Montana Department of
ENVIRONMENTAL QUALITY

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Department of Environmental Quality
Testimony in the Matter of Amended Notice Of Public Hearing And Extension Of Comment Period On Proposed Amendment, Adoption, And Repeal of Solid Waste Program Rules

For the record, my name is Ricknold Thompson. I'm the Section Supervisor of the Solid Waste Management Program with the Montana Department of Environmental Quality (Department) located in the Metcalf Building in Helena, Montana. I am presenting testimony for the Department's Solid Waste Program. The Program would like to offer testimony concerning the stringency analysis of certain proposed rule amendments and adoptions in "Subchapter 5" rulemaking (MAR Notice No. 17-284).

I have 17 years of experience in solid waste management with the Department. My education includes a Bachelors degree in Bio-geography and many years of specialized training in solid waste management since being employed with the department. Based on my knowledge, experience, and education in solid waste management, as well as with input from the department's Solid Waste Program staff of environmental scientists and engineers, I find the enclosed stringency analysis to be accurate.

The Department received several comments on the "Subchapter 5" rulemaking concerning whether certain rule adoptions and amendments would make the state solid waste rules more stringent than comparable federal regulations or guidelines addressing the same circumstances, and whether they can be adopted or amended without the Department making the written findings referenced in Title 75, Chapter 10, Part 107, MCA. In response to the comments, the Department made the written stringency findings necessary to retain many requirements that are more stringent than comparable federal requirements including the following:

(1) in New Rule XVII(4)(c), concerning submission of a remediation plan for an exceedance of the concentration limit for explosive gases. In the written finding, the Department has provided anecdotal evidence that the submittal and approval of a remediation plan is necessary to ensure protection of human health and the environment;

(2) in New Rule XXIV(1)(a), that a deed notation must be recorded by the owner of the land where a facility is located. The Department believes a deed notation as an operating condition for new and existing landfills is necessary to protect and inform future owners of the property that the property was used as a landfill. In the written finding, the Department has provided anecdotal evidence of problems with licensees failing to record deed notations at closure of landfills and then was forced to litigate to require land owners to record notations;

(3) in New Rule XL(7), concerning approval of a demonstration that a source other than a Class II or Class IV landfill unit caused the statistically significant change. The Department's rule requiring assessment monitoring when there has been a statistically significant

increase over background for contaminants in Appendix I to 40 CFR Part 258, is comparable to the federal regulations at 40 CFR 258.54(c)(2). Although EPA does not require review and approval by the Department of an assessment monitoring program, the Department believes such review and approval is necessary. If a licensee can demonstrate that a source other than a Class II or Class IV landfill unit caused the statistically significant change, the implementation of an assessment monitoring program would not be required. Therefore, the Department believes that its review and approval of a demonstration that a source other than a Class II or Class IV unit caused the statistically significant increase is necessary to ensure protection of human health and the environment;

(4) in New Rule XLI(7)(b), concerning approval of a determination that a source other than a Class II or Class IV landfill unit caused the contamination, or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in ground water quality so as to allow the system to continue assessment monitoring and avoid a corrective measures assessment. If a licensee can demonstrate that a source other than a Class II or Class IV landfill unit caused the statistically significant change, or the exceedance was cause by an error in sampling, analysis, statistical evaluation, or natural variation in ground water quality, the implementation of a corrective measures assessment would not be required. Therefore, the Department believes that its review and approval of such a determination is necessary to ensure protection of human health and the environment;

(5) in New Rule XV(2)(c), that a Class II landfill for which some portion will not receive additional waste within 90 days must place on that portion an intermediate cover of at least one foot of approved cover soil. The Department believes that this rule is necessary to keep birds and other scavenger species out of the waste, and to protect waste from precipitation that could mix with it and form leachate. Prior to the requirement implementing the proposed rule by Solid Waste Program policy in 1995, portions of landfills not slated to receive waste for long periods became a source of litter as well as a source of food for birds and other scavenger species. The unused but not yet finally-covered portions of landfills were often covered with the bare minimum of cover soils (i.e. six inches). The insufficient amount of cover solids over the wastes did little to prevent animals or birds from getting into the waste mass. The lack of sufficient cover soil also resulted in precipitation entering the wastes and generating leachate; and

(6) in New Rule XXIV, that a deed notation for a Class II landfill unit must be recorded before the initial receipt of waste or within 60 days after the effective date of the requirement, rather than at closure. The Department believes a deed notation as a license condition for new and existing landfills is necessary to protect and inform future owners of the property that the property was used as a landfill. The Department has experienced problems with licensees failing to record deed notations at closure of landfills and has been forced to litigate to require land owners to record notations. This is wasteful of the Department's resources and could lead to a person buying a former landfill property without being fully aware that the land contains a landfill. It is simpler and wiser to require an owner to record a notation when the owner has an incentive to do so. Then, the owner would be able to accept waste and receive payment for doing so only after a notation has been recorded.

House Bill 521 (1995), codified at sections 75-10-107 and 75-10-405(2), MCA, requires the Department of Environmental Quality (Department) make certain written findings after a public hearing and public comment prior to adopting a rule that is more stringent than a comparable federal standard or guideline.

The Department has received several comments concerning whether certain rule adoptions and amendments would make the state solid waste rules more stringent than comparable federal regulations or guidelines addressing the same circumstances, and whether they can be adopted or amended without the Department making the written findings referred to in 75-10-107, MCA. On August 13, 2009, the Department published an amended notice to provide notice of a second hearing on November 4, 2009, to receive comments on stringency pursuant to 75-10-107, MCA. In the amended notice the Department identified the following rule adoptions and amendments which must be analyzed for stringency pursuant to 75-10-107, MCA, as follows:

(1) requirements in the proposed amendments and new rules for an owner or operator to make a submission to the Department and to obtain approval of that submission:

(a) subsection ARM 17.50.509(3), concerning approval of operation and maintenance (O & M) plan updates. An operation and maintenance plan and plan updates are not addressed in the federal solid waste regulations (40 CFR parts 257 and 258). Therefore, the requirement to submit a plan update for approval does not trigger the findings requirements of 75-10-107, MCA, because EPA has no comparable regulations that address the same circumstances. Also, 75-10-204(1), MCA, provides that the Department shall adopt rules for requirements for an operation and maintenance plan that must be submitted with a license application. The Department believes that it is reasonable and authorized under 75-10-204(1), MCA, to adopt ARM 17.50.509(3), which requires an update of the plan for significant changes in conditions or requirements. Because, as provided in the statement of reasonable necessity in the proposal notice (MAR Notice No. 17-284) for ARM 17.50.509, solid waste management: "…. is not a static activity, and the originally-approved O & M plan can become outdated and may require revision when circumstances or requirements change at the facility. In five years much can change, so it is reasonable to require the owner, operator, or licensee to review it at least that frequently to determine if an update is necessary."

Proposed new (4) would require an owner, operator, or licensee to update the O & M plan for a solid waste management system within 45 days after the Department has mailed written notice that the update is necessary to protect human health or the environment. The Department would be able to approve a longer period in response to an extension request. This is necessary because circumstances or requirements at a facility could change to the point that the Department believes an updated plan is necessary to protect human health or the environment before five years have elapsed." Also, statute requires that "The Department may require submission of a new application if the Department determines that the plan of operation, the management of the solid waste system, or the geological or ground water conditions have changed since the license was initially approved." § 75-10-221(5), MCA. This implies that the Department may require updates to the operation and maintenance plan or ground water monitoring plan;

(b) New Rule IV(1), concerning a demonstration that airplanes will be protected from birds within a lesser setback. In the Federal Register adoption notice (56 FR 50997, October 9, 1991) for its municipal solid waste landfill regulations found in 40 CFR Part 258, the EPA was unclear about which demonstrations concerning locational criteria required state approval and which did not. For example, for wetlands, the regulation language states that a landfill may not be located in a wetland unless the owner or operator "can" make a demonstration. However, in its explanation of the regulation in the adoption notice, EPA stated that the owner or operator must make a demonstration to the satisfaction of the director of an approved state. See 56 FR 51045. Elsewhere in the locational criteria, EPA states "like all of the demonstrations in today's regulation, this one [setbacks from a seismic impact zone] is self-implementing." See 56 FR 51046.

Because EPA is unclear, the Department has concluded that, except for the demonstration for wetlands, it must err on the side of caution and assume that EPA intended that each locational restriction was to be self implementing. However, this does not apply to a demonstration to vary a restriction that is part of a license application. Because the Department reviews all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules, a demonstration that is required as part of license application will be subject to Department review and approval. This is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258 include locational restrictions and demonstrations to allow variances from them, where those restrictions and demonstrations are part of a license application, there is no stringency issue with a requirement that a demonstration be submitted to the Department for its review and approval. Therefore, the findings requirements of 75-10-107, MCA, are not triggered for New Rule IV(1);

(c) New Rule V, concerning approval of a demonstration regarding floodplains. Pursuant to the stringency analysis in (1)(b), the findings requirements of 75-10-107, MCA, are not triggered for New Rule V;

(d) New Rule VI, concerning a demonstration allowing a landfill unit in wetlands. As discussed in (1)((b), above, EPA intended that the demonstration for location of a unit in a wetlands had to be reviewed and approved by the state director. See 56 FR 51045. Therefore, the requirement is not more stringent than comparable federal regulations. In addition, because it is a demonstration required in a license application, the stringency analysis in (1)(b) applies, and the findings requirements of 75-10-107, MCA, are not triggered for New Rule VI;

(e) New Rule VII, concerning a demonstration for an alternative setback for location in a fault area. Pursuant to the stringency analysis in (1)(b), the findings requirements of 75-10-107, MCA, are not triggered for New Rule VII;

(f) New Rule VIII, concerning a demonstration allowing location in a seismic area. Pursuant to the stringency analysis in (1)(b), the findings requirements of 75-10-107, MCA, are not triggered for New Rule VIII;

(g) New Rule IX, concerning a demonstration that the structural components of a unit located in an unstable area will not be disrupted. The same analysis set forth above in (1)(b) applies, and therefore the findings requirements of 75-10-107, MCA, are not triggered for New Rule IX";

(h) New Rule XVII(4)(c), concerning submission of a remediation plan for an exceedance of the concentration limit for explosive gases. If methane levels exceed the prescribed maximum, human health is potentially jeopardized by risk of explosion. Review by the Department, which has experience in reviewing methane remediation plans around the state since 1996, makes it more likely that problems with a remediation plan would be identified and corrected and that the public health will be protected by reducing the risk of explosion. It is technologically achievable for landfills to submit these plans to the Department for its review. Landfills where methane gas concentrations have exceeded the lower explosive limit include those in Missoula, Bozeman, Livingston and Kalispell, Helena and Billings.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XVII(4)(c) concerning submission of a remediation plan for an exceedance of the concentration limit for explosive gases, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.23(c)(3) already requires the remediation plan to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department. Approximately 50 facilities would incur this expense;

(i) New Rule XXII(1), concerning exclusion of bulk or noncontainerized liquids, unless approved. The Department recognizes that this requirement is not provided in 40 CFR 258.28(a). The Department believes it would be difficult to make the necessary findings required under 75-10-107, MCA, to justify retaining this requirement. Therefore, the Department has amended New Rule XXII(1);

(j) New Rule XXIV(1)(a), concerning Department review and approval of a deed notation to be recorded by the owner of the land where a facility is located. Because this is a requirement of a license application, and the Department is required by 75-10-221 and 224, MCA, to review license applications to determine if they comply with the solid waste laws and rules, the Department's approval of an insurance policy is not subject to the stringency findings of 75-10-107, MCA. The analysis of the substantive requirement of the recording of a deed notation before the acceptance of waste or within 60 days after the effective date of the rule follows: a deed notation as an operating condition for new and existing landfills is necessary to protect and inform future owners of the property that the property was used as a landfill. The Department has experienced problems with licensees failing to record deed notations at closure of landfills and has been forced to litigate to require land owners to record notations. Two such examples are the Norm Close and Kerry Drew Class III landfills in Missoula County. In the Norm Close landfill case, the purchaser claimed that it did not know that the property had not been closed, and that it was unfair to require it to complete closure. This has been wasteful of the Department's resources and has led and could lead to a person buying a former landfill property without being fully aware that the land contains a landfill. It is simpler and wiser to require an owner to record a notation when the owner has an incentive to do so. Then, the owner would be able to accept waste and receive payment for doing so only after a notation has been recorded. If a person buys a

landfill that does not have a deed notation, and disturbs the cover or other landfill systems because they were not aware that it had been used as a landfill, water from precipitation could combine with the waste to form leachate and contaminate ground water. Water combining with waste also increases the decomposition rate of the waste and can increase methane production, and could cause to exceed the explosive limit in certain locations. This could subject the public to the risk of being hurt by an explosion. The recording of a deed notation before the acceptance of waste at a landfill or within 60 days after the effective date of the rule will protect the public from these potential harms.

There is no technological barrier to Department review and approval of the recording a deed notation.

Some commentors have stated that it is expensive to provide an exhibit to a certificate of survey to show the waste boundary at a Class III landfill. The Department intends to respond by amending the rule to require that the entire property may be subject to a deed notation and restriction, and that if the owner wishes to shrink the notation to match the waste boundary, then the owner may do that. That way, a prospective purchaser will be aware that the property is a landfill, but the owner or operator will not have to go to the expense to modify the extent of the property covered by a notation until the landfill unit closes, when the extent could be adjusted to match the waste boundary.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XXIV(1)(a) concerning a deed notation to be recorded by the owner of the land where a facility is located, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. The estimated costs to the regulated community for each of 50 facilities that are directly attributable to the proposed requirement would be $1040 - $2240 based on either (i) eight hours of consultant time at $130/hr to notate entire lot or an additional (ii) eight hours of two-man survey crew time at $150/hr to notate the licensed waste boundary;

(k) New Rule XXV(1), concerning Department approval of a policy of general liability insurance. There is no comparable federal regulation or guideline addressing the same circumstances. The Department believes it is important that a licensee demonstrate that it will have insurance coverage for bodily injury or property damages to ensure the financial health of the facility; The statement of reasonable necessity in the proposal notice (MAR Notice No. 17-284) for ARM 17.50.508 provides that: "It is important that a licensee demonstrate that it will have insurance coverage for bodily injury or property damages to ensure the financial health of the facility. Solid waste management facilities can be dangerous places with trucks and other heavy machinery in close proximity to small vehicles and people unloading refuse. A claim made against a facility that has no or inadequate insurance could jeopardize the financial stability of the facility and interfere with its ability to comply with these rules." If the landfill's financial stability was jeopardized, it might not be able to conduct closure or post-closure activities, and cover might not be applied, or the integrity of the cover could be harmed without ongoing inspection and maintenance. This could lead to leachate formation and contamination of ground water. Department review is necessary to determine if the insurance meets the requirements of the rule. Because this is a requirement of a license application, and the Department is required by 75-10-221 and 224, MCA, to review license applications to determine if they comply with the solid waste laws and rules, the

Department's approval of an insurance policy is not subject to the stringency findings of 75-10-107, MCA.;

(l) New Rule XXVII(2)(a), concerning confining waste to areas where it can effectively be managed by supervision, fencing, signs, or similar means approved by the Department. The requirement to confine wastes to areas where it can be effectively managed is a component of a facility's operation and maintenance plan. Therefore, the requirement for the approval of these approaches to confining wastes to manageable areas is included in the approval of an operation and maintenance plan that is required under 75-10-204, MCA. Because the submittal and approval of an operation and maintenance plan is required by state law, 75-10-107, MCA, does not apply;

(m) New Rule XXIX(1)(b), concerning the application at a Class IV landfill unit of an approved cover at least every three months. EPA provides that, for protection from fires or disease vectors, the "periodic application of cover material" may be required. 40 CFR 257.3-8(b). "Periodic application of cover material" is defined as the "application and compaction of soil or other suitable material over disposed solid waste at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and to impede disease vectors' access to the waste." 40 CFR 257.3-8(e)(6). Based on the experience of the Department's solid waste section supervisor in managing the program and inspecting solid waste landfills over 17 years, six inches of cover placed at least every three months is necessary to reduce the risk of fire and to impair the disease vectors' access to the waste. In at least two Class III units that have not placed at least 6 inches of cover at least every three months, fires have occurred and large numbers of mosquitoes have been observed. This requirement has been shown to be achievable because it has been followed under existing rule and has been shown to be good management practice for many years. There are no technological barriers to meeting this requirement. Because this requirement is equivalent to the EPA's regulation, there is no additional cost.

Therefore, the Department believes this requirement for the application of an approved cover is comparable to the federal requirement in 40 CFR 257.3-8, and the finding requirements of 75-10-107, MCA, are not triggered;

(n) New Rule XXXII(4), concerning approval of a demonstration that the owner or operator meets the requirements for a small community exemption. Montana law, at §§ 75-10-212 and 221, MCA, requires each solid waste management system, including a small community landfill unit, to be licensed. The Department is required by § 75-10-224, MCA to review all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules. The appropriate solid waste rules are applicable to a unit unless it qualifies for the small community exemption. Therefore, it is necessary for the applicant for a unit that claims the exemption to demonstrate that the exemption is applicable as part of its license application. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review. Therefore, the findings requirements of the stringency statute are not triggered;

(o) New Rule XXXIII(1), concerning approval of a design of a Class II or Class IV landfill unit. Montana law, at § 75-10-204, MCA, requires the Department to adopt rules governing "(3) the procedures to be followed in the disposal, treatment, or transport of solid wastes; and (4) the suitability of the site from a public health standpoint when hydrology, geology, and climatology are considered ..." The

Department's license application rule, at 17.50.508, which was adopted pursuant to this statute, requires submission of a unit design as part of a license application. The Department is required by statute to review all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review.

In addition, EPA's design regulation for an MSWLF unit, at 40 CRF 258.40(a), requires the Department, as the state regulatory agency, to review for approval each alternative landfill unit design. For a non-MSWLF unit, EPA's regulation, at 40 CFR 257.3–4(a), requires a landfill not to pollute ground water drinking water source in excess of an MCL for a contaminant listed in Appendix I of 40 CFR Part 257, which is the same as Table I of New Rule XXXIII. Under this requirement, the Department must review an application for a Class IV landfill unit to determine if it is designed to meet that ground water protection standard.

For the reasons stated above, the findings requirements of the stringency statute are not triggered for submission of a Class II or IV landfill unit design for approval.

While the following is not related to the stringency analysis required in 75-10-107, MCA, the Department believes it is necessary to inform the public at the hearing on stringency that it intends to amend New Rule XXXIII(1) to remove a requirement that a new Class II or IV landfill unit or lateral expansion meet applicable ground water quality standards (GWQS). The Department is proposing to remove that requirement because the reason for adopting the GWQS was not discussed in the statement of reasonable necessity in the notice of public hearing that proposed adoption of the rule. However, the Department believes that the Montana Water Quality Act requires the use of GWQS, and intends to propose adoption of the GWQS at the uppermost aquifer as the appropriate design, monitoring, and corrective action standards for all classes of landfill units in a future rulemaking;

(p) New Rule XXXIV(4), concerning Department approval of recirculation of leachate at a Class II landfill unit. The EPA's liner design rule does not explicitly address recirculation of leachate. However, its bulk liquids rule, 40 CFR 258.28(a)(2), does allow for leachate to be disposed of at a landfill unit with a composite liner and a leachate collection system. Because this is part of a unit design, which must be submitted to the Department for review and approval as part of a license application (see discussion above under New Rule XXXIII(1)), the finding requirements of 75-10-107, MCA, are not triggered;

(q) New Rule XXXIV(5), concerning construction quality control (CQC) and construction quality assurance (CQA) manuals for assuring construction in accordance with Department-approved design plans. The Department recognizes that the requirements for CQC and CQA manuals and the associated submission for approval are not provided in 40 CFR 258, subpart D. However, the use of CQC and CQA manuals is recommended by EPA in Quality Assurance and Quality control for Waste Containment Facilities, EPA/600/R-93/182, section 1.1.1. The Department believes that because EPA recommends the use of CQC and CQA manuals in the above-listed guidance, the proposed requirement to have CQC and CQA manuals is comparable to the federal guideline.

Regarding Department approval of the CQC and CQA manuals in New Rule XXXIV(5): CQC and CQA manuals are a necessary component of a design plan.

The design plan is required as part of a license application (see discussion above under New Rule XXXIII(1)). Because the Department reviews all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules, a submission that is required as part of license application will be subject to Department review and approval. This is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258 includes design plans that are part of a license application, there is no stringency issue. Therefore, the requirement to submit the manuals for approval does not trigger the findings requirements of 75-10-107, MCA;

(r) New Rule XXXIV(6), concerning a final CQC and CQA report. The Department recognizes that the requirements for CQC and CQA reports and the associated submission for approval are not provided in 40 CFR 258, subpart D. However, the requirement to have CQC and CQA reports is recommended by EPA in Quality Assurance and Quality control for Waste Containment Facilities, EPA/600/R-93/182, section 1.1.1. Thus, the submittal of final CQA/CQC reports is a standard 'state of the practice' at MSW facilities and, to date, has been required for all landfill design. The Department believes that because EPA recommends the use of CQC and CQA report requirement in the above listed guidance, then the proposed requirement to have final CQC and CQA reports is comparable to the federal guideline. Failure to comply with the approved CQA/CQC plan has caused non-conformance with design requirements at the Butte and Logan landfills, causing expensive and inefficient repairs. A QA/QC program also provides a structure that allows for efficient review and approval of significant deviations that are necessary during construction. Consequently, the Department believes that an approved QA/QC program is necessary to protect human health and the environment.

CQC plans and CQA reports are a necessary component of a design plan (New Rule XXXIV(5)). The design plan is required as part of a license application. Because the Department reviews all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules, a submission that is required as part of license application will be subject to Department review and approval. This is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258 include design plans that are part of a license application, and because CQC and CQA reports are necessary components of a design plan that is subject to Department approval as part of a license application, there is no stringency issue. Therefore, the requirement to submit the final CQC and CQA reports for approval does not trigger the findings requirements of 75-10-107, MCA.

Research conducted by the Solid Waste Association of North America (SWANA) Applied Research Foundation Disposal Group indicated that long-term

environmental risks from Subtitle 'D' landfills are reduced by CQC\CQA of the liners and covers. As provided in the September 2009 edition of the MSW Management Magazine at p. 12, "Recent studies of Subtitle 'D' landfills have yielded important findings about their design, construction and operation. These studies have found that good design and appropriate CQC testing and CQA oversight during construction are important to provide bottom-liner and final cover systems that function;"

(s) New Rule XXXVIII(4)(a) and (b), concerning a ground water monitoring plan and plan updates. The requirement for submittal and approval of the ground water monitoring plan is required by 75-10-207(4), MCA. Because this submittal and approval is required by state law, 75-10-107, MCA, does not apply. A ground water monitoring plan and plan updates are not addressed in the federal solid waste regulations (40 CFR parts 257 and 258). Therefore, the requirement to submit a plan update for approval does not trigger the findings requirements of 75-10-107, MCA, because EPA has no comparable regulations that address the same circumstances.

(t) New Rule XXXVIII(6), the number, spacing, and depth of ground water monitoring wells. The Department considers the number, spacing, and depth of ground water monitoring wells as necessary components of a ground water monitoring plan. Comparable components are set out in EPA's regulation for a multiunit ground water monitoring system in 40 CFR 258.51(b), so the requirement is not more stringent than a comparable federal regulation. In addition, submittal and approval of a ground water monitoring plan is required under 75-10-207, MCA. Because a ground water monitoring plan is required by state law, the findings requirements of 75-10-107, MCA, are not triggered;

(u) New Rule XXXIX(1), concerning a ground water sampling and analysis plan. Section 75-10-207(1), MCA, requires ground water monitoring. Ground water sampling and associated analysis fundamental aspects of the ground water monitoring plan required by 75-10-207, MCA. Without a sampling and analysis plan, a ground water monitoring plan would be meaningless. The EPA, in 40 CFR 258.53, requires sampling and analysis procedures in a ground water monitoring program. The ground water monitoring plan required in ARM 17.50.508 and New Rule XXXVII is the method used by the Department to implement the ground water monitoring program required by EPA, and the elements of the sampling and analysis plan in the rule are taken from the EPA regulation. Therefore, New Rule XXXIX(1) is not more stringent than a comparable federal regulation. Because a ground water monitoring plan is required by state law, and because a sampling and analysis program is required under the EPA regulations, 75-10-107, MCA, does not apply;

(v) New Rule XL(5)(b), concerning approval of an assessment monitoring program. Section 75-10-207(4), MCA, requires the submittal of a ground water monitoring plan for Department review and approval. Ground water sampling and the associated analyses and determinations are all fundamental aspects of the ground water monitoring required by 75-10-207(4), MCA. The assessment monitoring program in New Rule XL(5)(b) contains the elements of a ground water assessment monitoring plan. Because Department review and approval of a ground water monitoring plan is required by Montana law, the findings requirements of § 75-10-107, MCA, do not apply.

In addition, the design and implementation of an assessment monitoring program is required under the EPA regulations. EPA does not require review and

approval by the Department of an assessment monitoring program. However, the Department believes such review and approval is necessary. Several licensed landfills are located adjacent to population centers where Department review of the monitoring results and network has noted the exceedance over background, which led to the initiation of assessment monitoring programs and the placement of additional monitoring wells to define the nature and extent of the contaminant plumes. Examples include the Missoula, Bozeman, Havre, Wolf Point, Kalispell, Logan, Livingston, closed Sidney, closed City of Helena and closed Beaverhead County landfills. The Department's rule requiring assessment monitoring when there has been a statistically significant increase over background for contaminants in Appendix I to 40 CFR Part 258, is comparable to the federal regulations at 40 CFR 258.54(c)(2), and is not more stringent than the comparable federal regulation. Therefore, 75-10-107, MCA, does not apply;

(w) New Rule XL(7), concerning approval of a demonstration that a source other than a Class II or Class IV landfill unit caused the statistically significant change. The Department's rule requiring assessment monitoring when there has been a statistically significant increase over background for contaminants in Appendix I to 40 CFR Part 258, is comparable to the federal regulations at 40 CFR 258.54(c)(2). Although EPA does not require review and approval by the Department of an assessment monitoring program, the Department believes such review and approval is necessary. An owner or operator has an incentive to demonstrate that another source caused the contamination, because it is costly to undertake assessment monitoring. The Department's review is necessary to provide an unbiased evaluation by a party that does not have a financial stake in the determination. If the owner determined that another source caused the contamination, and that determination was not correct, contamination could go untreated and harm ground water quality. The Department's review could protect ground water quality by determining in a specific case that the other source did not cause the contamination, and by requiring assessment monitoring and eventually requiring corrective action that could remediate contamination. No landfill has made this determination to date. There is no barrier to achieving this requirement because the owner or operator is already required by 40 CFR 258.54(c)(3) to place the demonstration into the operating record.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XL(7), concerning approval of a demonstration that a source other than a Class II or Class IV landfill unit caused the statistically significant change, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.54(c)(3) already requires the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department. Up to 50 facilities could be subject to this requirement, although only eight are currently in assessment monitoring;

(x) New Rule XLI(5), concerning Department approval of a return to detection monitoring if an owner or operator determines that Appendix II constituents are at or below background; and (6), concerning Department approval of a determination by an owner or operator that Appendix II constituents are above background but below ground water protection standards; the determination allows the owner or operator to continue assessment monitoring, rather than move toward

assessment of corrective action under (7). The Department recognizes that these requirements are not provided in 40 CFR 258.55(e) and (f). The Department believes it is necessary for it to review these determinations to ensure that the facility has made a reasonable assessment of the monitoring data. The Department believes that an unbiased review by its technical staff who are educated and trained in ground water analysis is necessary to ensure that the correct interpretation is made to protect the public from being subjected to ground water contamination that is not further analyzed or remediated. The Department has found problems when a landfill reported a significant decrease in pH, which could lead to the leaching of heavy metals from the waste, which could pose a threat to private drinking water supply wells. The Department placed the landfill on assessment monitoring. This could result in the protection of public health by monitoring to ensure that the downgradient water users are not affected by contamination from the landfill, and to trigger corrective action to correct a problem if it is indicated. There is no barrier to achieving this requirement because the determination is currently required to be submitted to the state director by 40 CFR 258.55(e).

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLI(5), concerning Department approval of a return to detection monitoring and (6) concerning Department approval of a determination by an owner or operator that Appendix II constituents are above background but below ground water protection standards, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.29(a)(5) and 258.55(g) already require these demonstrations to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department. Up to 50 facilities could be subject to this requirement, although only eight are currently in assessment monitoring;

(y) New Rule XLI(7)(b), concerning approval of a determination that a source other than a Class II or Class IV landfill unit caused the contamination, or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in ground water quality so as to allow the system to continue assessment monitoring and avoid a corrective measures assessment. If a licensee can demonstrate that a source other than a Class II or Class IV landfill unit caused the statistically significant change, or the exceedance was cause by an error in sampling, analysis, statistical evaluation, or natural variation in ground water quality, the implementation of a corrective measures assessment would not be required. No landfill has made a determination under this rule. The reasons for the Department's review and approval of this determination are the same as offered for (w) and (x) above. There is no barrier to achieving this requirement because the determination is currently required under 40 CFR 258.29(a)(5), and an owner or operator could make the demonstration by analyzing, using existing technology the source of the contamination.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLI(7), concerning approval of a demonstration that a source other than a Class II or Class IV landfill unit caused the statistically significant change, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.29(a)(5) already requires the demonstration to be placed in the operating

record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(z) New Rule XLII(1)(b), concerning Department review and approval of an assessment of corrective measures. The reasons for the Department's review and approval of assessment of corrective measures are the same as offered for (w) through (y) above. The Department has reviewed at least eight assessments and commented on at least three corrective measures assessments by owners or operators of landfill units and has provided guidance and requested that additional measures to be implemented, or requested that measures identified in the original corrective measures assessment be implemented. This has resulted in improved conditions at these facilities by helping to correct releases of contaminants to ground water that could affect public drinking water and therefore public health. There is no barrier to having the Department approve an assessment, because the assessment is currently required to be placed in the operating record by under to 40 CFR 258.56 and 258.29(a)(5), and no additional technological barriers are imposed by Department review and approval.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLII(1)(b), concerning Department review and approval of an assessment of corrective measures, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.56 and 258.29(a)(5) already require the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(aa) New Rule XLIII(1)(b), concerning Department approval of a selected remedy report addressing ground water contamination. This requirement is not provided in 40 CFR 258.57(a). The reasons for Department review and approval of a selected remedy report are the same as discussed in (w through z) above. In landfills where the Department's review of the corrective measures assessment indicated that additional measures were necessary (see z above), additional remedies were selected and implemented. This resulted in greater protection from contamination of ground water that could be used as a drinking water source, thus better protecting public health. There is no barrier to having the Department approve a selected remedy report, because the report is currently required to be placed in the operating record by 40 CFR 258.57(a), and there are no technological barriers to Department review and approval.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLIII(1)(b), concerning Department approval of a selected remedy report addressing ground water contamination, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.57(a) already requires the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(ab) New Rule XLIV(1)(a), concerning approval of a corrective action ground water monitoring program. Ground water monitoring is required under 75-10-207,

MCA. Department review and approval of a ground water monitoring plan is required in § 75-10-207(4), MCA. So, approval of a corrective action ground water monitoring program required by New Rule XLIV would also be required by 75-10-207(4), MCA. Because the corrective action ground water monitoring plan is required by state law, 75-10-107, MCA, does not apply;

(ac) New Rule XLIV(1)(c), concerning interim measures to correct ground water contamination. The Department believes that its review and approval of interim measures is necessary to protect public health, for the same reasons stated in (w) through (aa) above. The Department's review of interim measures at two landfills found that the interim measures implemented by the landfill did not adequately address or achieve the objective of decreasing the extent of the contamination by VOCs of ground water that could affect public drinking water sources. The Department's review resulted in implementation of additional measures that enhanced the effectiveness of the interim measures to protect public health by reducing the contamination caused by the landfill's leachate to contaminate drinking water. There is no barrier to having the Department approve interim measures, because the owner or operator is currently required to consider and implement interim measures, and to placed them in the operating record by 40 CFR 258.58(a)(3), and 258.29(a)(5). There are no technological barriers to Department review and approval.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLIV(1)(c), concerning interim measures to correct ground water contamination, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.58(a)(3) and 258.29(a)(5) already require the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(ad) New Rule XLIV(3)(a) and (d), concerning Department approval of a determination of impracticability of achieving ground water remediation goals. No landfill has submitted such a determination. The Department's review and approval of interim measures is necessary to protect public health, for the same reasons stated in (w) through (aa), and (ac), above. There is no barrier to having the Department approve a determination of impracticability, because the owner or operator is currently required to make such a determination if it wishes to avoid continued implementation of a remedy, and such a determination and alternatives must be placed in the operating record under 258.58(c)(4) and 258.29(a)(5). There are no other technological barriers to Department review and approval.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLIV(3)(a) and (d), concerning Department approval of a determination of impracticability of achieving ground water remediation goals, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.58(c)(4) and 258.29(a)(5) already require the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(ae) New Rule XLIV(7) and (8), concerning Department approval of a certification that a corrective action remedy has been completed. The Department

recognizes that these requirements are not provided in 40 CFR 258.58(f) and (g). The Department's review and approval of remedy completion is necessary to protect public health, for the same reasons stated in (w) through (aa), (ac), and (ad), above. If the remedy has not accomplished its purposes in reducing ground water contamination, it is necessary for corrective action to continue to reduce exposure of the public to contaminants from landfill leachate that could move to a ground water aquifer that could be or is used for drinking water. The Department's review of completion of the remedy is necessary to continue the remedy in effect until it has accomplished its purposes. In addition, upon certification of remedy completion, an owner or operator is released from financial assurance for corrective action. This is a critical decision, because without money, a remedy cannot be implemented. To protect public health by assuring that there is money available to complete a corrective action remedy, which in turn protects public health by reducing ground water contamination that may be used as a drinking water source, it is necessary for the Department to review the certification that the remedy is complete. No owner or operator has yet certified, or requested the Department to determine, that a corrective action remedy is complete. There is no barrier to having the Department approve a certification of remedy completion, because the owner or operator is currently required by 40 CFR 258.58 to make such a certification and place it in the operating record if it wishes to terminate a corrective measure. There are no other technological barriers to Department review and approval;

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XLIV(7) and (8), concerning Department approval of a certification that a corrective action remedy has been completed, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. Since 40 CFR 258.58(f) already requires the demonstration to be placed in the operating record, the estimated costs to the regulated community that are directly attributable to the proposed requirement would just be the cost of mailing the plan (less than five dollars for a facility) to the Department;

(af) New Rule XLV(1)(b), concerning Department review and approval of a hydrogeologic and soils work plan for ground water monitoring. Ground water monitoring is required under 75-10-207, MCA. The hydrogeologic and soils work plan is a fundamental element of a site-specific ground water monitoring plan. Submittal and approval of the hydrogeologic and soils work plan, as part of a ground water monitoring plan is required under 75-10-207(4), MCA. Because this submittal and approval is required by state law, 75-10-107, MCA, does not apply;

(ag) New Rule XLIX(4), (5) and (10), concerning a closure plan for a Class II or Class IV landfill unit. The closure plan is required as part of a license application. Because the Department reviews all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules, a submittal that is required as part of license application will be subject to Department review and approval. This is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258

include closure plans which are part of a license application, there is no stringency issue. In addition, a closure plan is a component of unit design, because it specifies the type of cover and vegetation that will be used to help isolate water from the waste in the unit. Without the cover proposed in the unit design and closure plan, a unit is unlikely to perform as required to protect ground water quality at the uppermost aquifer (for a Class II unit) or in a drinking water source aquifer (for Class IV unit). The requirement for approval of a design was addressed in the discussion of New Rule XXXIII(1), above. Therefore, the requirement to submit the closure plan for approval does not trigger the findings requirements of 75-10-107, MCA;

(ah) New Rule L(3), (5) through (7), concerning Department review and approval of a post-closure plan. The post-closure plan is required as part of a license application. Because the Department reviews all submittals required as part of a license application to determine if the application complies with the solid waste laws and rules, a demonstration that is required as part of license application will be subject to Department review and approval. This is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258 includes post-closure plans which are part of a license application, there is no stringency issue. In addition, a post-closure plan is a component of unit design, because it ensures that the cover, vegetation, and other landfill systems that will be used to help isolate water from the waste in the unit will be protected and maintained so that they continue to function as designed. If the cover and vegetation, and other landfill systems proposed in the unit design and closure plan are not protected and maintained, a unit is unlikely to perform as required to protect ground water quality at the uppermost aquifer (for a Class II unit) or in a drinking water source aquifer (for Class IV unit). The requirement for approval of a design was addressed in the discussion of New Rule XXXIII(1), above. Therefore, the requirement to submit the post-closure plan for approval does not trigger the findings requirements of 75-10-107, MCA; and

(ai) New Rule LI(3), concerning closure and post-closure plans for a Class III landfill unit. There is no comparable federal regulation or guideline addressing the same circumstances, so the stringency findings of 75-10-107, MCA, do not apply. In addition, closure and post-closure plans and requirements are necessary to protect the public from potential risks at landfills such as sharp objects, breeding grounds for disease-carrying organisms such as rats, skunks, birds, insects, and other disease vectors. The placement and maintenance of cover can protect the public from these risks. Regulated facilities have been submitting closure and post-closure plans for many years under the existing rules, and there are not other technological barriers to achieving this requirement, so it is achievable under current technology.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule LI(3), concerning closure and post-closure plans for a Class III landfill unit, must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. The estimated costs to the regulated community for each of 33 facilities that are directly attributable to the proposed requirement would be approximately $2,500 based on

consultant costs of $130/hr;

(2) requirements in proposed New Rule XXXIV concerning design requirements for a Class II landfill unit, as follows:

(a) provide a demonstration of adequate leachate flow and slope stability. The Department recognizes that this standard is not provided in 40 CFR 258.40. However, this standard is recommended by EPA in Municipal Solid Waste Disposal Facility Criteria Technical Manual, Subpart D Design Criteria, EPA 530-R-93-017, page 152; and Sanitary Landfill Design and Operation, SW-65ts, page 9-35. Because EPA recommends the two percent minimum slope requirement in the above-listed guidance, the proposed standard is not more stringent than a comparable federal guideline. Therefore, the finding requirements of 75-10-107, MCA, are not triggered;

(b) a maximum side slope on the liner less than or equal to 33 percent. The Department recognizes that this standard is not provided in 40 CFR 258, subpart D. The Department believes it would be difficult to make the necessary findings required under 75-10-107, MCA, to justify retaining this standard. Therefore, the Department has amended New Rule XXXIV(3)(b);

(c) elements of an alternative liner. The Department has decided to remove this requirement in response to a comment received on the proposed notice (MAR Notice No. 17-284); and

(d) CQC and CQA requirements for design and construction of a landfill unit. The Department recognizes that this requirement is not provided in 40 CFR 258, subpart D. However, this requirement is recommended by EPA in Quality Assurance and Quality control for Waste Containment Facilities, EPA/600/R-93/182, page iv. Research conducted by the Solid Waste Association of North America (SWANA) Applied Research Foundation Disposal Group indicated that long-term environmental risks from Subtitle 'D' landfills are reduced by CQC\CQA of the liners and covers. As provided in the September 2009 edition of the MSW Management Magazine at p. 12, "Recent studies of Subtitle 'D' landfills have yielded important findings about their design, construction and operation". These studies have found that good design and appropriate CQC testing and CQA oversight during construction are important to provide bottom-liner and final cover systems that function."

Because EPA recommends the use of CQC and CQA manuals in the above-listed guidance, the proposed requirement is not more stringent than a comparable federal guideline. Also, CQC and CQA manuals are a component of a design plan. See New Rule XXXIV(5) and stringency discussion, above, for that rule and for New Rule XXXIV(6). The design plan is required as part of a license application. See discussion of New Rule XXXIII(1), above. Licensing is a duty imposed on the Department by the Legislature under 75-10-221 and 224, MCA. A rule adopted to implement a direct requirement of Montana state law is not subject to stringency review under 75-10-107, MCA. In addition, EPA requires in its 40 CFR Part 239 regulations for approval of state solid waste management programs that a state have a permitting (or licensing) program that ensures compliance with the requirements in 40 CFR Part 258. See 40 CFR 239.4 and 239.6. Because the requirements of 40 CFR Part 258 includes design, and the Department is required by statute to review design as part of a license application, there is no stringency issue. Therefore, the requirement to have CQC and CQA manuals does not trigger the findings requirements of 75-10-107, MCA;

(3) requirements for a Class II landfill unit that are not contained in 40 CFR Part 258, as follows:

(a) insurance requirements proposed in ARM 17.50.508(2) and New Rule XXV. There is no comparable requirement addressing the same circumstances in a federal regulation or guideline, so the findings requirements of 75-10-107, MCA, do not apply. The reasons for the requirement were set forth in (1)(k) above;

(b) in New Rule XV(2)(c), the proposed requirement for a Class II landfill for which some portion will not receive additional waste within 90 days that it must place on that portion an intermediate cover of at least one foot of approved cover soil. There is no comparable federal regulation or guideline addressing the same circumstances, so the findings requirements of 75-10-107, MCA, do not apply. This standard is not provided in 40 CFR 258.21. However, this rule is necessary to keep birds and other scavenger species out of the waste, and to protect waste from precipitation that could mix with it and form leachate. Prior to the requirement implementing the proposed rule by Solid Waste Program policy in 1995, portions of landfills not slated to receive waste for long periods became a source of litter as well as a source of food for birds and other scavenger species. The unused but not yet finally-covered portions of landfills were often covered with the bare minimum of cover soils (i.e. six inches). The insufficient amount of cover solids over the wastes did little to prevent animals or birds from getting into the waste mass. The lack of sufficient cover soil also resulted in precipitation entering the wastes and generating leachate.

An example of this was noted at the Powell County landfill several years ago when a portion of the waste unit was filled to the maximum capacity and had to sit idle until the other cells in the unit were filled to the same elevation to effect a uniform closure of the unit. During a routine facility inspection, waste from the idle portion of the facility was scattered around the facility and birds and other small animals were seen in the waste mass. The six inch daily cover left on the cell was eroded and did not present a deterrent to precipitation or animals from entering the waste. The solution was long-term intermediate cover over the unused portion of the landfill. This policy has been in place since 1995 and has worked well to prevent these problems.

The written finding required in 75-10-107(2), MCA, necessary to retain the requirement in New Rule XV(2)(c) that a Class II landfill for which some portion will not receive additional waste within 90 days must place on that portion an intermediate cover of at least one foot of approved cover soil (six inches more than the federal daily cover requirement), must also include information regarding the costs to the regulated community that are directly attributable to the proposed requirement. The estimated costs to the regulated community for each of 50 facilities that are directly attributable to the proposed requirement would be $2018/acre based on the $2.50/cubic yard cost of the placement of 807 cubic yards of additional six-inch soil cover per acre of open area. The on-site soil would already be available for placement after excavation to build each landfill unit and provide daily cover as designed. The site-specific magnitude of these additional costs would vary depending on the open area chosen by each facility operator;

(c) updates to operating and maintenance plans in proposed new ARM 17.50.509(4). An operation and maintenance plan and plan updates are not addressed in the federal solid waste regulations (40 CFR parts 257 and 258). Therefore, the requirement to submit a plan update for approval does not trigger the

findings requirements of 75-10-107, MCA, because EPA has no comparable regulations that address the same circumstances. Also, 75-10-204(1), MCA, provides that the Department shall adopt rules for requirements for an operation and maintenance plan that must be submitted with a license application. The Department believes that it is reasonable and authorized under 75-10-204(1), MCA, to adopt ARM 17.50.509(4), which requires an update of the plan for significant changes in conditions or requirements. In addition, 75-10-221, MCA, requires a new license application if there has been a significant change in the plan of operations for a facility. The only way for the Department to become aware if there have been significant changes to a plan of operations is to require owners or operators to submit updates. As noted in the statement of reasonable necessity for the proposed amendment to ARM 17.50.509(4) (MAR Notice No. 17-284), solid waste is not a static activity, and many aspects of a facility's operations can change over five years; and

(d) in New Rule XLIV(1)(d), the proposed requirement to submit to the Department by April 1 an annual corrective measures progress report. This requirement is not provided in 40 CFR 258.58. The Department proposes to delete the requirement, but will make a final decision based on the evidence in the record;

(4) requirements for a Class II landfill unit that does not accept municipal solid waste, to the extent that they are more stringent than requirements in 40 Part 257. This includes all proposed amendments and adoptions that address a Class II landfill unit, because the definition in ARM 17.50.503 of Group II waste, which can be disposed of only at a Class II landfill unit, is broader than the definition of municipal solid waste in 40 CFR 258.2. The definition of a Class II landfill (considering the wastes it can receive) is broader than the definition of MSWLF in 40 CFR 258.2. The Department may adopt the following approach in the adoption notice for these rules: If an owner or licensee wishes not to follow all requirements of a MSW landfill unit for non-MSW waste, because it will not contain waste that poses the same threat to human health or the environment that is posed by putrescible MSW it may demonstrate to the Department in its design, plan of operations and maintenance, and closure and post-closure plans that it will not contaminate the underground drinking water source in excess of applicable ground water quality standards. The owner or operator then must also demonstrate that MSW will not be disposed of in that unit, and must plan to screen and otherwise exclude inappropriate waste from being disposed of in that unit;

(5) requirements in New Rules XXXIII and XXXIV that a Class IV landfill unit have a liner and other prescriptive design elements. The Department intends to delete requirements for prescriptive design elements for a Class IV landfill unit. Instead, the Department intends to substitute the requirement that a Class IV landfill unit be designed not to exceed an MCL listed in Table I of New Rule XXXIII, which is the same as Appendix I of 40 CFR Part 257. This would make a Class IV landfill subject to the same requirements as EPA imposes on a comparable class of landfill, and so it is not more stringent than a comparable federal regulation;

(6) the requirement in New Rule XXIV that a deed notation for a Class II landfill unit must be recorded before the initial receipt of waste or within 60 days after the effective date of the requirement, rather than at closure. The reasons for this requirement were set forth in (1)(j) above;

(7) in New Rule VIII, locational restrictions for a Class II landfill unit that are more stringent than those in 40 CFR Part 258, including of "landfill cover" and "gas

control system" in a "containment system" that must be designed to resist the maximum horizontal acceleration in a seismic impact zone. The Department has decided to remove these requirements in response to a comment received at the public hearing for MAR Notice No. 17-284;

(8) locational restrictions for a Class III or Class IV landfill unit that are more stringent than 40 CFR Part 257, subpart A and B, regulations, respectively. This includes restrictions concerning:

(a) locating a Class III landfill unit in wetlands (New Rule XI(1)(h)). This requirement is not provided in 40 CFR 257 or 258. The Department proposes to delete the requirement, but will make a final decision based on the evidence in the record.

(b) locating a Class IV landfill unit in fault areas (New Rule VII). There are additional fault area location requirements in New Rule VII for Class IV landfills that are not provided in 40 CFR 257. The Department proposes to delete the requirement, but will make a final decision based on the evidence in the record;

(c) locating a Class IV landfill unit in seismic areas (New Rule VIII). There are additional seismic area location requirements in New Rule VIII for Class IV landfills that are not provided in 40 CFR 257. The Department proposes to delete the requirement, but will make a final decision based on the evidence in the record. ; and

(d) locating a Class IV landfill unit in unstable areas (New Rule IX); There are additional unstable area location requirements in New Rule IX for Class IV landfills that are not provided in 40 CFR 257. The Department proposes to delete the requirement, but will make a final decision based on the evidence in the record;

(9) operational requirements for a Class III or Class IV landfill unit that are not required in 40 CFR Part 257, as follows:

(a) liability insurance requirements in proposed ARM 17.50.508(2) and New Rule XXV. There is no comparable federal regulation or guideline addressing the same circumstances, so the findings requirements of 75-10-107, MCA, are not applicable. The reasons for this requirement were set forth in (1)(k), above;

(b) requirements concerning updates to operating and maintenance plans in proposed new ARM 17.50.509(4). An operation and maintenance plan and plan updates are not addressed in the federal solid waste regulations (40 CFR parts 257 and 258). Therefore, the requirement to submit a plan update for approval does not trigger the findings requirements of 75-10-107, MCA, because EPA has no comparable regulations that address the same circumstances. Also, 75-10-204(1), MCA, provides that the Department shall adopt rules for requirements for an operation and maintenance plan that must be submitted with a license application. The Department believes that it is reasonable and authorized under 75-10-204(1), MCA, to adopt ARM 17.50.509(4) which requires an update of the plan for significant changes in conditions or requirements. The statement of reasonable necessity in the proposal notice (MAR Notice No. 17-284) for ARM 17.50.509 provides that solid waste management is not a static activity: "This is necessary because solid waste management is not a static activity, and the originally-approved O & M plan can become outdated and may require revision when circumstances or requirements change at the facility. In five years much can change, so it is reasonable to require the owner, operator, or licensee to review it at least that frequently to determine if an update is necessary";

(c) requirements concerning deed notations in New Rule XXVIII(1)(f) for a

Class III landfill unit and in New Rule XXIX(1)(e) for a Class IV landfill unit. There is no comparable federal regulation or guideline addressing the same circumstances, so the findings requirements of 75-10-107, MCA, are not applicable. The reasons for this requirement were set forth in (1)(j), above; and

(d) bulk liquids restrictions in New Rule XXVIII(1)(c) for a Class III landfill unit and New Rule XXIX(2)(h) for a Class IV landfill unit. There is no comparable federal regulation or guideline addressing the same circumstances, so the findings requirements of 75-10-107, MCA, are not applicable. The proposed requirement is consistent with EPA's discussion of one of the purposes of cover being to reduce infiltration of rainwater and to increase runoff and decrease leachate formation. 43 FR 4950 (2/6/78). A Class III landfill unit will not have a liner, leachate collection or removal system, or a ground water monitoring network or plan, and it is not appropriate to dispose of liquid waste in such unit, when the liquid waste could move unimpeded to ground water, causing contamination that would not be detected. In addition, although the wastes disposed of in a Class III unit are relatively inert, the addition of bulk liquids to those wastes could result in the leaching of tannin and lignins from wood waste, which could result in odor and taste problems in drinking water. Water in wood waste could also result in accelerated decomposition and settling, which could harm the cover and render it ineffective to protect the public from sharp objects or habitat for disease vectors.

For Class IV landfills, which can accept painted wood waste, drywall, and other construction waste, the conditions created by bulk liquids could result in the same harms just described for Class III units, plus the environment created by the presence of liquids can create leachate that can contaminate a ground water drinking water source in excess of the applicable ground water quality standard. The exclusion of bulk liquids from Class III and IV landfills is necessary to protect public health because it will prevent the harms described above.
This requirement has been show to be achievable because it has been followed under existing rule and has been shown to be good management practice for the many years. There are no technological barriers to meeting this requirement;

(10) operational requirements for a Class III landfill unit, as follows:

(a) in New Rule XXVIII(1)(b), the placement of six inches of cover at least every three months. EPA provides that, for protection from fires or disease vectors, the "periodic application of cover material" may be required. 40 CFR 257.3-8(b). "Periodic application of cover material" is defined as the "application and compaction of soil or other suitable material over disposed solid waste at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and to impede disease vectors' access to the waste." 40 CFR 257.3-8(e)(6). Based on the experience of the Department's solid waste section supervisor in managing the program and inspecting solid waste landfills over 17 years, six inches of cover placed at least every three months is necessary to reduce the risk of fire and to impair the disease vectors' access to the waste. In at least two Class III units that have not placed at least 6 inches of cover at least every three months, fires have occurred and large numbers of mosquitoes have been observed. This requirement has been shown to be achievable because it has been followed under existing rule and has been shown to be good management practice for many years. There are no technological barriers to meeting this requirement. Because this requirement is equivalent to the EPA's regulation, there is no additional cost.

Therefore, the Department believes this requirement for the application of an

approved cover is comparable to the federal requirement in 40 CFR 257.3-8, and the finding requirements of 75-10-107, MCA, are not triggered.

The estimated costs to the regulated community for each of 33 facilities that are directly attributable to the proposed requirement would be $2018/acre based on the $2.50/cubic yard cost of the placement of 807 cubic yards of additional six-inch soil cover per acre of open area. There would be four applications of cover per year for a total cost of $8,072/acre; and

(b) in New Rule XXVIII(d)(ii), concerning access. These access requirements do not trigger the findings requirements of 75-10-107, MCA, because EPA has no comparable regulations that address the same circumstances;

(11) operational requirements for a Class IV landfill unit, as follows:

(a) in New Rule XXIX(1)(a), concerning control for aesthetics. EPA mentions aesthetics in its rulemaking notices, concerning cover, for example, at 43 FR 4950 (February 6, 1978), but the discussion of aesthetics is related to litter, odor, or air emissions. Because the rules provide for adequate regulation of these matters, the Department is amending New Rule XXIX(1)(a) to eliminate the regulation of aesthetics;

(b) in New Rule XXIX(1)(c), concerning the exclusion of liquids, and other materials that may be conditionally exempt small quantity generator (CESQG) wastes that may be disposed of at a 40 CFR Part 257, subpart B, landfill unit. Exclusion of bulk liquids has been addressed in (9)(d), above. Concerning the acceptance of containerized liquids at a Class IV landfill unit, there is no comparable federal regulation addressing the same circumstances. Therefore, it is not necessary to make findings under 75-10-107, MCA;

(c) in New Rule XXIX(2)(a), concerning waste screening requirements. There is no comparable federal regulation addressing the same circumstances. Therefore, it is not necessary to make findings under 75-10-107, MCA.
All hazardous wastes are prohibited from disposal at Class IV solid waste management systems, and a waste screening program must be implemented to ensure protection of human health and the environment from the release of hazardous contaminants to ground water that could be used as a drinking water source. If hazardous wastes were not screened from a Class IV unit, the public could be exposed to contamination that is harmful to human health. The requirement is achievable because all solid waste management systems currently screen as part of their plans of operation, and there are no technological barriers to comply with the screening requirement; and

(d) in New Rule XXIX(1)(d), concerning financial assurance requirements. There is no comparable federal requirement for financial assurance for a Class IV unit, and the findings requirements of 75-10-107, MCA, do not apply. Financial assurance ensures that money is available to complete closure and post-closure care at a landfill. If this money was not available, closure might not be completed, and post-closure care might not be conducted, and increased leachate could form and threaten a ground water drinking source. The requirement could prevent this from occurring. The requirement is achievable because Class IV units have been providing financial assurance for many years, and there is no technological barrier to compliance;

(12) in New Rule LI, concerning closure and post-closure requirements for a Class III landfill unit. There are no comparable federal requirements for closure or post-closure care for a Class III unit. Therefore, the closure and post-closure

requirements do not trigger the findings requirements of 75-10-107, MCA;

(13) in New Rules XLIX and L, concerning closure and post-closure requirements for a Class IV landfill unit. There are no comparable federal requirements for closure or post-closure care for a Class IV unit. Therefore, the closure and post-closure requirements do not trigger the findings requirements of 75-10-107, MCA. Also, closure and post-closure plans are required as part of a license application. They are part of the design required in New Rules XXXIII and XXXIV to ensure that the waste in a unit will not contaminate ground water. If the planned cover and vegetation are not properly installed and maintained, water from precipitation can enter the waste and form leachate, which can then migrate to a ground water drinking water source.