significant increase below the treat-
ment zone using a statistical procedure
that provides reasonable confidence
that migration from the treatment
zone will be identified. The Regional
Administrator will specify a statistical
procedure in the facility permit that he
finds:

(i) Is appropriate for the distribution
of the data used to establish back-
ground values; and
(ii) Provides a reasonable balance be-
tween the probability of falsely identi-
ifying migration from the treatment
zone and the probability of failing to
identify real migration from the treat-
ment zone.

(g) If the owner or operator deter-
mines, pursuant to paragraph (f) of this
section, that there is a statistically
significant increase of hazardous con-
stituents below the treatment zone, he
must:

(1) Notify the Regional Adminis-
trator of this finding in writing within
seven days. The notification must indi-
cate what constituents have shown sta-
tistically significant increases.
(2) Within 90 days, submit to the Re-
gional Administrator an application
for a permit modification to modify
the operating practices at the facility
in order to maximize the success of
degradation, transformation, or immo-
ibilization processes in the treatment
zone.

(h) If the owner or operator deter-
mines, pursuant to paragraph (f) of this
section, that there is a statistically
significant increase of hazardous con-
stituents below the treatment zone, he
may demonstrate that a source other
than regulated units caused the increase
or that the increase resulted from error in
sampling, analysis, or evaluation. While the owner or oper-
ator may make a demonstration under
this paragraph in addition to, or in lieu
of, submitting a permit modification
application under paragraph (g)(2)
of this section, he is not relieved of the
requirement to submit a permit modifi-
cation application within the time
specified in paragraph (g)(2) of this sec-
tion unless the demonstration made
under this paragraph successfully
shows that a source other than regu-
lated units caused the increase or that
the increase resulted from an error in
sampling, analysis, or evaluation. In
making a demonstration under this
paragraph, the owner or operator must:

(1) Notify the Regional Adminis-
trator in writing within seven days of
determining a statistically significant
increase below the treatment zone that
he intends to make a determination
under this paragraph;
(2) Within 90 days, submit a report to
the Regional Administrator demon-
strating that a source other than the
regulated units caused the increase or
that the increase resulted from error in
sampling, analysis, or evaluation;
(3) Within 90 days, submit to the Re-
gional Administrator an application
for a permit modification to make any
appropriate changes to the unsaturated
zone monitoring program at the facil-
ity; and
(4) Continue to monitor in accord-
ance with the unsaturated zone moni-
toring program established under this
section.

§ 264.279 Recordkeeping.
The owner or operator must include
hazardous waste application dates and
rates in the operating record required
under § 264.73.

§ 264.280 Closure and post-closure
care.

(a) During the closure period the
owner or operator must:

(1) Continue all operations (including
pH control) necessary to maximize de-
gradation, transformation, or immo-
bilization of hazardous constituents
within the treatment zone as required
under § 264.273(a), except to the extent
such measures are inconsistent with
paragraph (a)(8) of this section.
(2) Continue all operations in the
treatment zone to minimize run-off of
hazardous constituents as required
under § 264.273(b);
(3) Maintain the run-on control sys-
tem required under § 264.273(c);
(4) Maintain the run-off management
system required under § 264.273(d);
(5) Control wind dispersal of haz-
ardous waste if required under
§ 264.273(f);
(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under §264.276;

(7) Continue unsaturated zone monitoring in compliance with §264.278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and

(8) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with §264.115 of this chapter, when closure is completed the owner or operator may submit to the Regional Administrator certification by an independent, qualified soil scientist, in lieu of a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the post-closure care period the owner or operator must:

(1) Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

(2) Maintain a vegetative cover over closed portions of the facility;

(3) Maintain the run-on control system required under §264.273(c);

(4) Maintain the run-off management system required under §264.273(d);

(5) Control wind dispersal of hazardous waste if required under §264.273(f);

(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under §264.276; and

(7) Continue unsaturated zone monitoring in compliance with §264.278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under paragraphs (a)(8) and (c) of this section if the Regional Administrator finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in paragraph (d)(3) of this section. The owner or operator may submit such a demonstration to the Regional Administrator at any time during the closure or post-closure care periods. For the purposes of this paragraph:

(1) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under §264.271(b).

(ii) The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under paragraph (d)(3) of this section.

(2) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

(3) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

(i) Is appropriate for the distribution of the data used to establish background values; and
(ii) Provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under Subpart F of this chapter if the Regional Administrator finds that the owner or operator satisfies paragraph (d) of this section and if unsaturated zone monitoring under §264.278 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

§264.281 Special requirements for ignitable or reactive waste.

The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of 40 CFR part 268, and:

(a) The waste is immediately incorporated into the soil so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under §261.21 or §261.23 of this chapter; and

(2) Section 264.17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

§264.282 Special requirements for incompatible wastes.

The owner or operator must not place incompatible wastes, or incompatible wastes and materials (see appendix V of this part for examples), in or on the same treatment zone, unless §264.17(b) is complied with.

§264.283 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) Hazardous Wastes FO20, FO21, FO22, FO23, FO26 and FO27 must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the Regional Administrator pursuant to the standards set out in this paragraph, and in accord with all other applicable requirements of this part. The factors to be considered are:

1. The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. The attenuative properties of underlying and surrounding soils or other materials;

3. The mobilizing properties of other materials co-disposed with these wastes; and

4. The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Regional Administrator may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

§264.300 Applicability.

The regulations in this subpart apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as §264.1 provides otherwise.

§264.301 Design and operating requirements.

(a) Any landfill that is not covered by paragraph (c) of this section or §265.301(a) of this chapter must have a liner system for all portions of the landfill (except for existing portions of such landfill). The liner system must have:

1. A liner that is designed, constructed, and installed to prevent any