the environment by selecting a remedy that allows higher levels of contamination to remain at the facility, but requires the use of controls to limit the risk of unacceptable exposure. This remedy is considered the final remedy; however, protection of human health and the environment at the facility typically is dependent on maintenance of controls.

Types of Completion Determinations

As was discussed above, a determination by EPA that corrective action activities are complete is a statement by the Agency that protection of human health and the environment has been achieved at a facility. As was also discussed above, the Agency takes different approaches

⁶It should be noted that, at these facilities, cleanup to unrestricted use levels and a Corrective Action Complete without Controls determination (see discussion below in section 2) ultimately could be achieved under a variety of scenarios -- for example, the plan for land use at a facility might change; the owner or operator might decide to return the site to unrestricted use, or the facility might otherwise reach that state (e.g., through natural attenuation). At that time, the Agency could discontinue the requirement for controls.

⁷See Reuse Assessments: A Tool to Implement the Superfund Land Use Directive, June 4, 2001, OSWER Directive 9355.7-06p, for a discussion of reasonably foreseeable land use.

to achieving protection of human health and the environment at facilities, depending on the site-specific circumstances. Completion determinations benefit the owner or operator, the community, and the regulatory agency. Therefore, EPA recommends that regulators implementing the corrective action program make completion determinations where corrective action activities have assured long-term protection of human health and the environment at a facility. EPA anticipates two types of completion determinations – Corrective Action Complete without Controls, and Corrective Action Complete with Controls. These two types of completion determinations, and recommended procedures for making them, are described below.

1. Corrective Action Complete without Controls Determination

EPA believes that it is appropriate for it, or for an authorized State, to make a determination that Corrective Action is Complete without Controls where the facility owner or operator has satisfied all obligations under sections 3004(u) and (v).⁸ The Agency recommends this terminology be used to indicate that either there was no need for corrective action at the facility or, where corrective action was necessary, the remedy has been implemented successfully,⁹ and no further activity or controls are necessary to protect human health and the environment.

Under the approach described in this guidance, a determination that Corrective Action is Complete without Controls means that no additional remedial activity would be required on the part of the regulatory agency or the owner or operator to maintain protection of human health and

⁸Or the owner or operator has completed facility-wide corrective action, as necessary to protect human health and the environment, imposed through a section 3008(h) order.

⁹See (61 FR 19432, at 19453, May 1, 1996), and (55 FR 30798, at 30837, July 27, 1990) for guidance regarding selection, implementation, and completion of remedy.

the environment. No controls are necessary at the facility to maintain protection of human health and the environment. Thus, the corrective action requirements can be eliminated. It is likely that the facility will be eligible for release from financial assurance for corrective action, as no funds should be needed in the future for corrective action-related activities. In addition, when there no longer are RCRA-regulated activities at the facility, the regulatory agency will likely have no concerns associated with transfer of the property, nor any reason to want to be informed of, or take an action regarding, that transfer.

2. Corrective Action Complete with Controls Determination

EPA generally believes it is appropriate to make a Corrective Action Complete with Controls determination at a facility where: (1) a full set of corrective measures has been defined; (2) the facility has completed construction and installation of all required remedial actions; (3) site-specific media cleanup objectives have been met; and (4) all that remains is performance of required operation and maintenance and monitoring actions, and/or compliance with and maintenance of any institutional controls. A Corrective Action Complete with Controls determination provides the owner or operator with recognition that protection of human health and the environment has been achieved, and will continue as long as the necessary operation and maintenance actions are performed, and any institutional controls are maintained and complied with.

It is important to ensure that an enforceable mechanism is in place so that there is compliance with and maintenance of the controls. Regions and States have often ensured that controls are maintained through a RCRA permit or order at the facility in that continuation of the permit or order assures periodic review by the regulatory agency, compliance with any operation and maintenance requirements and institutional controls, and notification to the regulatory agency

of transfers of the facility (which allows an opportunity for the agency to assure that compliance with corrective action requirements will continue).¹⁰ Permits and orders will continue to be used as enforceable mechanisms to assure compliance. However, the Agency believes that other enforceable mechanisms also may be appropriate for implementing institutional controls. For example, several States have passed legislation that creates mechanisms to enforce institutional controls, a development that EPA encourages. For facilities where long-term institutional controls are necessary to ensure continued protection of human health and the environment, the regulator may explore a variety of options including permits, orders, and other enforceable mechanisms to maintain the institutional controls. In addition, where necessary, financial assurance for corrective action should be maintained at facilities following a Corrective Action Complete with Controls determination.

It should be noted that, at some point, many facilities that obtain a Corrective Action Complete with Controls determination might later obtain a Corrective Action Complete without Controls determination if circumstances were to change. For example, the owner or operator at a facility cleaned up to industrial levels could decide to conduct additional cleanup because there was a desire to change land use to unrestricted use levels, and/or because they no longer wished to maintain controls. Should a facility later seek a Corrective Action Complete without Controls

¹⁰The September, 2000 Fact Sheet on institutional controls discusses that, under RCRA, institutional controls typically are imposed through permit conditions, or through orders issued under section 3008(h) or 7003. The Fact Sheet cautions the regulator that those mechanisms might have shortcomings, and suggests that the regulator conduct a thorough evaluation to ensure its ability to enforce the institutional control through the permit or order mechanism over the entire duration that the institutional control must remain in place. (See Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups, EPA 540-F-00-005, OSWER 9355.0-74FS-P, September 2000.)

determination, the regulatory agency should process that determination through appropriate procedures, such as those described below. If the Corrective Action Complete without Controls determination were made, it would be appropriate to remove whatever enforceable mechanism is in place, and release the facility from financial assurance for corrective action, so long as there are no additional RCRA activities at the facility subject to permit requirements.

Completion Determinations for a Portion of a Facility

Regulators implementing the corrective action program often develop a number of distinct and separate remedies to address different areas of a facility or different media. This approach may be necessary because a facility may include areas and media that present a range of environmental risks. For example, an industrial facility may include areas that may never have been used for industrial purposes or have never been otherwise contaminated. Alternatively, a facility may have contaminated groundwater undergoing corrective action years after the source of contamination has been removed, and the soil cleaned up to unrestricted use levels.

To ensure that a range of appropriate cleanup and land use options are available to the facility owner or operator, EPA believes that the agency should consider, when appropriate, subdividing a particular facility for purposes of corrective action. In these situations, the Agency might, for example, select a cleanup approach based on unrestricted use at parts of the facility, while cleanup at other parts of the facility may be based on the restricted use assumptions and rely on institutional and/or engineering controls to maintain the protectiveness of the corrective action. Alternatively, the Agency may select a cleanup approach based on unrestricted use for the entire facility, with some parcels requiring a longer time period to achieve the same cleanup goals.

Under this approach, a Corrective Action Complete without Controls determination could be made for a portion of a facility when it is returned to unrestricted use. A Corrective Action

Complete without Controls or a Corrective Action Complete with Controls determination, as appropriate, could be made for remaining portions of the facility when the cleanup goals are achieved, and any necessary controls then would be implemented under an appropriate mechanism.

In some situations, following a Corrective Action Complete without Controls determination for a portion of a facility, the owner will sell the portion that no longer is subject to corrective action. In these situations, the regulator making the determination should consider the long-term plan for the facility, and the effect of the Corrective Action Complete without Controls determination and sale on financial assurance for corrective action. The regulator should take steps to ensure adequate financial assurance is available to address corrective action obligations at the remainder of the facility.

Procedures for Processing Completion Determinations

Completion determinations should be made by the appropriate authority (EPA or the authorized State implementing the corrective action program), and made through appropriate procedures. By following appropriate procedures, the authorized agency can make a sound, well informed completion determination. The appropriate procedures for processing a completion determination will depend on various factors, including the status of the facility (permitted or non-permitted), and on whether the determination applies to part of the facility or to the entire facility. The following section suggests procedures that the Agency believes generally are appropriate for completion determinations.¹¹

¹¹ EPA notes that, whether at a permitted or non-permitted facility and regardless of the completion determination procedure used, if EPA or the authorized State discovers unreported or misrepresented releases subsequent to the completion determination, this would likely be a basis to conclude that additional cleanup is needed. And, of course, if EPA subsequently discovers a

1. Corrective Action Complete without Controls Determinations for Entire Facility.

The regulations in 40 CFR that govern the RCRA program do not provide explicit procedures for recognizing completion of corrective action activities, so regulators have considerable flexibility in developing procedures for making completion determinations. The regulatory agency implementing the corrective action program in that State (i.e., the authorized State program or, in unauthorized States, EPA) should ensure that a completion determination has been made through appropriate procedures. It is important to provide meaningful opportunities for public participation as part of a completion determination procedure. The Agency believes that the following, generally, are appropriate procedures for making Completion of Corrective Action determinations.¹²

EPA believes that permit modification is an appropriate procedure to reflect the agency's determination that corrective action is complete. In cases where no other permit conditions remain, the permit could be modified not only to reflect the completion determination, but also to change the expiration date of the permit to allow earlier permit expiration (see 40 CFR section 270.42 (Appendix I(A)(6))).

The current regulations in 40 CFR section 270.42 provide procedural requirements for facility requested permit modifications. In most cases, completion of corrective action is likely to be a Class 3 permit modification, and the regulatory agency should follow those procedures (or authorized State equivalent), including the procedures for public involvement. It should be noted

situation that may present an imminent and substantial endangerment to human health or the environment, EPA may elect to use its RCRA section 7003 imminent and substantial endangerment authority, or other applicable authorities, to require additional work at the facility.

¹² Of course, if a facility's permit or order provides otherwise, these procedures would not be appropriate at that facility.

that the Agency suggests Class 3 permit modification procedures are generally appropriate for completion determinations. However, Class 3 procedures may not be appropriate in all circumstances, and the regulatory agency should evaluate each situation to determine whether a less extensive procedure would be adequate. For example, where the regulatory agency has made extensive efforts throughout the corrective action process to involve the public and has received little or no interest, and the environmental problems at the facility were limited, more tailored public participation may be appropriate.

At non-permitted facilities where facility-wide corrective action is complete, and all other RCRA obligations at the facility have been satisfied, EPA or the authorized State may acknowledge completion of corrective action by terminating interim status through final administrative disposition of the facility's permit application (see 40 CFR section 270.73(a)). To do so, the permitting authority at the facility (EPA or the authorized State or both, depending on the authorization status of the State) should process a final decision following the procedures for permit denial in 40 CFR Part 124, or authorized equivalent.¹³

EPA recognizes that referring to this decision as a "permit denial" may be confusing to the public and problematic to the facility when the facility is in compliance, is not seeking a permit, and does not have an active permit "application." Therefore, regulatory agencies may choose to use alternate terminology (e.g., a "no permit necessary determination" or "cleanup obligations

¹³ Under EPA permit denial procedures in 40 CFR Part 124, EPA must issue, based on the administrative record, a notice of intent to deny the facility permit (see 40 CFR section 124.6(b) and 124.9). The notice must be publicly distributed, accompanied by a statement of basis or fact sheet, and there must be an opportunity for public comment, including an opportunity for a public hearing, on EPA's proposed permit denial (see 40 CFR sections 124.7, 124.8, 124.10, 124.11, and 124.12). In making a final permit determination, EPA must respond to any public comments (see section 124.17). Under 40 CFR section 124.19, final decisions are subject to appeal.

satisfied”) to refer to this decision, though it is issued through the permit denial process or authorized equivalent. Regardless of the terminology used, the basis for the decision should be stated clearly, generally that: (1) there are no ongoing treatment, storage, or disposal activities that require a permit; (2) all closure and post-closure requirements applicable at the regulated units have been fulfilled; and (3) all corrective action obligations, including implementation of long-term monitoring procedures, have been met.

EPA or the authorized States may develop procedures for recognizing completion of corrective action at non-permitted facilities other than the permit decision process described above. For example, a regulatory agency may have procedures for issuing a notice informing the facility and the public that the facility has met its corrective action obligations, rather than issuing a final permit decision. Although these procedures would not have the effect of terminating interim status, unlike the Part 124 permit denial procedures, EPA believes they can be appropriate for making a completion determination. In general, EPA believes the alternative procedures should provide procedural protections equivalent to, although not necessarily identical to, those required by EPA’s 40 CFR Part 124 requirements (or the authorized State equivalent). Owners and operators should be aware that informal communications regarding the current status of cleanup activities at the facility are not the same as the completion determinations described in this guidance.¹⁴

¹⁴An alternative approach would likely be appropriate to process Completion of Corrective Action determinations that apply to less than an entire facility (see discussion below). An alternative approach could also be used to process a completion of corrective action determination at a facility with ongoing RCRA activities. For example, a facility may be conducting post-closure care at a regulated unit under an alternate non-permit authority, as allowed under the October 22, 1998 Post-Closure rule (see 63 FR 56710), yet may have completed corrective action at its solid waste management units. In this case, interim status generally should not be terminated because all RCRA obligations have not been met, but it may

2. Corrective Action Complete with Controls Determinations

To process a Corrective Action Complete with Controls determination, regulatory agencies should consider the regulatory status of the facility, among other factors, in determining what procedures are appropriate. For permitted facilities, following the permit modification procedures in 40 CFR section 270.42 would be appropriate. For non-permitted facilities, the regulatory agency should generally follow alternate procedures (e.g., issue a notice with an opportunity to comment) that provide procedural protections equivalent to, although not necessarily identical to, those required by Part 124 requirements (or the authorized State equivalent). However, following procedures other than the Part 124 procedures does not terminate interim status even though they may result in a Complete with Controls determination. Interim status should not be terminated at a RCRA facility where corrective action requirements remain. If corrective action was implemented through an order, the regulator should not eliminate the order until the facility meets all corrective action obligations required under the order.

As was discussed above, at facilities (permitted or non-permitted) where a Corrective Action Complete with Controls determination is made, and long-term institutional controls are necessary to continued protection of human health and the environment, the regulator may explore a variety of options including permits, orders, and other enforceable mechanisms to maintain the institutional control where appropriate.

3. Corrective Action Complete without Controls Determinations for Less than the Entire Facility

As was discussed above, EPA or the authorized State could make a Corrective Action

be appropriate to issue a notice (as described above) recognizing completion of the corrective action obligations to bring finality to that process.

Complete without Controls determination for a portion of a facility where corrective action obligations remain at the remaining portion. Where the regulatory agency determines that a Corrective Action Complete without Controls decision is appropriate for a portion of the facility, it should process that decision using procedures that will not affect portions of the facility where corrective action requirements remain.

For example, at a permitted facility, the agency might process a Corrective Action Completion determination for a portion of the facility by modifying the permit following the procedures in 40 CFR 270.42. The agency should not eliminate the permit, however, if corrective action responsibilities (and possibly other RCRA responsibilities) remain at the facility.

At non-permitted facilities, the Agency or authorized State might utilize alternate procedures as described above (e.g., issue a notice) to process the Corrective Action Completion determination for a portion of the facility. Those procedures should generally provide procedural protections equivalent to, although not necessarily identical to, those required by Part 124 requirements (or the authorized State equivalent). However, interim status is not terminated by such procedures and generally should not be terminated at a facility where RCRA obligations remain. If the corrective action was implemented through an order, it is important to maintain the order until the facility satisfies all corrective action obligations and ensures that institutional controls will be maintained.

For Further Information

For further information on completion of corrective action, please contact Barbara Foster at 703-308-7057 or Peter Neves at 202-564-6072. For information regarding the application of this guidance to a particular facility, please contact your local Regional or State office.