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# Colorado Hazardous Waste Regulations

## Part 100

### Appendix I

(Amended 11/16/10, Effective 12/30/10)

To obtain more information regarding the  
Colorado Hazardous Waste Regulations,  
Please contact the Hazardous Materials and  
Waste Management Division at 303-692-3300.

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## Appendix I to § 100.63 -- Classification of Permit Modification

Modifications	Class
<b>A. General Permit Provisions</b>	
1. Administrative and informational changes	1
2. Correction of typographical errors	1
3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)	1
4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:	
a. To provide for more frequent monitoring, reporting, sampling, or maintenance.	1
b. Other changes	2
5. Schedule of compliance:	
a. Changes in interim compliance dates, with prior approval of the Director.	1 <sup>1</sup>
b. Extension of final compliance date.	3
6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the Director.	1 <sup>1</sup>
7. Changes in ownership or operational control of a facility, provided the procedures of § 100.62(b) are followed.	1 <sup>1</sup>
<b>B. General Facility Standards</b>	
1. Changes to waste sampling or analysis methods:	
a. To conform with agency guidance or regulations.	1
b. To incorporate changes associated with F039 (multi-source leachate) sampling or analysis methods.	( <sup>1</sup> ) 1
c. To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes.	1 1
d. Other changes.	2
2. Changes to analytical quality assurance/control plan:	
a. To conform with agency guidance or regulations.	1
b. Other changes.	2
3. Changes in procedures for maintaining the operating record.	1
4. Changes in frequency or content of inspection schedules.	2
5. Changes in the training plan:	
a. That affect the type or decrease the amount of training given to employees.	2
b. Other changes.	1

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6. Contingency plan:	
a. Changes in emergency procedures (i.e., spill or release response procedures).	2
b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed.	1
c. Removal of equipment from emergency equipment list.	2
d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan.	1
7. Construction quality assurance plan:	
a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specifications.	1
b. Other changes	2
<b>Note:</b> When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change shall be reviewed under the same procedures as the permit modification.	
<b>C. Ground-Water Protection</b>	
1. Changes to wells:	
a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted ground-water monitoring system.	2
b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well.	1
2. Changes in ground-water sampling or analysis procedures or monitoring schedule, with prior approval of the Director.	1 <sup>1</sup>
3. Changes in statistical procedure for determining whether a statistically significant change in ground-water quality between upgradient and downgradient wells has occurred, with prior approval of the Director.	1 <sup>1</sup>
4. Changes in point of compliance.	2
5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):	
a. As specified in the groundwater protection standard.	3
b. As specified in the detection monitoring program.	2
6. Changes to a detection monitoring program as required by § 264.98(h), unless otherwise specified in this appendix.	2
7. Compliance monitoring program:	
a. Addition of compliance monitoring program as required by §§ 264.98(g)(4) and 264.99.	3
b. Changes to a compliance monitoring program as required by § 264.99(j), unless otherwise specified in this appendix.	2

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Modifications	Class
8. Corrective action program:	
a. Addition of a corrective action program as required by §§ 264.99(h)(2) and 264.100.	3
b. Changes to a corrective action program as required by § 264.100(h), unless otherwise specified in this appendix.	2
<b>D. Closure</b>	
1. Changes to the closure plan:	
a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the Director.	1 <sup>1</sup>
b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the Director.	1 <sup>1</sup>
c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the Director.	1 <sup>1</sup>
d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the Director.	1 <sup>1</sup>
e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix.	2
f. Extension of the closure period to allow a landfill, surface impoundment or land treatment unit to receive non-hazardous wastes after final receipt of hazardous wastes under § 264.113 (d) and (e).	2
2. Creation of a new landfill unit as part of closure.	3
3. Addition of the following new units to be used temporarily for closure activities:	
a. Surface impoundments.	3
b. Incinerators.	3
c. Waste piles that do not comply with § 264.250(c).	3
d. Waste piles that comply with § 264.250(c).	2
e. Tanks or containers (other than specified below).	2
f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the Director.	1 <sup>1</sup>
g. Staging Piles	2
<b>E. Post-Closure</b>	
1. Changes in name, address, or phone number of contact in post-closure plan.	1
2. Extension of post-closure care period.	2
3. Reduction in the post-closure care period.	3

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4. Changes to the expected year of final closure, where other permit conditions are not changed.	1
5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure.	2
<b>F. Containers</b>	
1. Modification or addition of container units:	
a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a) below.	3
b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a) below.	2
c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in § 268.8(a)(2)(ii), with prior approval of the Director. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1 <sup>1</sup>
2. a. Modification of a container unit without increasing the capacity of the unit.	
b. Addition of a roof to a container unit without alteration of the containment system.	1
3. Storage of different wastes in containers, except as provided in (F)(4) below:	
a. That require additional or different management practices from those authorized in the permit.	3
b. That do not require additional or different management practices from those authorized in the permit.	2
<b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.	
4. Storage of treatment of different wastes in containers:	
a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in § 268.8(a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1 <sup>1</sup>
b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1

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Modifications	Class
<b>G. Tanks</b>	
1. a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G(1)(c), G(1)(d), and G(1)(e) below.	3
b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G(1)(d) and G(1)(e) below.	2
c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation.	2
d. After prior approval of the Director, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation.	1 <sup>1</sup>
e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in § 268.8(a)(2)(ii), with prior approval of the Director. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1 <sup>1</sup>
2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit.	2
3. Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the replaced tank provided. -- The capacity difference is no more than 1500 gallons, -- The facility's permitted tank capacity is not increased, and -- The replacement tank meets the same conditions in the permit.	1
4. Modification of a tank management practice.	2
5. Management of different wastes in tanks:	
a. That require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided in (G)(5)(c) below.	3
b. That do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided in (G)(5)(d).	2
c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in § 268.8(a)(2)(ii). The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1 <sup>1</sup>
d. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received	1

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wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	
<b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.	
<b>H. Surface Impoundments</b>	
1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity.	3
2. Replacement of a surface impoundment unit.	3
3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system.	2
4. Modification of a surface impoundment management practice.	2
5. Treatment, storage, or disposal of different wastes in surface impoundments:	
a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.	3
b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.	2
c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR § 268.8(a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 CFR § 268.5(h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1
d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR § 268.5(h)(2), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
6. Modifications of unconstructed units to comply with §§ 264.221(c), 264.222, 264.223, and 264.226(d)	1 <sup>1</sup>
7. Changes in response action plan:	
a. Increase in action leakage rate	3
b. Change in a specific response reducing its frequency or effectiveness.	3
c. Other changes	2
<b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.	
<b>I. Enclosed Waste Piles.</b> For all waste piles except those complying with § 264.250(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with § 264.250(c).	

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1. Modification or addition of waste pile units:	
a. Resulting in greater than 25% increase in the facility's waste pile storage or treatment capacity.	3
b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity.	2
2. Modification of waste pile unit without increasing the capacity of the unit.	2
3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit.	1
4. Modification of a waste pile management practice.	2
5. Storage or treatment of different wastes in waste piles:	
a. That require additional or different management practices or different design of the unit.	3
b. That do not require additional or different management practices or different design of the unit.	2
6. Conversion of an enclosed waste pile to a containment building unit.	2
<b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.	
<b>J. Landfills and Unenclosed Waste Piles</b>	
1. Modification or addition of landfill units that result in increasing the facility's disposal capacity.	3
2. Replacement of a landfill.	3
3. Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system.	3
4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system.	2
5. Modification of a landfill management practice.	2
6. Landfill different wastes:	
a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system.	3
b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system.	2
c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR § 268.8(a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR § 268.5(h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	1
d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements	1

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<p>stated in 40 CFR § 268.5(h)(2), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).</p>	
<p>7. Modifications of unconstructed units to comply with §§ 264.251(c), 264.252, 264.253, 264.254(c), 264.301(c), 264.302, 264.303(c), and 264.304.</p>	1
<p>8. Changes in response action plan:</p>	
<p>a. Increase in action leakage rate</p>	3
<p>b. Change in a specific response reducing its frequency or effectiveness.</p>	3
<p>c. Other changes</p>	2
<p><b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.</p>	
<p><b>K. Land Treatment</b></p>	
<p>1. Lateral expansion of or other modification of a land treatment unit to increase areal extent.</p>	3
<p>2. Modification of run-on control system.</p>	2
<p>3. Modify run-off control system.</p>	3
<p>4. Other modifications of land treatment unit component specifications or standards required in permit.</p>	2
<p>5. Management of different wastes in land treatment units:</p>	
<p>a. That require a change in permit operating conditions or unit design specifications.</p>	3
<p>b. That do not require a change in permit operating conditions or unit design specifications.</p>	2
<p><b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.</p>	
<p>6. Modification of a land treatment unit management practice to:</p>	
<p>a. Increase rate or change method of waste application.</p>	3
<p>b. Decrease rate of waste application.</p>	1
<p>7. Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions.</p>	2
<p>8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans for distribution of animal feeds resulting from such crops.</p>	3
<p>9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to § 264.278(g)(2).</p>	3
<p>10. Changes in the unsaturated zone monitoring system, resulting in a change to the location, depth, number of sampling points, or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications</p>	3

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different from permit requirements.	
11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements.	2
12. Changes in background values for hazardous constituents in soil and soil-pore liquid.	2
13. Changes in sampling, analysis, or statistical procedure.	2
14. Changes in land treatment demonstration program prior to or during the demonstration.	2
15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the Director's prior approval has been received.	1 <sup>1</sup>
16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the Director.	1 <sup>1</sup>
17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration.	3
18. Changes in vegetative cover requirements for closure.	2
<b>L. Incinerators, Boilers, and Industrial Furnaces</b>	
1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.	3
2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.	2
3. Modification of an incinerator, boiler or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl/Cl <sub>2</sub> , metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler or industrial furnace that could affect its capability to meet the regulatory performance standards. The Director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.	3
4. Modification of an incinerator, boiler or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in	2

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the permit. The Director may require a new trial burn to demonstrate compliance with the regulatory performance standards.	
5. Operating requirements:	
a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber, flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The Director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.	3
b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls.	3
c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit.	2
6. Burning of different wastes:	
a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The Director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.	3
b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit.	2
<b>Note:</b> See § 100.63(g) for modification procedures to be used for the management of newly listed or identified wastes.	
7. Shakedown:	
a. Modification of permit conditions applicable during the shakedown period for determining operational readiness after construction, with prior approval of the Director.	2
b. Authorization of an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the Director.	1 <sup>1</sup>
8. Trial Burn:	
a. Changes in the approved trial burn plan for conducting an initial trial burn, provided the change is minor and has received the prior approval of the Director.	1 <sup>1</sup>
b. Changes in the approved trial burn plan for conducting an initial trial burn, if the change is not minor.	2
c. Changes in the approved trial burn plan to conduct additional trial burn testing under revised conditions if the unit has not met one or more conditions of a previous trial burn.	2

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d. Modification of permit conditions applicable during the post-trial burn period, with prior approval of the Director.	2
e. Changes in the operating requirements set in the permit to reflect the results of the trial burn. (*Modification of the trial permit to incorporate final operating conditions will be either a Class 2 or 3 permit modification following the procedures of § 100.63(d)).	2 or 3 <sup>†</sup>
9. Substitution of an alternative type of nonhazardous waste fuel that is not specified in the permit.	1
<b>M. Containment Buildings.</b>	
1. Modification or addition of containment building units:	
a. Resulting in greater than 25% increase in the facility's containment building storage or treatment capacity.	3
b. Resulting in up to 25% increase in the facility's containment building storage or treatment capacity.	2
2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit.	2
3. Replacement of a containment building with a containment building that meets the same design standards provided:	
a. The unit capacity is not increased.	1
b. The replacement containment building meets the same conditions in the permit.	1
4. Modification of a containment building management practice.	2
5. Storage or treatment of different wastes in containment buildings:	
a. That require additional or different management practices.	3
b. That do not require additional or different management practices.	2
<b>N. Corrective Action:</b>	
1. Approval of a corrective action management unit pursuant to § 264.552	3
2. Approval of a temporary unit or time extension for a temporary unit pursuant to § 264.553.	2
3. Approval of a staging pile or staging pile operating term extension pursuant to § 264.554	2
<b>O. Burden Reduction:</b>	
1. RESERVED.	
2. Development of one contingency plan based on Integrated Contingency Plan Guidance pursuant to § 264.52(b)	1
3. RESERVED.	

**Part 100 Appendix I**

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<b>Modifications</b>	<b>Class</b>
4. Changes to inspection frequency for tank systems pursuant to § 264.195(b)	1
5. Changes to detection and compliance monitoring program pursuant to: §§ 264.98(d), (g)(2), and (g)(3), 264.99(f), and (g)	1

FOOTNOTE: <sup>1</sup>Class 1 Modifications requiring prior Department approval.

Note: Permittees should use the procedures in §100.63(d) if a proposed modification is not listed in this appendix.

An attached statement of basis and purpose for these regulations has been adopted by the Board of Health and is hereby incorporated by reference in these regulations pursuant to C.R.S. 1973, 24-4-103.