ENVIRONMENTAL PROTECTION AGENCY

[FRL-]

Final Guidance on Completion of Corrective Action Activities at RCRA Facilities

AGENCY: Environmental Protection Agency (EPA)

**ACTION:** Notice

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SUMMARY: The purpose of this notice is to provide the newly issued "Guidance on Completion of Corrective Action Activities at RCRA Facilities" memorandum to regulators and to the regulated community. The memorandum provides the EPA Regions, the States, Tribes, the regulated community, members of the public, and other stakeholders with guidance on significant issues related to completion of corrective action activities at RCRA facilities. 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.

DATES: This guidance was issued [insert date of signature of guidance].

ADDRESSES: The Agency is posting this document on the Corrective Action website: <a href="http://www.epa.gov/correctiveaction.">http://www.epa.gov/correctiveaction.</a> If you would like to receive a hard copy, please call the RCRA Hotline at 800-424-0346 or TDD 800-553-7672 (hearing impaired). In the Washington, DC, metropolitan area, call 703-412-9810 or TDD 703-412-3323.

1

For more detailed information on specific aspects of the guidance document, contact Barbara Foster, Office of Solid Waste 5303W, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460, (703-308-7057), (foster.barbara@epa.gov). SUPPLEMENTARY INFORMATION: The guidance document, which is published below, was issued as a memorandum from EPA headquarters to the Regional offices. It is available on the Internet at: <a href="http://www.epa.gov/correctiveaction.">http://www.epa.gov/correctiveaction.</a>

#### BACKGROUND

On October 2, 2001, EPA published a notice in the <u>Federal Register</u> requesting comment on a draft guidance document entitled "Recognizing Completion of Corrective Action Activities at RCRA Facilities" (<u>see</u> 66 FR 50195). Comments received by the Agency on that draft guidance largely supported the content, but expressed concern that the Agency needed to expand the scope of the guidance, for example, to address when and under what circumstances decisions that corrective action is complete should be made.

On February 27, 2002, the Agency published a second draft guidance in the <u>Federal</u>

<u>Register</u> (see 67 FR 9174), which included most elements of the first draft, but was expanded to discuss two types of corrective action completion determinations. The Agency again solicited comment on the guidance.

Generally, commenters on the February 27 draft guidance supported the Agency's effort (and some supported all or part of the Agency's approach) to develop guidance related to completion of corrective action. However, some commenters raised concerns about aspects of the guidance, with many commenters offering suggestions for revising the guidance. The Agency modified the draft guidance in response to comments received, and the resulting final

"Guidance on Completion of Corrective Action Activities at RCRA Facilities" memorandum is published below in this <u>Federal Register</u> notice.

#### DISCUSSION OF PUBLIC COMMENT

# Comments Related to the Definition of Completion

In the February 27, 2002 <u>Federal Register</u> notice, the Agency described two types of completion of corrective action. For both types, all of the following have been satisfied: (1) a full set of corrective measures is defined; (2) the facility has completed construction and installation of all required remedial actions; (3) site-specific media cleanup objectives, which were selected based on current and reasonably expected future land use, and maximum beneficial groundwater use, have been met.

A Corrective Action Complete without Controls<sup>1</sup> means that these objectives have been met, and the areas subject to the determination do not require any additional action or measures to ensure the remedy remains protective of human health and the environment. For Corrective Action Complete with Controls, all that remains is performance of required operation and maintenance and monitoring actions, and/or compliance with and maintenance of any institutional controls.

The Agency received many comments on those two types of completion.

While commenters generally agreed with the two types of completion, there was widespread concern among the commenters that they would not be useful for many facilities.

Commenters believed that Corrective Action Complete (without controls), as described, may

<sup>&</sup>lt;sup>1</sup>In the February 27, 2002 <u>Federal Register</u> notice, this form of completion was referred to as Corrective Action Complete. The Agency added "without controls" in this final guidance to more clearly reflect that this is a form of completion (<u>See</u> discussion of comments below).

never be achieved by some facilities, and that Corrective Action Complete with Controls, because of the third criterion (that final remedy cleanup objectives have been met) would not be attainable by many facilities within a reasonable timeframe, particularly in the case of restoration of contaminated groundwater. Commenters expressed the need for a formal and public recognition of progress that could be achieved within a reasonable timeframe. Some requested that the Agency modify the definition of Corrective Action Complete with Controls to remove the criteria that cleanup objectives be met to provide a measure that can be achieved within a timeframe that is reasonable. Others suggested that the Agency establish a provisional type of corrective action complete designation.

The Agency recognizes that in carrying out an extensive and complex corrective action a facility can achieve several significant milestones, and recently described in detail a strategy for RCRA corrective action that includes short-term protection goals, intermediate performance goals, and final cleanup goals (see Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action, September, 2001, Sections 1.2-1.3,

(www.epa.gov/epaoswer/hazwaste/ca), and Environmental Indicator Guidance, February, 1999, (www.epa.gov/epaoswer/hazwaste/ca/eis)).

This final guidance was not designed to guide regulators in recognizing progress at facilities where short-term protection goals or intermediate performance goals have been achieved. Rather, it was designed to recommend steps that regulators might take where the site-specific media cleanup objectives, identified based on the current and reasonably anticipated use of the site, have been met.

The Agency continues to believe that it is important to distinguish between situations

where significant progress has been made toward final cleanup, and situations where corrective action is actually complete. The Agency believes that a "completion" determination signals to all parties involved that corrective action activities no longer are necessary (though controls to ensure the remedy remains protective may be necessary), and thus are preferably reserved for situations where there is no further cleanup activity to conduct – regardless of how long it might take to achieve site-specific media cleanup objectives. The Agency is concerned that making "completion" determinations at facilities that have not yet achieved final cleanup goals would jeopardize the integrity of that distinction, potentially be misleading, and minimize the accomplishment of facilities that truly have completed corrective action.

At the same time, the Agency recognizes that the commenters raised a valid concern—
that owners and operators often need a formal recognition of progress at a landmark that can be
achieved within a reasonable timeframe. Rather than encourage regulators to recognize
completion prematurely, however, the Agency would prefer to address commenters' concern by
formally recognizing progress at an earlier step in the corrective action process—where remedial
measures are in place and operating, but cleanup objectives have not yet been met—in addition to
recognizing completion of corrective action. The Superfund program makes "Construction
Complete" designations at this point in its cleanups; EPA believes it is appropriate to recognize
the analogous stage in RCRA corrective action as well. At that point in the cleanup process,
while remedial meansures continue to be implemented, final remedial decisions have been made
and, at some facilities, environmental and human health risks may have been controlled such that
the facility is ready for reuse. In recognition of the valid concerns raised by commenters, the
Agency plans to investigate, in another forum, how it might formally and publicly recognize an

earlier milestone in the corrective action process, analogous to Superfund's "construction complete<sup>2</sup>."

Some commenters were concerned that, because the criteria discussed in the draft guidance for "Corrective Action Complete with Controls" determinations included achievement of site-specific media cleanup objectives, which were selected based on current and reasonably expected future land use and maximum beneficial groundwater use, the guidance would be interpreted to mean that groundwater would be restored to drinking water standards in all cases. The Agency disagrees with that interpretation of the draft guidance, and believes that interpretation is inconsistent with the September, 2001 Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action, which is the Agency's most current guidance on groundwater issues related to RCRA corrective action. However, the Agency removed references to "maximum beneficial use of groundwater" from this final guidance for two other reasons. First, the draft guidance did not discuss cleanup standards for all media – in fact, the discussion was limited to groundwater. The Agency did not intend this guidance to address the issue of cleanup standards for the various media addressed through corrective action, and saw no reason to single out groundwater for discussion. Second, the Agency was concerned that provisions of the Groundwater Handbook when discussed in this guidance might be interpreted differently than they would within the context of the handbook itself. The September, 2001 Groundwater Handbook represents current Agency guidance on groundwater issues for the corrective action program, and EPA does not intend for this final Completion Guidance to

<sup>&</sup>lt;sup>2</sup>One likely forum is the "One Cleanup Program" initiative currently under development by the Agency. As part of that initiative, the Agency is examining ways to promote consistency, where appropriate, among all of its cleanup programs.

address, or modify its guidance on, groundwater issues. The Agency is exploring a cross-program "Ground Water Working Group," as a forum to identify and discuss groundwater issues of importance to multiple EPA programs, and to develop options for addressing those issues.<sup>4</sup>

Finally, some commenters were concerned that Corrective Action Complete with Controls would be considered a stepping stone toward Corrective Action Complete without Controls, rather than a form of completion in and of itself. Commenters requested that the Agency clarify that Corrective Action Complete with Controls is a form of completion. The Agency agrees with commenters that Corrective Action Complete with Controls is a form of completion, and not a stepping stone toward Corrective Action Complete without Controls. For example, EPA recognizes that a final remedy that involves the use of institutional controls to maintain protection of human health and the environment is, nonetheless, a final remedy. EPA believes that owners and operators should be able to implement a final remedy, including one that involves institutional controls, with assurance that the Agency generally will not require additional corrective action at a later date so long as the controls, which help assure protection of human health and the environment, are effective.

It should be noted, however, that in the case of a Corrective Action Complete with

<sup>&</sup>lt;sup>3</sup> <u>See</u> memorandum dated September 18, 2002 from Michael B. Cook to EPA Addressees entitled "Cross-Program Ground Water Working Group."

<sup>&</sup>lt;sup>4</sup>It should be noted that the Agency also removed language regarding land use from the description of corrective action complete with controls. Again, EPA simply removed the language because the Agency is not discussing media cleanup standards in this guidance. For a discussion of reasonably foreseeable land use, see Reuse Assessments: A Tool to Implement the Superfund Land Use Directive, June 4, 2001, OSWER Directive 9355.7-06p.

Controls determination, protection of human health and the environment is dependent upon the maintenance of the controls. Should the controls fail, a risk to human health and/or the environment might require additional action. That action might include different or additional controls, or it might involve additional cleanup. This does not mean that the Agency intends to revisit Corrective Action Complete with Controls determinations for the purpose of achieving Corrective Action Complete without Controls determinations. Rather, the Agency expects final remedies to be effective not just at the moment that the completion determination is made, but in the long-term as well.

In addition, the Agency anticipates that there may be circumstances where an owner or operator of a facility that has received a Corrective Action Complete with Controls determination may choose in the future to conduct additional cleanup and obtain a Corrective Action Complete without Controls determination. For example, if a remedy included a restriction that the property be used only for industrial purposes, and the owner or operator were to decide to convert the property to residential use, additional cleanup would likely be necessary. Or, an owner or operator might choose to conduct additional cleanup and return the property to unrestricted use in order to end the responsibility for maintaining controls at the facility. However, under these examples, the decision to conduct additional corrective action would be that of the owner or operator.

In response to commenters' concerns described above, the Agency made two modifications to the guidance. In the February 27, 2002 <u>Federal Register</u> notice, the two types of completion were designated "Corrective Action Complete" and "Corrective Action Complete with Controls." The Agency modified the terms used to refer to the two types of completion by

adding "without Controls" to "Corrective Action Complete." The Agency believes that the resulting two designations – Corrective Action Complete without Controls and Corrective Action Complete with Controls – more clearly reflect that both are forms of completion. The Agency also added language to the guidance to clarify that Corrective Action Complete with Controls is, in and of itself, a form of completion, and not a stepping stone toward Corrective Action Complete without Controls.

One additional modification to the definition of Corrective Action Complete with Controls should be noted. In the February 27, 2002 Federal Register notice, the fourth factor for a Corrective Action Complete with Controls determination stated "all that remains is ... compliance with and implementation of any institutional controls." In this final guidance, the Agency changed "implementation" to "maintenance" in this phrase. The Agency made this change to avoid an interpretation that "implementation" includes actions related to getting institutional controls in place, such as selection or securing institutional controls.

"Maintenance," more clearly conveys that the phrase "Corrective Action Complete with Controls" means that the appropriate controls are in place.

### Comments Related to Procedures for Completion Determinations

The draft guidance published in both the October 2, 2001 and the February 27, 2002

Federal Register notices suggested procedures for making completion determinations at permitted and non-permitted facilities. Generally commenters agreed with those procedures, and they are included in this guidance. However, commenters expressed concerns about language in the guidance related to permit modifications. The draft guidance suggested that at permitted facilities, Class 3 permit modification procedures generally would be appropriate for modifying a

Register notice suggested that, in many cases, a Class 1 procedure would be appropriate. The Agency added language (in a footnote) to the draft guidance in the February 27, 2002 notice to recognize that, in some cases, Class 3 procedures might not be necessary (see 67 FR 9174 at 9177). However, commenters on the February 27, 2002 notice repeated the same concerns that the guidance suggested that Class 3 procedures were appropriate for recognizing completion and that those procedures would be unduly burdensome.

The Agency believes that when it recognizes completion of corrective action at a facility, it is taking a step that is significant not only to the facility, but to the local community as well. Thus, the Agency believes it is important that the community have an opportunity to be involved in the Agency's decision. The Agency agreed with commenters that there may be circumstances where Class 3 procedures might be burdensome and reap little benefit, and recognized those situations in the February 27, 2002 draft completion guidance. However, the Agency continues to believe that Class 3 procedures will be appropriate procedures for recognizing completion determinations at most facilities.

To address commenters concerns, the Agency has emphasized in this guidance that Class 3 procedures might not be appropriate in all situations by strengthening that discussion and moving it to the text of the guidance from the footnote.

# Completion Determinations for Portions of a Facility

In the February 27, 2002 draft guidance, the Agency discussed making completion determinations for a portion of a facility. There was widespread support among commenters for recognizing completion determinations for a portion of a facility, and this final guidance retains

that discussion. At the same time, the Agency recognizes that the discussion in this guidance addresses only a few of the issues related to parceling of RCRA facilities. The Agency agrees with the commenter who accurately pointed out that by supporting completion determinations for portions of a facility under the circumstances described in this guidance, the Agency has taken the first step toward addressing related issues.

# Methods to Implement Institutional Controls

The February 27, 2002 draft guidance discussed and requested comment on the issue of implementation of institutional controls at facilities that receive Corrective Action Complete with Controls determinations. The draft guidance suggested that, in most cases, a permit or order should be maintained following a Corrective Action Complete with Controls determination, but noted that regulators might find alternative methods for ensuring continued effectiveness of the institutional controls at a facility.

The Agency received many comments related to implementation of institutional controls.

Commenters were not in agreement on the issue of whether permits and/or orders should be maintained at facilities where Corrective Action Complete with Controls determinations are made, or, more broadly, on more effective methods for implementing institutional controls.

After reviewing comments, the Agency generally believes that the approach it took in the draft guidance is appropriate, although the Agency is also interested in exploring and evaluating alternative methods for the continued effectiveness of institutional controls at a facility. The Agency recognizes that effective implementation of institutional controls is vital to continued protection of human health and the environment following a Corrective Action Complete with Controls determination at RCRA facilities (and at facilities where cleanup is conducted under

other programs, such as Superfund) where the remedy depends upon institutional controls, and continues to explore the complex issues related to institutional controls. However, the Agency did not attempt to address those complex issues in this guidance.

The Agency continues to focus attention on the evolving and complex issues associated with institutional controls. In the near future EPA will finalize a cross-program guidance entitled, "Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund and RCRA Corrective Action Cleanups" that will serve as a companion to guidance issued in 2000 entitled "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups," September 2000, OSWER Directive 9355.0-74FS-P.

Additionally, the Agency is currently at work developing a national institutional control tracking system; supporting the development of a model state institutional control law; and evaluating the need for guidance on estimating institutional control costs, institutional control implementation plans, and ensuring compliance with institutional controls.

# Comments Not Addressed in this Federal Register Notice

The final guidance published in this <u>Federal Register</u> notice describes two types of completion of corrective action, and suggests processes for recognizing completion. The comments discussed above were directly related to the issues discussed in the guidance. The Agency recognizes that completion of corrective action raises many issues for regulators and for owners and operators, including issues related to transfer of RCRA facilities (or portions of facilities), sometimes referred to as "parceling," financial assurance, and institutional controls. In addition, completion of corrective action at some facilities, such as Federal Facilities, may

present unique issues. EPA received comments on these related issues as part of the comment it received on the October 2, 2001 and February 27, 2002 draft guidances. The Agency reviewed all of those comments, but those that were not directly related to issues discussed in the draft guidance documents are not addressed in this notice.

EPA believes that, because of the multitude and complexity of the issues related to completion of corrective action, the best approach to these issues is to make continuous incremental progress in addressing them. Using this approach, the Agency has limited the scope of the discussion in this final guidance, but hopes that it has opened dialogue on, and will establish a foundation for, some of the broader issues related to completion of corrective action, to be addressed at a later time. The Agency encourages commenters to continue to provide input on these important issues as they are addressed.

Robert Springer, Director Office of Solid Waste	Date
Susan E. Bromm, Director	 Date

# **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.<sup>5</sup>

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." 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 achieved.

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."

<sup>&</sup>lt;sup>5</sup>The 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.

<sup>&</sup>lt;sup>6</sup>Likewise, 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.

<sup>&</sup>lt;sup>7</sup>Note 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)<sup>8</sup> 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.<sup>9</sup> 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

<sup>&</sup>lt;sup>8</sup>EPA 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).

<sup>&</sup>lt;sup>9</sup>"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."<sup>10</sup>

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.<sup>11</sup> 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

<sup>&</sup>lt;sup>10</sup>It should be noted that, at these facilities, cleanup to unrestricted use levels and a Corrective Action Complete without Controls determination (<u>see</u> 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.

<sup>&</sup>lt;sup>11</sup>See 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 sitespecific 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. <u>Corrective Action Complete without Controls Determination</u>

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).<sup>12</sup> 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,<sup>13</sup> 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

<sup>&</sup>lt;sup>12</sup>Or 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.

<sup>&</sup>lt;sup>13</sup>See (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.

and 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. <u>Corrective Action Complete with Controls Determination</u>

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). 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

<sup>&</sup>lt;sup>14</sup>The 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.)

to maintain controls. Should a facility later seek a Corrective Action Complete without Controls 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.<sup>15</sup>

## 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.<sup>16</sup>

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)).

<sup>&</sup>lt;sup>15</sup> 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 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.

<sup>&</sup>lt;sup>16</sup> Of course, if a facility's permit or order provides otherwise, these procedures would not be appropriate at that facility.

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 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.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> 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

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 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

subject to appeal.

this guidance.<sup>18</sup>

## 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

<sup>&</sup>lt;sup>18</sup>An alternative approach would likely be appropriate to process Completion of Corrective Action determinations that apply to less than an entire facility (<u>see</u> 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 (<u>see</u> 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 be appropriate to issue a notice (as described above) recognizing completion of the corrective action obligations to bring finality to that process.

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. <u>Corrective Action Complete without Controls Determinations for Less than the Entire Facility</u>

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