

This section will contain the final text of the rules proposed by agencies. The order of rulemaking is required to contain a citation to the legal authority upon which the order or rulemaking is based; reference to the date and page or pages where the notice of proposed rulemaking was published in the *Missouri Register*; an explanation of any change between the text of the rule as contained in the notice of proposed rulemaking and the text of the rule as finally adopted, together with the reason for any such change; and the full text of any section or subsection of the rule as adopted which has been changed from that contained in the notice of proposed rulemaking. The effective date of the rule shall be not less than thirty (30) days after the date of publication of the revision to the *Code of State Regulations*.

The agency is also required to make a brief summary of the general nature and extent of comments submitted in support of or opposition to the proposed rule and a concise summary of the testimony presented at the hearing, if any, held in connection with the rulemaking, together with a concise summary of the agency's findings with respect to the merits of any such testimony or comments which are opposed in whole or in part to the proposed rule. The ninety-(90-) day period during which an agency shall file its order of rulemaking for publication in the *Missouri Register* begins either: 1) after the hearing on the proposed rulemaking is held; or 2) at the end of the time for submission of comments to the agency. During this period, the agency shall file with the secretary of state the order of rulemaking, either putting the proposed rule into effect, with or without further changes, or withdrawing the proposed rule.

**Title 1—OFFICE OF ADMINISTRATION
Division 10—Commissioner of Administration
Chapter 18—Retirement Policy**

ORDER OF RULEMAKING

By the authority vested in the Commissioner of Administration under section 104.404, RSMo 2016, the commissioner rescinds a rule as follows:

1 CSR 10-18.010 Retirement Policy is rescinded.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on October 15, 2018 (43 MoReg 2975). No changes have been made in the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the Code of State Regulations.

SUMMARY OF COMMENTS: No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-1.010 General Organization is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 018 (43 MoReg 2782-2783). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. At the public hearing, one (1) oral comment was made.

COMMENT #1: Clark Brown, on behalf of Service Employees International Union (SEIU), Local 1, stated that the proposed amendment to 1 CSR 20-1.010 would strip away the authority of the Personnel Advisory Board on merit principles.

RESPONSE: The proposed amendment to 1 CSR 20-1.010 removes language describing the Board's members and authority in section (2) that largely mirrors the statutory language of sections 36.050 and 36.060, RSMo, and does not alter the authority of the Board on merit principles. No changes have been made to the amendment text as a result of this comment

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-1.020 Definitions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2783-2787). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board rescinds a rule as follows:

1 CSR 20-1.030 Personnel Rules is rescinded.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2787). No changes have been made in the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed rescission was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-1.040 Unclassified Service is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2787-2788). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-1.045 Covered Service is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2788-2790). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 1—Organization and Operation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board rescinds a rule as follows:

1 CSR 20-1.050 Records and Reports is rescinded.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2790). No changes have been made in the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed rescission was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 2—Classification and Pay Plans**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-2.010 The Classification Plan is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2790-2791). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 2—Classification and Pay Plans**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-2.015 Broad Classification Bands is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2791-2794). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 2—Classification and Pay Plans**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-2.020 The Pay Plan is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2795-2797). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment,
Evaluation and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.010 Examinations is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2797-2800). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment,
Evaluation and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.020 Registers is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2800-2802). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment,
Evaluation and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.030 Certification and Appointment is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2802-2804). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. One (1) written comment was received prior to the public hearing. At the public hearing, one (1) oral comment was made.

COMMENT #1: Chris Grant, on behalf of American Federation of State, County, and Municipal Employees (AFSCME), Council 61, Service Employees International Union (SEIU), Local 1, and Communications Workers of America (CWA), Local 6355 (collectively the "Unions"), submitted a statement in opposition to this proposed amendment as well as the proposed amendments to 1 CSR 20-3.070 and 1 CSR 20-4.020. The Unions argue that the proposed rules go beyond the plain language and purpose of Senate Bill 1007 (2018), represent an administrative overreach, and are unauthorized by law and also unconstitutional. The Unions object to the proposed amendment of 1 CSR 20-3.030 "to the extent the changes seek to prohibit employees from bargaining and enforcing requirements of 'cause' or 'just cause' for demotion, discipline, and discharge and from bargaining and enforcing seniority considerations in layoffs, recalls, and transfers."

RESPONSE: The Board reviewed the Unions' legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. No changes have been made to the amendment text as a result of this comment.

COMMENT #2: Clark Brown, on behalf of Service Employees International Union (SEIU), Local 1, stated that the removal of language in the proposed amendment to 1 CSR 20-3.030 relating to lay-off, transfer, and reinstatement, as well as the concept of dismissal for no reason, go beyond what is required by statutes.

RESPONSE: The Board reviewed Mr. Brown's legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. Section 36.025, RSMo, reads as follows: "Except as otherwise provided in section 36.030, all employees of the state shall be employed at-will, may be selected in the manner deemed appropriate by their respective appointing authorities, shall serve at the pleasure of their respective appointing authorities, and may be discharged for no reason or any reason not prohibited by law, including section 105.055." No changes have been made to the amendment text as a result of this comment.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment,
Evaluation and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.040 Probationary Period is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2805-2806). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment, Evaluation
and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board rescinds a rule as follows:

1 CSR 20-3.050 Service Reports is rescinded.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2806). No changes have been made in the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed rescission was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

**Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of
Personnel
Chapter 3—Personnel Selection, Appointment, Evaluation
and Separation**

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.070 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2806-2810). Those sections or subsections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. Two (2) written comments were received prior to the public hearing. At the public hearing, one (1) oral comment was made.

COMMENT #1: Chris Grant, on behalf of American Federation of State, County, and Municipal Employees (AFSCME), Council 61, Service Employees International Union (SEIU), Local 1, and Communications Workers of America (CWA), Local 6355 (collectively the “Unions”), submitted a statement in opposition to this proposed amendment as well as the proposed amendments to 1 CSR 20-3.030 and 1 CSR 20-4.020. The Unions argue that the proposed rules go beyond the plain language and purpose of Senate Bill 1007 (2018), represent an administrative overreach, and are unauthorized by law and also unconstitutional. The Unions object to the proposed amendment of 1 CSR 20-3.070 “to the extent the changes seek to prohibit employees from bargaining and enforcing requirements of ‘cause’ or ‘just cause’ for demotion, discipline, and discharge and from bargaining and enforcing seniority considerations in layoffs, recalls, and transfers.”

RESPONSE: The Board reviewed the Unions’ legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. No changes have been made to the amendment text as a result of this comment.

COMMENT #2: Guy Krause, Deputy Director of the Division of Personnel within the Office of Administration, recommended the replacement of the terms “dismissal,” “dismissals,” and “dismissed” in the proposed amendment to 1 CSR 20-3.070 to align with terminology used in the new section 36.025, RSMo.

RESPONSE AND EXPLANATION OF CHANGE: The Board agrees with this comment, in part. References to “dismissal” in the context of regular employees remain appropriate in the proposed amendment to 1 CSR 20-3.070 pursuant to section 36.380, RSMo. The Board agrees that references to “dismissal” and “dismissed” in the context of all other employees should instead reference “discharge” and “discharged” in accordance with section 36.025, RSMo. The Board further notes that references to “dismissal” in the context of all employees should instead reference “dismissal or discharge,” and the Board has revised the language of the proposed amendment accordingly. In section (3) and subsection (3)(E), the word “dismissal” has been replaced with “dismissal or discharge.” In section (5), the word “Dismissals” has been replaced with the words “Dismissals or Discharges.” In subsection (5)(B), the words “dismissal” and “dismissed” have been replaced with the words “discharge” and “discharged.”

COMMENT #3: Clark Brown, on behalf of Service Employees International Union (SEIU), Local 1, stated that the removal of language in the proposed amendment to 1 CSR 20-3.070 relating to lay-off, transfer, and reinstatement, as well as the concept of dismissal for no reason, go beyond what is required by statutes.

RESPONSE: The Board reviewed Mr. Brown’s legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. Section 36.025, RSMo, reads as follows: “Except as otherwise provided in section 36.030, all employees of the state shall be employed at-will, may be selected in the manner deemed appropriate by their respective appointing authorities, shall serve at the pleasure of their respective appointing authorities, and may be discharged for no reason or any reason not prohibited by law, including section 105.055.” No changes have been made to the amendment text as a result of this comment.

1 CSR 20-3.070 Separation, Suspension, and Demotion

(3) Suspension. An appointing authority, for disciplinary purposes, may suspend, without pay, any employee in his/her division. A suspension may be made for a length of time as s/he considers appropriate, not exceeding twenty (20) working days in any twelve- (12-) month period except that this limitation shall not apply in the event of a terminal suspension given in conjunction with a dismissal or discharge; a suspension given in connection with a criminal offense involving the use of a controlled substance; or, with the approval of

the director, a suspension made pending the investigation or trial of any charges against the employee (see section 36.370, RSMo). Employees enumerated in 1 CSR 20-5.010(1)(C) and (D) and designated as exempt from the overtime requirements of the Fair Labor Standards Act shall not be suspended from duty without pay for disciplinary purposes unless the said suspension is for one (1) or more full workdays.

(E) In the event of an instance of unacceptable conduct by an employee that in the judgment of the appointing authority does not warrant immediate suspension, dismissal or discharge, or demotion, but which requires a permanent record, the appointing authority may record such conduct in the employee's service history by notifying the personnel director in a manner prescribed by the director. Employees do not have the right to notice, opportunity to be heard, or appeal from an unacceptable conduct record.

(5) Dismissals or Discharges.

(B) Employees not covered under section 36.030.1(2), RSMo do not have the right to notice, opportunity to be heard, or appeal from a discharge and may be discharged for no reason or any reason not prohibited by law.

Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 3—Personnel Selection, Appointment, Evaluation and Separation

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-3.080 General Provisions and Prohibitions **is amended.**

A notice of proposed rescission containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2810-2811). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 4—Appeals, Investigations, Hearings and Grievances

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board rescinds a rule as follows:

1 CSR 20-4.010 Appeals **is rescinded.**

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2811). No changes have been made in the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed rescission was held November 5, 2018, and the public comment period also ended November 5, 2018. No comments were received.

Title 1—OFFICE OF ADMINISTRATION
Division 20—Personnel Advisory Board and Division of Personnel
Chapter 4—Appeals, Investigations, Hearings and Grievances

ORDER OF RULEMAKING

By the authority vested in the Personnel Advisory Board under section 36.070, RSMo Supp. 2018, the Board amends a rule as follows:

1 CSR 20-4.020 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2811-2813). Those sections or subsections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held November 5, 2018, and the public comment period also ended November 5, 2018. Two (2) written comments were received prior to the public hearing. At the public hearing, one (1) oral comment was made.

COMMENT #1: Chris Grant, on behalf of American Federation of State, County, and Municipal Employees (AFSCME), Council 61, Service Employees International Union (SEIU), Local 1, and Communications Workers of America (CWA), Local 6355 (collectively the "Unions"), submitted a statement in opposition to this proposed amendment as well as the proposed amendments to 1 CSR 20-3.030 and 1 CSR 20-3.070. The Unions argue that the proposed rules go beyond the plain language and purpose of Senate Bill 1007 (2018), represent an administrative overreach, and are unauthorized by law and also unconstitutional. The Unions specifically object to the new section (1) of 1 CSR 20-4.020, arguing that it interferes with the right of state employees to collectively bargain. The Unions further state that the proposed regulation seems to require state agencies to repudiate existing grievance procedures established by presently effective collective bargaining agreements.

RESPONSE: The Board reviewed the Unions' legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. Regarding the effect of section (1) on any collective bargaining agreements in effect at the time the proposed rule becomes effective, subsection (1)(B) has been modified as described in the response to Comment #2, below. No changes have been made to the amendment text as a result of this comment.

COMMENT #2: Guy Krause, Deputy Director of the Division of Personnel within the Office of Administration, recommended the insertion of a comma after "part-time employee" in subsection (1)(A), the modification of subsection (1)(B) to clarify that it applies only to agreements entered subsequent to the effective date of the rule, the addition of a new subsection (1)(D) defining "grievance procedure" as it is used in section (1), the addition of a new subsection (1)(E) to clarify that agencies may adopt policies allowing for the reporting of discrimination, other illegal acts, and employee concerns, and the addition of a new subsection (1)(F) clarifying that sections (2)-(4) of 1 CSR 20-4.020 only apply to regular employees.

RESPONSE AND EXPLANATION OF CHANGE: Each of the recommended changes will help clarify the meaning and application of this rule. The Board agrees with each of the recommended changes

and has made those changes to the rule.

COMMENT #3: Clark Brown, on behalf of Service Employees International Union (SEIU), Local 1, stated that the proposed amendment to 1 CSR 20-4.020 would go beyond the scope of statutes by eliminating grievance procedures.

RESPONSE: The Board reviewed Mr. Brown's legal assertions, but believes they relate to statutory terms. These rules carry forward the meaning of the statute. Section 36.025, RSMo, reads as follows: "Except as otherwise provided in section 36.030, all employees of the state shall be employed at-will, may be selected in the manner deemed appropriate by their respective appointing authorities, shall serve at the pleasure of their respective appointing authorities, and may be discharged for no reason or any reason not prohibited by law, including section 105.055." No changes have been made to the amendment text as a result of this comment.

1 CSR 20-4.020 Grievance Procedures

(1) Prohibited Grievance Procedures.

(A) No state agency may establish a grievance procedure permitting a state employee, including a part-time employee, other than a regular employee, to grieve:

1. Any of the following, however any of the same may be denominated, imposed by an appointing authority or anyone acting on the appointing authority's behalf:

- A. Discipline;
- B. Suspension;
- C. Demotion;
- D. Notice of unacceptable conduct or conditional employment;

- E. Leave denial;
- F. Transfer;
- G. Shift change;
- H. Reprimand;
- I. Furlough; or
- J. Any employment action that could be alleged to have an adverse financial impact on a state employee.

(B) Subsequent to the effective date of this rule, no state agency may enter into an agreement with a certified bargaining unit providing for the same or any alternative dispute resolution procedure regarding the matters prohibited in subsection (1)(A).

(C) The foregoing prohibitions shall not apply to grievance procedures that allow for the presentation of allegations that one (1) of the types of employment actions described in subsection (1)(A) was taken for a reason prohibited by law.

(D) A "grievance procedure" as used in this section means a right to a process or practice whereby an employee could have a decision addressing any of the foregoing matters reviewed either within or outside the employee's agency.

(E) The prohibition on the creation of a grievance procedure contained in this section does not prohibit a state agency from adopting policies allowing for the reporting of instances of unlawful discrimination or other illegal acts, as well as policies permitting the agency the discretion to review and address other employee concerns regarding other employees, facilities, or other aspects of their work environment. Such policies are specifically excluded from the grievance procedures prohibited by this rule.

(F) The grievance procedure found in sections (2)-(4) of this rule shall not apply to state employees, including part-time employees, other than regular employees.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 1—Wildlife Code: Organization

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-1.010 Organization and Methods of Operation is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2815). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received seventeen (17) comments on proposed changes to 3 CSR 10-1.010 Organization and Methods of Operation.

COMMENTS: Michael Simmons, Glasgow; David Gocken, Kansas City; Jeffery Keller, Martinsville; Doug Smentkowski, Jefferson City; Michael Krote, Warrenton, and Jacob Harris, Kansas City, indicated general support for proposed changes to this rule.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENTS: Lawrence Farley, New Bloomfield; Jennifer Meyers, Shelbyville; Corey Buchheit, Jackson; Chris Pund, New Florence; Mike Bockerstette, St. Charles; Michael Hagene, St. Peters, and Ed Lipowica, Lone Jack, voiced support for proposed changes to this rule; however, specific comments pertained to elimination of the no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes and will address these comments with others received on this specific change in the order of rulemaking for 3 CSR 10-7.431 Deer Hunting Seasons: General Provisions.

COMMENT: Curt Dittmer, Henley, voiced general opposition to proposed changes to this rule.

RESPONSE: The commission appreciates citizen input. No changes to the rule have been made as a result of this comment.

COMMENT: Roger Rudd, Piedmont, voiced opposition to this rule change; however, specific comments pertained to feral hog hunting.

RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of this comment.

COMMENTS: Tommy Basham, Newburg, and Jim Wrinkle, Aurora, expressed opposition to this proposed amendment; however, specific comments pertained to elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who provided input and will address these comments with others received on this specific change in the order of rulemaking for 3 CSR 10-7.431 Deer Hunting Seasons: General Provisions.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 4—Wildlife Code: General Provisions

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-4.200 Chronic Wasting Disease; Management Zone is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2815–2816). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received nineteen (19) comments on proposed changes to 3 CSR 10-4.200 Chronic Wasting Disease; Management Zone.

COMMENTS: Charles Fugate, Ozark; David Mack, Bloomsdale; Michael Simmons, Glasgow; Michael Bishop, Tebbetts; Wade Harris, Collins; David McCartney, Lincoln; Jeffrey Anderson, Braymer; Doug Dunlap, Owensville; Corey Buchheit, Jackson; Kevin Hooper, Carthage, and David Ponzer, location unknown, indicated general support for proposed changes to this rule.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: David McCartney, Lincoln, voiced support for the proposed changes; however, specific comments pertained to elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes and will address these comments with others received on this specific change in the order of rulemaking for 3 CSR 10-7.431 Deer Hunting Seasons: General Provisions.

COMMENTS: Sean Witthar, location unknown; Gary Wiele, St. Louis; Ceseree Maggart, Smithville, and Gary Scott, location unknown, voiced opposition to this rule change; however, specific comments questioned the seriousness of chronic wasting disease or indicated their belief that regulations already in place to limit the spread of the disease will not be effective.

RESPONSE: Flexibility to adjust the Chronic Wasting Disease (CWD) Management Zone based on risk is critical as CWD management evolves in Missouri. Allowing the designation of a county rather than the blanket inclusion of all counties within twenty-five (25) miles of a confirmed positive will allow more adaptive management of CWD in Missouri.

CWD is a disease that infects deer and other members of the deer family. It is transmitted by prions, which are abnormal proteins that attack the nervous system, and is always fatal to the infected animal. CWD is spread both directly from deer to deer and indirectly to deer from infected soil and other surfaces. The CWD prions accumulate in the brain, spinal cord, eyes, spleen, and lymph nodes of infected animals. Once well established in an area, CWD is impossible to eradicate. States with CWD must focus on limiting the spread of the disease and preventing its introduction to new areas. CWD has been confirmed in over twenty-two (22) states, including Missouri, and continues to spread throughout the country. No changes to the rule have been made as a result of these comments.

COMMENT: John Spihlmann, Belton, voiced opposition to the rule change; however, specific comments indicated support for implementing regulations to limit the spread of chronic wasting disease statewide.

RESPONSE: Flexibility to adjust the CWD Management Zone based on risk is critical as CWD management evolves in Missouri. Allowing the designation of a county rather than the blanket inclusion of all counties within twenty-five (25) miles of a confirmed positive will allow more adaptive management of the disease. Management decisions are based on the best available science and the department is currently focused on prioritizing management actions based on risk. No changes to the rule have been made as a result of this comment.

COMMENT: Chris Nelson, location unknown, voiced opposition to the rule change; however, specific comments pertained to targeted

culling in areas where CWD has been found.

RESPONSE: Flexibility to adjust the CWD Management Zone based on risk is critical as CWD management evolves in Missouri. Allowing the designation of a county rather than the blanket inclusion of all counties within twenty-five (25) miles of a confirmed positive will allow more adaptive management of the disease. Management decisions are based on the best available science and targeted culling is an effective tool to reduce deer numbers, which will reduce the spread of CWD in a specific area. No changes to the rule have been made as a result of this comment.

COMMENT: Paul Barber, Phillipsburg, indicated indecision regarding the proposed changes and suggested that any regulations should be based on research and statistical findings.

RESPONSE: All CWD management decisions are based on the best available science. No changes to the rule have been made as a result of this comment.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 5—Wildlife Code: Permits

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-5.205 Permits Required; Exceptions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2816–2821). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received one hundred twenty-two (122) comments from ninety-six (96) individuals on proposed changes to 3 CSR 10-5.205 Permits Required; Exceptions.

COMMENTS: Fifty-two (52) individuals indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENTS: Five (5) individuals expressed indecision regarding the proposed changes and offered input on unrelated regulations.

RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of these comments.

COMMENTS: John Zawodny, Lee's Summit, and Deb Karr, location unknown, expressed opposition to changes that eliminate the requirement for an adult to be properly licensed when accompanying a youth hunter.

RESPONSE: This amendment will allow adults to accompany properly licensed youth deer and turkey hunters during the youth portions of the deer and turkey hunting seasons without a permit and may serve to increase participation. No changes to the rule have been made as a result of these comments.

COMMENTS: Thirty-eight (38) individuals expressed general opposition to the proposed elimination of no-cost landowner permits for lessees.

RESPONSE: To the extent there were specific comments or suggestions provided, the commission has addressed them below.

COMMENTS: Eleven (11) individuals expressed support for continuing to issue no-cost landowner permits to individuals who lease property for agricultural purposes.

RESPONSE: The original intent of the term lessee within the Wildlife Code was in regard to “tenant farming”, an activity that is no longer a common practice, and there has been considerable confusion regarding lessee/tenant eligibility for no-cost permits. Lessees/tenants must live on the land to qualify; simply leasing property for agricultural purposes is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Fourteen (14) individuals expressed support for expanding availability of no-cost landowner hunting permits to all lessees.

RESPONSE: The original intent of the term lessee within the Wildlife Code was in regard to “tenant farming”, an activity that is no longer a common practice, and there has been considerable confusion regarding lessee/tenant eligibility for no-cost permits. Currently, lessees/tenants must live on the land to qualify. Simply leasing some of the many land rights is not equivalent to land ownership and many forms of leasing currently occur, ranging from crop and house rental to hunting leases. No changes to the rule have been made as a result of these comments.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 5—Wildlife Code: Permits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-5.215 Permits and Privileges: How Obtained; Not Transferable is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2822–2823). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received seventeen (17) comments on proposed changes to 3 CSR 10-5.215 Permits and Privileges: How Obtained; Not Transferable.

COMMENTS: Jeffery Keller, Martinsville; Paul Barber, Phillipsburg, and Doug Smentkowski, Jefferson City, indicated general support for the proposed change.

RESPONSE: The commission thanks those individuals who voiced support for the regulation change.

COMMENTS: Pablo Ortiz, Adrain; Ray Wright, Prairie Home, and James Harding, Cedar Creek, expressed general support for this proposed amendment; however, specific comments pertained to elimination of the no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who provided input and will address these comments with others received on this specific change in the order of rulemaking for 3 CSR 10-7.431 Deer Hunting Seasons: General Provisions.

COMMENT: Daniel Collins, Alton, expressed opposition to the proposed requirement for individuals to provide their Social Security number to obtain a recreational hunting, fishing, or trapping permit in Missouri based on his religious beliefs.

RESPONSE: The Department of Conservation is required by federal

and state law to collect a Social Security number for all recreational permits, specifically sections 42 U.S.C. § 666 of the Child Welfare Reform Act and Missouri Statute § 454.403. This same requirement was challenged in *Montana Shooting Sports Ass'n v. State of Montana*, 224 P. 3d 1240 (Mt. 2010), but was upheld by the Montana Supreme Court which found that hunting is a recreation and not a livelihood, and the requirement did not violate a fundamental right of privacy since a Social Security number is a piece of information issued by the government and regularly provided to government entities. The court found that the federal and state government had a compelling interest to collect this information, namely child support enforcement. Finally, the Eighth Circuit has held that a religious accommodation is not required when a Social Security number is required by federal law. *Seaworth v. Pearson*, 203 F.3d 1056 (8th Cir. 2000).

In summary, the department is required by both federal and state law to collect Social Security numbers for recreational licenses. This mandate has been upheld by several courts. The sole purpose of the collection is to assist with child support enforcement. No changes to the rule have been made as a result of these comments.

COMMENTS: Twelve (12) individuals voiced opposition to the proposed requirement for individuals to provide their Social Security number to obtain a recreational hunting, fishing, or trapping permit in Missouri.

RESPONSE: The Department of Conservation is required by both federal and state law to collect Social Security numbers for recreational licenses. This mandate has been upheld by several courts. The sole purpose of the collection is to assist with child support enforcement. No changes to the rule have been made as a result of these comments.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 5—Wildlife Code: Permits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-5.222 Youth Pricing: Deer and Turkey Permits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2824). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received three (3) comments on proposed changes to 3 CSR 10-5.222 Youth Pricing: Deer and Turkey Permits.

COMMENT: Paul Luce, Branson, indicated general support for the proposed change.

RESPONSE: The commission thanks Mr. Luce for his support.

COMMENTS: Andrew Pinkley, Greenville, and John Zawodney, Lee's Summit, expressed opposition to discounted permits for youths.

RESPONSE: The department has a history of providing deer and turkey hunting permits at a reduced rate for youth hunters as a hunter recruitment tool. No changes to the rule have been made as a result of these comments.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 5—Wildlife Code: Permits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission adopts a rule as follows:

3 CSR 10-5.600 Resident Firearms Deer Management Assistance Program Permit is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2824). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received four (4) comments on the proposed rule.

COMMENT: Travis Harms, Cole Camp, expressed general opposition; however, specific comments did not pertain to the rule.
RESPONSE: The commission appreciates citizen input. No changes to the rule have been made as a result of this comment.

COMMENT: Aaron Espinoza, Newburg, voiced opposition to the proposed rule and suggested that all landowners be issued additional antlerless permits based on the number of acres they own.
RESPONSE: The Deer Management Assistance Program (DMAP) will issue to antlerless permits participating landowners based on the harvest objectives of their plan and acreage amounts will be considered as those plans are drafted. No changes to the rule have been made as a result of this comment.

COMMENT: Jesse Lochman, location unknown, voiced opposition to the proposed rule, stating that it will further complicate deer hunting regulations.
RESPONSE: The Deer Management Assistance Program was created based requests landowners who wanted an additional tool to manage white-tailed deer on their property. Although it does add a level of complexity to the *Wildlife Code*, it will only affect program participants. No changes to the rule have been made as a result of this comment.

COMMENT: One (1) individual indicated indecision regarding the proposed rule.
RESPONSE: This individual's specific questions regarding availability of the new permits were addressed separately. No changes to the rule have been made as a result of this comment.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 5—Wildlife Code: Permits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission adopts a rule as follows:

3 CSR 10-5.605 Nonresident Firearms Deer Management Assistance Program Permit is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on October 1, 2018 (43

MoReg 2824). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received four (4) comments on the proposed rule.

COMMENT: Bill Smith, Hallsville, and Tim Rubbelke, Creve Coeur, indicated general support for the proposed rule.
RESPONSE: The commission thanks those individuals who voiced support for the new rule.

COMMENT: David Mack, Bloomsdale, indicated general opposition to the proposed rule; however, specific comments did not pertain to the proposed rule.
RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of this comment.

COMMENT: Joe Gioia, Union, voiced opposition to the requirement for landowners to purchase a Nonresident Firearms Any-Deer Hunting Permit or a Nonresident Managed Deer Hunting Permit as a prerequisite to purchasing a Nonresident Firearms Deer Management Assistance Program Permit.
RESPONSE: The department currently requires nonresidents to purchase an any-deer hunting permit prior to purchasing an antlerless permit. Surveys of Missouri hunters indicate significant support for this practice. No changes to the rule have been made as a result of this comment.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 6—Wildlife Code: Sport Fishing: Seasons, Methods, Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-6.415 Restricted Zones is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2824-2825). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods, Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-7.405 General Provisions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1,

2018 (43 MoReg 2825). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received three (3) comments on proposed changes to 3 CSR 10-7.405 General Provisions.

COMMENTS: Doug Smentkowski, Jefferson City; Michael Wyatt, Lee's Summit, and Ronald Dodge, Lake St. Louis, indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-7.410 Hunting Methods is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2825). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received eleven (11) comments on proposed changes to 3 CSR 10-7.410 Hunting Methods.

COMMENTS: John Hardin, De Soto; David Cartner, Richland; William Federhofer, Liberty; Sean Witthar, location unknown; Doug Martin, Lee's Summit, and Joe Richards, Rolla, indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENTS: Ceseree Maggart, Smithville; Phil Orita, location unknown; Louis Bailey, location unknown; Hugh Carnahan, Nixa, and Tom Head, Green City, voiced opposition to the proposed elimination of no-cost landowner permits for lessees.

RESPONSE: The original intent of the term lessee within the *Wildlife Code* was in regard to "tenant farming", an activity that is no longer a common practice. There has been considerable confusion regarding lessee/tenant eligibility for no-cost permits. Lessees/tenants must live on the land to qualify, but this is not always clearly understood by the public. Many forms of leasing currently occur, ranging from crop and house rental to hunting leases; simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

**3 CSR 10-7.431 Deer Hunting Seasons: General Provisions
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2825 - 2827). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received one hundred twenty-eight (128) comments from one hundred (100) individuals on proposed changes to 3 CSR 10-7.431 Deer Hunting Seasons: General Provisions.

COMMENTS: Sixty-three (63) individuals indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENTS: Thirty-six (36) individuals indicated general opposition to elimination of no-cost landowner permit privileges for lessees.

RESPONSE: To the extent there were specific comments provided, the commission has addressed them below.

COMMENTS: Shaun Hunt, Bolivar; Andy Dodson, location unknown; Rachel Russell, Foristell; Jim Wrinkle, Aurora; Jake Owen, location unknown, and Ashley Berry, Rolla, oppose the proposed change but agree that those who lease property primarily for hunting purposes should not be eligible for no-cost landowner permits.

RESPONSE: Individuals who lease property for hunting purposes are not eligible to receive no-cost landowner permits. The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Shaun Hunt, Bolivar; Martin Walsh, location unknown; Kelly Hampton, Ellington; Hugh Carnahan, Nixa, and David Ponzer, location unknown, oppose the change because lessees provide valuable land management assistance to landowners.

RESPONSE: The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Ashley Berry, Rolla; Brent Hayden, Columbia; David Rogers, Gerald; Jake Owen, location unknown; Jim Wrinkle, Aurora; Paul Ayres, Carthage; Robert Fisher, Grovespring; Teresa Johnson, Bolivar; Tom Head, Green City; Paul Arway, Eureka, and Ray Wright, Prairie Home, indicated that individuals who lease land for agricultural purposes provide habitat for wildlife and should continue to receive no-cost landowner permits.

RESPONSE: The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a

common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing property for agricultural purposes is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENT: One (1) individual indicated indecision regarding elimination of no-cost landowner permits for lessees and submitted comments that were unrelated to the proposed changes.

RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of this comment.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-7.433 Deer: Firearms Hunting Season is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2828). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received two (2) comments on proposed changes to 3 CSR 10-7.433 Deer: Firearms Hunting Season.

COMMENT: Rick Winkler, Festus, indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks Mr. Winkler for his support.

COMMENT: Rob Wagner, Imperial, expressed indecision regarding the proposed changes and suggested that the department conduct a comprehensive review of the entire landowner permit system to reduce abuse.

RESPONSE: The department currently reviews ten percent (10%) of new no-cost permit holders and ten percent (10%) of current no-cost permit holders every year. This process takes significant resources to complete and many of the checks involve contacting or visiting the county clerk's offices to confirm land ownership for each individual. In 2017, there were over one hundred eighty thousand (180,000) individuals who received no-cost landowner deer or turkey hunting permits, many of whom were found to be ineligible for those permits. No changes to the rule have been made as a result of this comment.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-7.434 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2828-2829). Those sections with changes are reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received one hundred sixty-four (164) comments from one hundred forty (140) individuals on proposed changes to 3 CSR 10-7.434 Deer: Landowner Privileges.

COMMENTS: Eighty-six (86) individuals indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: David Schlemeyer, Hallsville, indicated general support for the changes; however, he indicated that individuals who lease land for agricultural purposes provide habitat for wildlife and should continue to receive no-cost landowner permits.

RESPONSE: The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing property for agricultural purposes is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Forty-four (44) individuals expressed opposition to elimination of no-cost landowner permit privileges for lessees.

RESPONSE: To the extent there were specific comments provided, the commission has addressed them below.

COMMENTS: Doug Michael, Gallatin; Mike Stevins, location unknown; Dale Leeper, Trenton, and Kip Thompson, Springfield, oppose the proposed change but agree that those who lease property primarily for hunting purposes should not be eligible for no-cost landowner permits.

RESPONSE: Individuals who lease property for hunting purposes are not eligible to receive no-cost landowner permits. The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Nineteen (19) individuals indicated that those who lease land for agricultural purposes provide habitat for wildlife and should continue to receive no-cost landowner permits.

RESPONSE: The original intent of the term "lessee" within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing property for agricultural purposes is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENTS: Nine (9) individuals indicated indecision regarding elimination of no-cost landowner permits for lessees and specific comments provided pertained to other regulations.

RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of these

comments.

COMMENT: Missouri Department of Conservation staff noted that counties listed in paragraphs (1)(B)1. and (1)(B)2. in the proposed amendment to this rule which was published in the *Missouri Register* on October 1, 2018, were inaccurate because they did not reflect the current regulation, in effect since July 1, 2018.

RESPONSE AND EXPLANATION OF CHANGE: Consequently, the changes to these sections below simply reflect regulations currently in effect.

3 CSR 10-7.434 Deer: Landowner Privileges

(1) Resident landowners as outlined in the *Fall Deer & Turkey Hunting Regulations and Information* booklet can obtain no-cost deer hunting permits from any permit vendor.

(B) In addition to the permits listed in subsection (1)(A), those with seventy-five (75) or more acres located in a single county or at least seventy-five (75) continuous acres bisected by a county boundary can receive a maximum of two (2) Resident Landowner Firearms Antlerless Deer Hunting Permits. Landowners with at least seventy-five (75) acres in more than one (1) county must comply with landowner antlerless deer limits for each county.

1. Resident landowners of at least seventy-five (75) acres may receive one (1) no-cost Landowner Antlerless Deer Hunting Permits in the counties of: Butler, Carter, Christian, Dent, Douglas, Dunklin, Iron, Lawrence, Maries, Mississippi, New Madrid, Newton, Pemiscot, Phelps, Pulaski, Reynolds, Ripley, Scott, Shannon, Stoddard, Texas, Wayne, Webster, and Wright.

2. Resident landowners of at least seventy-five (75) acres may receive two (2) no-cost Landowner Antlerless Deer Hunting Permits in the counties of: Adair, Andrew, Atchison, Audrain, Barry, Barton, Bates, Benton, Bollinger, Boone, Buchanan, Caldwell, Callaway, Camden, Cape Girardeau, Carroll, Cass, Cedar, Chariton, Clark, Clay, Clinton, Cole, Cooper, Crawford, Dade, Dallas, Daviess, DeKalb, Franklin, Gasconade, Gentry, Greene, Grundy, Harrison, Henry, Hickory, Holt, Howard, Howell, Jackson, Jasper, Jefferson, Johnson, Knox, Laclede, Lafayette, Lewis, Lincoln, Linn, Livingston, Macon, Madison, Marion, McDonald, Mercer, Miller, Moniteau, Monroe, Montgomery, Morgan, Nodaway, Oregon, Osage, Ozark, Perry, Pettis, Pike, Platte, Polk, Putnam, Ralls, Randolph, Ray, St. Charles, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Saline, Schuyler, Scotland, Shelby, Stone, Sullivan, Taney, Vernon, Warren, Washington, and Worth.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-7.455 Turkeys: Seasons, Methods, Limits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2829). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received six (6) comments on proposed changes to 3 CSR 10-7.455 Turkeys: Seasons, Methods, Limits.

COMMENTS: Alan Novak, Kansas City; Robert Moline, Reeds Spring; Paul Barber, Phillipsburg; Michael Brightwell, Republic, and Jeffery Keller, Martinsburg, indicated general support for elimination of no-cost landowner permits for lessees.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: Hugh Carnahan, Nixa, voiced opposition to the proposed changes and believes that anyone who lives on and actively manages land should be eligible for no-cost permits, regardless of ownership.

RESPONSE: The original intent of the term “lessee” within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission adopted a rule as follows:

**3 CSR 10-7.600 Deer Management Assistance Program
is adopted.**

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2829-2832). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received one (1) comment on the proposed rule.

COMMENT: Doug Smentkowski, Jefferson City, indicated general support for the proposed rule.

RESPONSE: The commission thanks this individual for his support for the new rule

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 10—Wildlife Code: Commercial Permits:
Seasons, Methods, Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

**3 CSR 10-10.715 Resident and Nonresident Fur Dealers: Reports,
Requirements is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2833). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed

amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 10—Wildlife Code: Commercial Permits:
Seasons, Methods, Limits**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-10.768 Sales and Possession of Wildlife Parts and Mounted Specimens is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2833). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.115 Closings is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2833–2834). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.120 Pets and Hunting Dogs is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2834–2835). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received two (2) comments on proposed changes to 3 CSR 10-11.120 Pets and Hunting Dogs.

COMMENT: Garry Gordon, location unknown, indicated general support for proposed changes to this rule.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: Ceseree Maggart, Smithville, voiced general opposition to the change; however, specific comments pertained to the unpredictable nature of dogs.

RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of this comment.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.125 Field Trials is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2835). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.130 Vehicles, Bicycles, Horses, and Horseback Riding is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2836–2837). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.135 Wild Plants, Plant Products, and Mushrooms is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2837). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.140 Camping is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2837–2838). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received one (1) comment on proposed changes to 3 CSR 10-11.140 Camping.

COMMENT: Rick Pohlmann, Wright City, indicated general opposition to the proposed amendment; however, specific comments related to use of generators during quiet hours on areas that allow camping. RESPONSE: The commission appreciates citizen input on all regulations. No changes to the rule have been made as a result of this comment.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.145 Tree Stands is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2838). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission

received two (2) comments on proposed changes to 3 CSR 10-11.145 Tree Stands.

COMMENTS: Sean Withar, location unknown, and James Pennino, Camdenton, indicated general support for proposed changes to this rule.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.155 Decoys and Blinds is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2838). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.160 Use of Boats and Motors is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2838–2839). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.180 is amended.

A notice of proposed rulemaking containing the text of the proposed

amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2839–2844). Those subsections with changes are reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received forty-one (41) comments from twenty-five (25) individuals on proposed changes to 3 CSR 10-11.180 Hunting, General Provisions and Seasons.

COMMENTS: Conrad Moody, location unknown, and David Erickson, Columbia, expressed general support for the proposed ban on lead shot on areas that receive heavy dove hunting pressure or are prone to flooding.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: Amanda Good, Jefferson City, expressed support for the proposed changes on behalf of the Humane Society of the United States.

RESPONSE: The commission thanks Ms. Good for her support.

COMMENT: Tony Reiss, location unknown, expressed opposition to the propose changes on behalf of Hunting Works for Missouri. Mr. Reiss contends that a ban on lead shot on certain conservation areas will result in increased costs for hunters, reduce hunter numbers, and damage local economies.

RESPONSE: Lead is a well-documented toxin. The commission carefully considered the impacts of this proposed amendment and its potential effects to wildlife, the health of our public lands, and hunters. The rulemaking is not intended to reduce the number of hunters on our areas but rather, preserve hunting traditions.

The department annually provides management on sixty (60) to seventy (70) conservation areas statewide averaging two thousand (2,000) to three thousand (3,000) acres, specifically for doves. When suitable sunflower and other dove-friendly feeding fields are provided, doves will be attracted, which attracts hunters to these areas. The department spends considerable resources annually to provide this opportunity with staff dedicated to make the fields the best they can be. This regulation change is a responsible step, rather than reducing the number of intensively managed dove fields.

The commission has long been concerned about issues related to hunter recruitment and retention, but our experience shows hunters do not shy away from wetland/bottomland conservation areas requiring non-toxic shot when good dove hunting opportunities exist.

To address the price of steel shot versus lead shot, a check of major retailer's websites found that small shot, light load shotshells are very close to the same price. Many dove hunters buy less than five (5) boxes of shells (six (\$6) – eight (\$8) dollars per box) per year for a few days of dove hunting. The price differential between lead shotshells and steel shotshells will be minimal for individual hunters and the commission does not anticipate an impact on local economies. No changes to the rule have been made as a result of this comment.

COMMENT: Trevor Santos, Washington, DC, expressed opposition to the propose changes on behalf of the National Shooting Sports Foundation. Mr. Santos contends that a ban on lead shot on certain conservation areas will result in higher costs for hunters, loss of income for retailers, decreased funding for conservation in Missouri, and reduced hunter numbers. He also called for more research to prove claims that lead is toxic prior to implementing this regulation.
RESPONSE: Lead is a well-documented toxin. A substantial body of scientific literature indicate that doves routinely ingest lead pellets and as few as one (1) ingested lead pellet will kill a dove in less than three (3) weeks. Multiple studies from around the country conserva-

tively demonstrate two to six percent (2-6%) of doves shot near heavily-hunted fields have ingested lead shot in their digestive tract. The ingested pellets have multiple physiological effects shortly after ingestion, and the number of birds poisoned likely exceeds the annual legal harvest.

The commission carefully considered the impacts of this proposed amendment and its potential effects to wildlife, the health of our public lands, and hunters. The rulemaking is not intended to reduce the number of hunters on our areas but rather, preserve hunting traditions.

The department annually provides management on sixty (60) to seventy (70) conservation areas statewide averaging two thousand (2,000) to three thousand (3,000) acres, specifically for doves. When suitable sunflower and other dove-friendly feeding fields are provided, doves will be attracted, which attracts hunters to these areas. The department spends considerable resources annually to provide this opportunity with staff dedicated to make the fields the best they can be. This regulation change is a responsible step, rather than reducing the number of intensively managed dove fields.

The commission has long been concerned about issues related to hunter recruitment and retention; however, experience shows hunters do not shy away from wetland/bottomland conservation areas requiring non-toxic shot when good hunting opportunities exist.

To address the price of steel shot versus lead shot, a check of major retailer's websites found that small shot, light load shotshells are very close to the same price. Many dove hunters buy less than five (5) boxes of shells (six (\$6) – eight (\$8) dollars per box) per year for a few days of dove hunting. The price differential between lead shotshells and steel shotshells will be minimal for individual hunters and the commission does not anticipate an impact on local economies. No changes to the rule have been made as a result of this comment.

COMMENTS: Twenty (20) individuals expressed general opposition to the proposed ban on lead shot on areas that receive heavy dove hunting pressure or are prone to flooding.

RESPONSE: To the extent there were specific comments provided, the commission has addressed them below.

COMMENTS: Linda Everhart, location unknown, and Andrew Murphy, Kingsville, contend that hunting with steel is unethical and will result in more wounded birds.

RESPONSE: Results from a multi-year, peer-reviewed study in Texas indicate that dove hunters using shotshells loaded with lead pellets were no more effective than hunters firing shotshells loaded with non-toxic steel shot of similar or slightly larger size. The study recorded over five thousand (5,000) shots and over one thousand one hundred (1,100) doves harvested. No changes to the rule have been made as a result of these comments.

COMMENTS: Christopher Herndon, Kearney; Cole Newman, Imperial; Linda Everhart, location unknown; Russell Mullinax, Farmington; Vance Ewing, St. Robert, and William Green, Vandalia, expressed doubts regarding the seriousness of lead shot deposited on the landscape.

RESPONSE: Lead is a well-documented toxin. A substantial body of scientific literature indicate that doves routinely ingest lead pellets and as few as one (1) ingested lead pellet will kill a dove in less than three (3) weeks. Multiple studies from around the country conservatively demonstrate two to six percent (2-6%) of doves shot near heavily-hunted fields have ingested lead shot in their digestive tract. The ingested pellets have multiple physiological effects shortly after ingestion, and the number of birds poisoned likely exceeds the annual legal harvest. No changes to the rule have been made as a result of these comments.

COMMENTS: Garry Gordon, location unknown; Linda Everhart, location unknown; Matthew Luber, location unknown; Randall Russell, Oldfield; Russell Mullinax, Farmington; Sean McLafferty, Jefferson City, and William Green, Vandalia, expressed opposition based on the higher cost of steel shot.

RESPONSE: With regard to the cost of steel shot versus lead shot, a check of major retailer's websites found that small shot, light load shotshells are very close to the same price. Many dove hunters buy less than five (5) boxes of shells (six (\$6) – eight (\$8) dollars per box) per year for a few days of dove hunting. The price differential between lead shotshells and steel shotshells will be minimal for individual hunters and the commission does not anticipate an impact on local economies. No changes to the rule have been made as a result of these comments.

COMMENT: Garry Gordon, location unknown, expressed concern due to the potential for lead shot to cause damage to older firearms.

RESPONSE: The use of steel shot in any firearm is the decision of the owner. While many recommend not using steel shot in older firearms with tight chokes, some of the newer shot alternatives like bismuth and tin seem to have more favorable reviews for older firearms. If there is a question about using steel or other non-toxic shot in a particular firearm, a gunsmith should be consulted. No changes to the rule have been made as a result of this comment.

COMMENT: Missouri Department of Conservation staff noted an error in subsection (8)(KK) of the Wildlife Code of Missouri as submitted on August 28, 2018, in the proposed amendment to this rule which was published in the October 1, 2018, edition of the *Missouri Register*.

RESPONSE AND EXPLANATION OF CHANGE: A correction to the name of one conservation area was made.

3 CSR 10-11.180 Hunting, General Provisions and Seasons

(8) Use or possession of lead shot is prohibited for hunting on the following department areas:

(KK) Wolf Creek Bend Conservation Area

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 11—Wildlife Code: Special Regulations for Department Areas

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.184 Quail Hunting is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2845). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 11—Wildlife Code: Special Regulations for Department Areas

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.185 Dove Hunting is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2845–2848). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received fifty-eight (58) comments from thirty (30) individuals on proposed changes to 3 CSR 10-11.185 Dove Hunting.

COMMENT: Amanda Good, Jefferson City, expressed support for the proposed ban on lead shot on areas that receive heavy dove hunting pressure or are prone to flooding on behalf of the Humane Society of the United States.

RESPONSE: The commission thanks Ms. Good for her support.

COMMENT: Trevor Santos, Washington, DC, expressed opposition to the proposed changes on behalf of the National Shooting Sports Foundation. Mr. Santos contends that a ban on lead shot on certain conservation areas will result in higher costs for hunters, loss of income for retailers, decreased funding for conservation in Missouri, and reduced hunter numbers. He also called for more research to prove claims that lead is toxic prior to implementing this regulation.

RESPONSE: Lead is a well-documented toxin. A substantial body of scientific literature indicate that doves routinely ingest lead pellets and as few as one (1) ingested lead pellet will kill a dove in less than three (3) weeks. Multiple studies from around the country conservatively demonstrate two to six percent (2-6%) of doves shot near heavily-hunted fields have ingested lead shot in their digestive tract. The ingested pellets have multiple physiological effects shortly after ingestion, and the number of birds poisoned likely exceeds the annual legal harvest.

The commission carefully considered the impacts of this proposed amendment and its potential effects to wildlife, the health of our public lands, and hunters. The rulemaking is not intended to reduce the number of hunters on our areas but rather, preserve hunting traditions.

The department annually provides management on sixty (60) to seventy (70) conservation areas statewide averaging two thousand (2,000) to three thousand (3,000) acres, specifically for doves. When suitable sunflower and other dove-friendly feeding fields are provided, doves will be attracted, which attracts hunters to these areas. The department spends considerable resources annually to provide this opportunity with staff dedicated to make the fields the best they can be. This regulation change is a responsible step, rather than reducing the number of intensively managed dove fields.

The commission has long been concerned about issues related to hunter recruitment and retention; however, experience shows hunters do not shy away from wetland/bottomland conservation areas requiring non-toxic shot when good hunting opportunities exist.

To address the price of steel shot versus lead shot, a check of major retailer's websites found that small shot, light load shotshells are very close to the same price. Many dove hunters buy less than five (5) boxes of shells (six (\$6) – eight (\$8) dollars per box) per year for a few days of dove hunting. The price differential between lead shotshells and steel shotshells will be minimal for individual hunters and the commission does not anticipate an impact on local economies. No changes to the rule have been made as a result of this comment.

COMMENTS: Twenty-eight (28) individuals expressed general opposition to the proposed ban on lead shot on areas that receive heavy dove hunting pressure or are prone to flooding.

RESPONSE: To the extent there were specific comments provided, the commission has addressed them below.

COMMENTS: Sydney Melancon, Springfield; Alan Novak, Kansas City, and Nathan Swett, location unknown, contend that hunting with steel shot will result in more wounded birds.

RESPONSE: Results from a multi-year, peer-reviewed study in Texas indicate that dove hunters using shotshells loaded with lead pellets were no more effective than hunters firing shotshells loaded with non-toxic steel shot of similar or slightly larger size. The study recorded over five thousand (5,000) shots and over one thousand one hundred (1,100) doves harvested. No changes to the rule have been made as a result of these comments.

COMMENTS: Alexander Kowalczyk, Birch Tree; Rick Pohlman, Wright City; Linda Everhart, location unknown; Thomas Fuhremann, Manchester; Cole Newman, Imperial; William Green, Vandalia; Brett (last name unknown), location unknown; Doug Williams, Blue Springs; Randall Russell, Oldfield, and Sawyer Kresse, Garden City, expressed doubts regarding the seriousness of lead shot deposited on the landscape.

RESPONSE Lead is a well-documented toxin. A substantial body of scientific literature indicate that doves routinely ingest lead pellets and as few as one (1) ingested lead pellet will kill a dove in less than three (3) weeks. Multiple studies from around the country conservatively demonstrate two to six percent (2-6%) of doves shot near heavily-hunted fields have ingested lead shot in their digestive tract. The ingested pellets have multiple physiological effects shortly after ingestion, and the number of birds poisoned likely exceeds the annual legal harvest. No changes to the rule have been made as a result of these comments.

COMMENTS: Nathan Swett, location unknown; Alan Novak, Kansas City; Alexander Kowalczyk, Birch Tree; Thomas Fuhremann, Manchester; William Green, Vandalia; Matthew Luber, location unknown; Sidney Melancon, Springfield, and Vincent Pasowicz, Camdenton, expressed opposition based on the higher cost of steel shot.

RESPONSE: With regard to the cost of steel shot versus lead shot, a check of major retailer's websites found that small shot, light load shotshells are very close to the same price. Many dove hunters buy less than five (5) boxes of shells (six (\$6) – eight (\$8) dollars per box) per year for a few days of dove hunting. The price differential between lead shotshells and steel shotshells will be minimal for individual hunters and the commission does not anticipate an impact on local economies. No changes to the rule have been made as a result of these comments.

COMMENTS: Alexander Kowalczyk, Birch Tree; Thomas Fuhremann, Manchester, and Doug Williams, Blue Springs, expressed concern due to the potential for lead shot to cause damage to older firearms.

RESPONSE: The use of steel shot in any firearm is the decision of the owner. While many recommend not using steel shot in older firearms with tight chokes, some of the newer shot alternatives like bismuth and tin seem to have more favorable reviews for older firearms. If there is a question about using steel or other non-toxic shot in a particular firearm, a gunsmith should be consulted. No changes to the rule have been made as a result of these comments.

COMMENTS: Charles Crews, Marionville; Doug Williams, Blue Springs; Thomas Fuhremann, Manchester, and Vincent Pasowicz, Camdenton, believe the proposed change will result in decreased participation in dove hunting and hunter numbers.

RESPONSE: The commission carefully considered the impacts of

this proposed amendment and its potential effects to wildlife, the health of our public lands, and hunters. The rulemaking is not intended to reduce the number of hunters on our areas but rather, preserve hunting traditions.

The department annually provides management on sixty (60) to seventy (70) conservation areas statewide averaging two thousand (2,000) to three thousand (3,000) acres, specifically for doves. When suitable sunflower and other dove-friendly feeding fields are provided, doves will be attracted, which attracts hunters to these areas. The department spends considerable resources annually to provide this opportunity with staff dedicated to make the fields the best they can be. This regulation change is a responsible step, rather than reducing the number of intensively managed dove fields.

The commission has long been concerned about issues related to hunter recruitment and retention; however, experience shows hunters do not shy away from wetland/bottomland conservation areas requiring non-toxic shot when good hunting opportunities exist. No changes to the rule have been made as a result of these comments.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.186 Waterfowl Hunting is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2849). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.200 Fishing, General Provisions and Seasons
is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2849–2850). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.205 Fishing, Methods and Hours is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2850–2851). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

**3 CSR 10-11.210 Fishing, Daily and Possession Limits
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2851–2852). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 11—Wildlife Code: Special Regulations for
Department Areas**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-11.215 Fishing, Length Limits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2852–2853). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: No comments received.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 20—Wildlife Code: Definitions**

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-20.805 Definitions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2853). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective **March 1, 2019**.

SUMMARY OF COMMENTS: The Conservation Commission received nine (9) comments on proposed changes to 3 CSR 10-20.805 Definitions.

COMMENT: Doug Smentkowski, Jefferson City, indicated general support for proposed changes to this rule.

RESPONSE: The commission thanks Mr. Smentkowski for his support.

COMMENTS: Thomas Thurman, Monroe City, and Kenneth Baker, Cameron, voiced support for elimination of no-cost permits for lessees, stating that only landowners should receive these privileges.

RESPONSE: The commission thanks those individuals who voiced support for the regulation changes.

COMMENT: Lawrence Jenkins, Jefferson City, voiced general opposition to proposed changes to this rule.

RESPONSE: The commission appreciates citizen input on all regulation changes. No changes to the rule have been made as a result of this comment.

COMMENT: Hugh Carnahan, Nixa, expressed opposition to elimination of no-cost permits for lessees, stating that anyone who maintains property should be eligible for this privilege.

RESPONSE: The original intent of the term “lessee” within the *Wildlife Code* refers to tenant farming, an activity that is no longer a common practice. There has been considerable confusion regarding eligibility for no-cost permits. Lessees must live on the land to qualify; however, this is not always understood by the public. While many forms of leasing currently occur, simply leasing some of the many land rights is not equivalent to land ownership. No changes to the rule have been made as a result of these comments.

COMMENT: David Rauh, St. Louis, voiced opposition to proposed changes to the definition of corporate ownership.

RESPONSE: This regulation change will align the *Wildlife Code* with the corporate definition outlined in the Missouri Revised Statutes. No changes to the rule have been made as a result of this comment.

COMMENTS: Three (3) individuals expressed indecision regarding proposed changes to this rule and confusion regarding current regulations pertaining to no-cost lessee permit privileges.

RESPONSE: The commission appreciates citizen input and addressed their specific questions separately. No changes to the rule have been made as a result of this comment.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 1—Definitions**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-1.020 Definitions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2161–2162). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 2—Permits**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-2.010 Who Needs a Permit is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2162). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 2—Permits**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-2.020 Types of Permits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2162–2163). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 2—Permits**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-2.100 Appeal of Action on Permits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2163). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 3—Permit Requirements**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-3.020 General Requirements is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2163–2165). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 3—Permit Requirements**

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-3.030 Registration Permit Requirements is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2165). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 3—Permit Requirements

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-3.040 Construction Permit Requirements is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2166–2169). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 3—Permit Requirements

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-3.050 Safety Permit Requirements is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2169–2170). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 22—Dam and Reservoir Safety Council
Chapter 4—Action Taken by Council and Chief Engineer

ORDER OF RULEMAKING

By the authority vested in the Dam and Reservoir Safety Council under section 236.405, RSMo 2016, the council amends a rule as follows:

10 CSR 22-4.020 Enforcement Orders and Enforcement Procedures is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2170). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.010 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2170–2176). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made. One (1) additional comment was made on the proposed amendment.

COMMENT #1: Staff identified definitions in this rule that were no longer relevant and others that needed to be added based on changes made to 10 CSR 23-3.090(11) from comments received.

RESPONSE AND EXPLANATION OF CHANGE: Staff concur that this change needs to be made to provide clarification and consistency. Section (9) will be changed to add the definition of Impact Area and section (20) will be changed to remove definition of TCE Concern Area and TCE Impact Area.

COMMENT #2: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund asked that staff review the definition for charitable or benevolent organization water system. In addition, she asked that staff change the definition of completion date of temporary monitoring wells to be the date the last well is plugged rather than the first day and have an additional sixty (60) days beyond that for submittal of the registration report. Ms. Erwin also commented that she would like to see types of public wells as subsections of Public Water System.

RESPONSE: Pursuant to Executive Order 17-03, staff identified the definition of Charitable or Benevolent Organization Water System in 10 CSR 23-1.010 as redundant language that is stated in section 640.116, RSMo. During rule review the definition of completion date was amended for clarity. Requiring plugging registration reports after the first temporary well is plugged clarifies existing language and ensures timely receipt of reports to address groundwater protection concerns. Certification and registration requirements located throughout the rule were consolidated into a single new rule in Chapter 2. The requirement that registration reports are due one hundred and eighty (180) days after a temporary well is plugged was moved from 10 CSR 23-4.020(4) to the proposed new rule 10 CSR 2.020(4)(A). Finally, definitions found throughout the rule were streamlined to remove terms that are not used and organize alphabetically. No changes have been made as a result of this comment.

10 CSR 23-1.010 Definitions

(9) Terms beginning with the letter I.

(A) Impact Area means an area that contains contaminant(s) of one (1) or more of the following: lead, cadmium, chlorinated volatile organic compounds (VOCs) including trichloroethylene (TCE), TCE degradation products, or other contaminants pursuant to 10 CSR 60-4.

(B) Inactive well means a well not currently operational that is not

in a state of disrepair and does not present a threat to groundwater.

(C) Incomplete well means a well that was abandoned during construction with or without casing and is susceptible to surface contamination.

(D) Injection well means a monitoring well into which fluid or other media is injected to clean, treat, or prevent contamination of groundwater.

(20) Terms beginning with the letter T.

(A) Temporary monitoring well means a monitoring well used for field screening purposes that is plugged within thirty (30) days of being installed.

(B) Test hole means a hole drilled for the exploration of minerals or for geologic data that is not associated with the remediation or associated environmental characterization of a site. This includes stratigraphic holes drilled to obtain geologic information for structural studies or seismic shot holes.

(C) Transient noncommunity water system means a public water system as defined in 10 CSR 60-2.

(D) Tremie pipe means a conductor pipe, hose, or tubing used in the down hole placement of grout.

(E) Tremie grouting method means the process in which a small diameter pipe is inserted in the annular space or borehole to the depth of the zone to be sealed and grout is emplaced through the tremie pipe by gravity.

(F) Tremie pressure grouting method means the process in which a small diameter pipe is inserted in the annular space or borehole to the depth of the zone to be sealed and grout is emplaced by pumping with a grout pump from the bottom to the top of the zone to be sealed.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-1.030 Types of Wells is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2176). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.040 Variances is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1,

2018 (43 MoReg 2176–2177). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.050 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2177–2181). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made. The Department of Natural Resources received seven (7) additional comments on the proposed amendment.

COMMENT #1: Sara Ragan commented, 10 CSR 23-1.050(4) rule says all subsequent test attempts must be a minimum of 30 days from the initial test date. This should say, there is only one retake allowed per test date. The way the rule is written it implies that if you take your 1st test on August 1 and do not pass, you can retake the test on August 31 as many times as it takes to pass it. There should be a timeframe between each failed test.

RESPONSE AND EXPLANATION OF CHANGE: Staff concurs and has added language to clarify that there is a thirty (30) day waiting period after the last retest to subsection (4)(A).

COMMENT #2: Sara Ragan commented, 10 CSR 23-1.050(3)(L) you should accept experience from another state even if my permit is expired from that state and I can provide information on the experience. If my permit was in good standing with the other state you should accept the experience whether my permit is current (valid) or not.

RESPONSE: Exemptions to the apprenticeship program are intended to provide current out of state permit holders an option to become permitted in Missouri. This is a request to vary from the regulations and is not guaranteed. Out of state experience is only one consideration when reviewing these requests. No changes have been made to this rule as a result of this comment.

COMMENT #3: Sara Ragan commented, 10 CSR 23.1.050(3)(D) Rule says an apprentice can work under another non-restricted permittee besides the responsible permittee, does the apprentice have to be permitted with the same company as the other -restricted permit? If no, let the apprentice be permitted under their own company and have any non- restricted person sign as the responsible permittee.

RESPONSE: An apprentice may be permitted under their own company. The proposed amendments allow a non-restricted permit holder to sign as the responsible party provided they are on site and oversee the apprentice's work. A responsible party must be designated

for the apprentice. No changes have been made to this rule as a result of this comment.

COMMENT #4: Sara Ragan commented, 10 CSR 23-1.050(3)(A)4. Probation should also be included here. Rule says includes but is not limited to but the rule should be clear on what is included. Penalty fees?

RESPONSE: A permittee may be placed on probation pursuant to section 256.630, RSMo. The terms of probation depend on the specific circumstances of the violation. No changes have been made to this rule as a result of this comment.

COMMENT #5: Sara Ragan commented, 10 CSR 23-1.050(1)(A) restricted permit should also be required to pre-notify work that is being subcontracted if required.

RESPONSE: Prenotification applies to non-restricted permittees who are installing wells. Prenotification provides staff advanced notice to witness well installation. Restricted permittees who are acting as primary contractors are not required to prenotify because they are overseeing the work. No changes have been made to this rule as a result of this comment.

COMMENT #6: Sara Ragan commented, 10 CSR 23-1.050(1) This rule should allow for a restricted permit to be reinstated.

RESPONSE: Permit renewals for both restricted and non-restricted permits is addressed in 10 CSR 23-1.105 Permit Renewal. No changes have been made to this rule as a result of this comment.

COMMENT #7: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund recommended that restricted well driller permits be removed or included as an apprentice permit holder because it is the first stage in becoming an apprentice. Ms. Erwin went on to state that water well drillers should be allowed to become non-restricted permit holders for monitoring wells without undergoing the apprentice program for monitoring wells because if someone can install a drinking water well they can also install a monitoring well.

RESPONSE: A permit is required to act as a primary contractor in the installation of wells pursuant to section 256.607.3, RSMo. The permitting requirements and level of responsibility for an apprentice driller are different than those of a restricted permit holder acting as a primary contractor. In addition, water-well drillers may add a permit type to drill monitoring wells. Water-well construction requirements (10 CSR 23-3) differ from monitoring well construction requirements (10 CSR 23-4). Monitoring wells typically are installed in areas where contaminants exist, thereby requiring understanding and knowledge of drilling in these types of conditions. No changes have been made to this rule as a result of this comment.

COMMENT #8: Since proposal of the rule amendment, department staff determined that the proposed amendment may be interpreted to suggest that a previously mandatory department obligation had become discretionary. The proposed amendment would modify the language of that requirement. Removal of restrictive terms may have different legal effect and the change may be misinterpreted.

RESPONSE AND EXPLANATION OF CHANGE: The department is revising the language to retain the word "shall" in sections (1), (2), and (3) to clarify the department's obligation.

10 CSR 23-1.050 Permittee Qualifications, Testing Procedures, and Permit Application

(1) Restricted Permit.

(A) To apply for a restricted permit as a water well, heat pump, monitoring well, or pump installation contractor an applicant shall—

1. Submit a complete permit testing application and corresponding fee;
2. Pass the applicable restricted permit test(s) (open book) with

a minimum score of seventy percent (70%); and

3. Submit a complete permit application and the corresponding fee.

(B) After approval of the permit application, the department will issue the restricted permit. A permit may be denied if the applicant has unresolved violations.

(2) Non-Restricted Permit. See 10 CSR 23-1.050(7) for adding a permit type to an existing permit and 10 CSR 23-1.105 for reinstatement of an expired permit.

(A) To apply for a non-restricted permit as a water well, heat pump, monitoring well, or pump installation contractor an applicant shall—

1. Complete the apprenticeship program pursuant to 10 CSR 23-1.050(3);
2. Submit a complete permit testing application and corresponding fee;
3. Pass the applicable non-restricted permit test(s) (closed book) with a minimum score of seventy percent (70%);
4. Submit a complete permit application and the corresponding fee; and

5. If applicable pursuant to 10 CSR 23-1.050(3)(L) or 10 CSR 23-1.050(7) the apprenticeship program may be waived.

(B) After approval of the permit application, the department will issue the non-restricted permit. A permit application may be denied if the applicant has unresolved violations. After resolution of violations, the department may require prenotification pursuant to 10 CSR 23-1.050(6).

(3) Apprenticeship Program.

(A) To apply for a permit as an apprentice water well, heat pump, monitoring well, or pump installation contractor an applicant shall—

1. Submit a complete testing application and corresponding fee;
2. Pass the applicable apprentice permit test(s) (open book) with a minimum score of seventy percent (70%);
3. Submit a complete apprentice permit application, signed by a responsible party who will be responsible for the apprenticeship;
4. The responsible party shall be a non-restricted permit holder holding the same type of permit for which the apprentice is applying. A non-restricted permittee may not serve as an apprentice's responsible party for a period of one (1) year from the date of resolution of any enforcement action taken by the department (includes, but is not limited to, settlement agreements, orders, consent judgments, suspension, or revocation); and

5. After approval of the permit application, the department will issue the apprentice permit.

(B) The apprenticeship period is two (2) years.

(C) The applicant shall complete work for the applicable permit type and sign the appropriate certification or registration form on a minimum of—

1. Water Well Permit - Twenty-five (25) different domestic or multifamily water well installations or ten (10) different high yield bedrock or public wells;
2. Pump Installation Permit - Twenty-five (25) different domestic or multifamily pump installations or ten (10) different high yield or public well pump installations;
3. Heat Pump Installation Permit - Ten (10) different heat pump system installations;
4. Monitoring Well Permit - Twenty (20) different monitoring wells or twenty (20) different temporary monitoring well sites.
 - A. Test Hole Only Endorsement - Twenty (20) different test holes; and
5. Plugging abandoned wells for the applicable type of permit may count for up to ten percent (10%) of the required installations.

(D) The responsible party for the apprentice or another non-restricted permit holder for the applicable permit type shall oversee the apprentice's work on site, sign the certification or registration

form as the installation contractor, and submit the form and appropriate fee.

(E) Once the number of installations pursuant to 10 CSR 23-1.050(3)(C) have been completed, the apprentice may work independently for the remainder of the two (2) year apprenticeship provided the responsible party continues to sign certification and registration forms as installation contractor along with the apprentice.

(F) The apprenticeship period may be reduced if the required number of installations pursuant to 10 CSR 23-1.050(3)(C) are met and proof of financial responsibility are provided for the remainder of the apprenticeship period pursuant to 10 CSR 23- 1.050(5).

(G) An apprentice may transfer the apprenticeship to another company by submitting a new apprenticeship application to the department with a non-restricted permittee signing as the responsible party.

(H) An apprentice can be permitted under more than one (1) company if the apprentice submits the appropriate application and fee for each permit type and a non-restricted permittee from each company signs as the responsible party. Apprentices will be issued separate permit numbers for each permit type.

(I) At the end of the two (2) year period, the apprentice may apply to extend the apprenticeship on a year-by-year basis if the number of installations has not been met. If an application to extend the apprenticeship is not received, the apprentice permit will not be renewed.

(J) If an apprentice cancels the apprenticeship, they may reapply within five (5) years. If the application is approved, the apprentice will be reinstated at the same status as at the point of cancellation.

(K) Proof of work performed in other states by an apprentice will be evaluated on a case-by-case basis for meeting the requirements of 10 CSR 23-1.050(3)(C).

(L) Applicants who are permitted in another state may request an exemption to the apprenticeship program provided they—

1. Submit proof of a valid permit and supporting documentation that includes, at a minimum, a copy of current license or permit, examples of well records, and contact information for the regulatory agency that issued the permit (same type of permit(s) only); and

2. Submit proof of financial responsibility pursuant to 10 CSR 23-1.050(5) for a period of two (2) years; and

3. Complete one (1) year of prenotification pursuant to 10 CSR 23-1.050(6).

(4) Testing.

(A) Applicants may retake the test one (1) time on the last test date. All subsequent test attempts shall be a minimum of thirty (30) days from the initial test date.

(B) An applicant may withdraw a testing application by notifying the department a minimum of ten (10) days in advance. Testing application fees are non-refundable; however, tests may be rescheduled up to two (2) times without cancellation of the application and forfeiture the corresponding fee.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-1.060 Application for a Permit is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2181). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty

(30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.075 Disciplinary Action is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2181–2183). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-1.080 Denial of Application is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2183). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.090 Permits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2183–2184). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment

period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made.

COMMENT #1: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund suggested that monitoring wells be allowed to be plugged by any non-restricted permittee instead of only by a monitoring well non-restricted permittee. Ms. Erwin also recommends that the requirement that a restricted permit holder be a primary contractor be removed. Finally, Ms. Erwin suggested that there is some overlap between water well and monitoring well permits since a water well permit holder can be qualified to install a monitoring well.

RESPONSE: A water well driller may add a permit type to drill monitoring wells. Water well construction and plugging requirements (10 CSR 23-3) differ from monitoring well construction and plugging requirements (10 CSR 23-4). Monitoring wells typically are installed in areas where contaminants exist, thereby requiring understanding and knowledge of drilling in these types of conditions. A permit is required to act as a primary contractor in the installation of wells pursuant to section 256.607.3, RSMo. No changes have been made to the rule based on this comment.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.105 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2184–2185). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and two (2) comments were made. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: Department of Natural Resources staff identified a discrepancy in this rule that relates to when late fees are assessed.

RESPONSE AND EXPLANATION OF CHANGE: Staff concur that this change needs to be made to provide consistent application of the rules. Section (2) is changed to remove more than thirty (30) days to be consistent with 10 CSR 23-2.010 and the current application of the regulation.

COMMENT #2: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund identified the same discrepancy as described in comment #1. Ms. Erwin also requested that clarification be added to explain at what point the permit will be canceled due to nonrenewal and reapplication will be necessary.

RESPONSE: See response and explanation of change to comment #1. In addition, a permit that is not renewed will expire and a permittee may reapply to reinstate an expired permit pursuant to 10 CSR 23-1.105(3). No additional changes have been made to the rule based on this comment.

COMMENT #3: Since proposal of the rule amendment, department

staff reviewed the regulation for grammar and identified an incorrect use of a pronoun. Because the misuse of this term may have different legal effect, the change may be misinterpreted.

RESPONSE AND EXPLANATION OF CHANGE: Section (5) has been revised to correct the pronoun error.

10 CSR 23-1.105 Permit Renewal

(2) Any permit renewal submitted after the expiration date will be assessed a late fee pursuant to 10 CSR 23-2.010(F).

(5) Any permittee who changes companies or wishes to cancel a permit shall notify the department.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-1.130 Reinstatement is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2185). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.140 Vehicle and Machine Registration is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2185). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made.

COMMENT #1: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund recommended that the requirement for vehicles and machines to be registered be removed since there are no requirements for inspection or quality control.

RESPONSE: Registration of drill rigs is required pursuant to section 256.617, RSMo. Registration and marking of drill rigs ensures customers, members of the public, and regulators have a clear mechanism to identify permitted well installation contractors and ensure

that they are licensed to do work in Missouri. No changes have been made to the rule as a result of this comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-1.155 Well Drilling and Pump Installation Machine Registration is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2185–2186). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 1—Definitions, Variances, and Permitting
Requirements

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-1.160 Mail and Notification Procedures is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2186). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing was held on this proposed amendment on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and zero (0) comments were made. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: Sara Ragan commented that electronic mail should not be a requirement. Rule says shall. Not all of us have internet or fast internet. Shouldn't have to provide email if I don't want state to have it.

RESPONSE: The proposed amendments to 10 CSR 23-1.160 require that permittees notify the department of changes to their electronic mailing addresses within thirty (30) days of the change and does not require that an electronic mailing address be provided. No changes have been made to the rule as a result of this comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 2—Fee Structure, Certification, and Registration

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-2.010 Fee Structure is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2186–2188). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing was held on this proposed amendment on September 7, 2018, and the public comment period ended on September 14, 2018. At the public comment period Department of Natural Resources staff explained the proposed amendment and one (1) comment was made.

COMMENT: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund asked that the fee permit for machine and service vehicle permits be removed and that the well logging be clarified to include who determines the cost.

RESPONSE: The board establishes fees that are reasonable and necessary to administer sections 256.600–256.640, RSMo pursuant to section 256.623, RSMo which includes both rig permits and logging of wells. No changes have been made to the rule as a result of this comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 2—Fee Structure, Certification, and Registration

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board adopts a rule as follows:

10 CSR 23-2.020 Certification and Registration is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2188). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing was held on this proposed rule on September 7, 2018, and the public comment period ended on September 14, 2018. At the public comment period Department of Natural Resources staff explained the proposed rule and one (1) comment was made.

COMMENT: Kaly Erwin representing Missouri Petroleum Storage Tank Insurance Fund asked that the registration report requirement for temporary monitoring wells be changed to state that they be submitted within one hundred and eighty (180) days of the date of the plugging of the last temporary monitoring well.

RESPONSE: Requiring plugging registration reports after the first temporary well is plugged clarifies existing language and ensures timely receipt of reports to address groundwater protection concerns. Certification and registration requirements located throughout the rule were consolidated into a single new rule in Chapter 2. The requirement that registration reports are due one hundred and eighty (180) days after a temporary well is plugged was moved from 10 CSR 23-4.020(4) to the proposed new rule 10 CSR 2.020(4)(A). No changes have been made to the rule as a result of this comment.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.010 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2188–2190). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and zero (0) comments were made. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: Leslie Holloway with Missouri Farm Bureau questioned whether the addition of Concentrated Animal Feeding Operation (CAFO) to Table 3.1 has the same meaning as the current rule.

RESPONSE AND EXPLANATION OF CHANGE: Table 3.1 is being amended to remove references to Concentrated Animal Feeding Operations (CAFO) and to clarify what is meant by a building area or yard used for livestock or poultry as an Animal Feeding Operation (AFO) as defined in 10 CSR 20-6.300.

10 CSR 23-3.010 Location of Wells

(1) High yield unconsolidated well location requirements are found in 10 CSR 23-3.010(F). All other well types shall be—

(A) Located on a site that has sufficient surface drainage to prevent the accumulation or ponding of surface water within ten feet (10') of the well and, if possible, at a higher elevation than possible sources of contamination. The top of the casing shall extend a minimum of twelve inches (12") above ground surface;

(B) Located a minimum setback distance from potential Pollution or Contamination Sources. See 10 CSR 23-3.010 Table 3.1 for specific distances to be followed; and

(C) High yield unconsolidated wells shall be a minimum of two hundred feet (200') from contamination sources unless greater distances are specified in 10 CSR 23-3.010(1) Table 3.1.

Table 3.1 Specific setback distances for wells from pollution or contamination sources.

Feature requiring setback	Minimum horizontal distance
Storage area for commercial fertilizers or chemicals	300'
Demolition landfill	300'
Wastewater treatment plant or lagoon that serves commercial facilities, subdivisions, or mobile home parks	300'
Above ground or underground storage tank ^{1,2}	300'
Tank distribution lines for liquid petroleum, petroleum products, or chemicals ^{1,2}	300'
Earthen, concrete, or other manure storage structures or lagoons	300'
Land application areas for domestic or animal waste	300'
Animal composting facilities	300'
Unplugged abandoned wells	100'
Subsurface wastewater disposal field, grave, residential lagoon, privy, lift station, or pressurized sewer line	100'
Animal Feeding Operation (AFO) ⁴	100'
An animal composting facility constructed with a concrete floor cell design covered with a roof	100'
Dry litter storage within a building	100'
Other areas with contaminants that may leach into the groundwater	100'
Septic tank or wastewater holding tank	50'
Pit or cistern	50'
Existing operating well	50'
Non-pressurized buried sewer line	25'
Solid waste disposal area, sanitary landfill, special waste landfill, utility waste landfill, waste stabilization pond (lagoon), or hazardous waste treatment, storage, or disposal facility ³	1000'

1. Any well that cannot meet setback distances for petroleum distribution site shall meet the well construction requirements for a High Yield Bedrock well pursuant to 10 CSR 23-3.030(3).
2. Petroleum or petroleum products that are not liquid at standard temperatures and pressures are exempt from these setback requirements.
3. A safe distance cannot be determined. Any well that intercepts leachates from a waste landfill or waste stabilization pond (lagoon) shall be plugged unless it is approved by the department for use as a monitoring well.
4. Has the same meaning as defined in 10 CSR 20-6.300.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.020 General Protection of Groundwater Quality and Resources is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2190–2192). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.030 Standards for Construction of Water Wells is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2192–2203). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-3.040 Well Casing Seals and Connections is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2203). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.050 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2203–2206). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and zero (0) comments were made. The Department of Natural Resources received two (2) additional comments on the proposed amendment.

COMMENT #1: Terry Whitehead asked if a pump installer is required to perform electrical wiring on domestic wells why are they not required to do so on high yield wells? High yield wells are producing large quantities of water and should be required to have a permitted pump installer perform the electrical wiring also.

RESPONSE: The electrical components of high yield wells are different than those of domestic wells and require the expertise of a trained electrician as opposed to a permitted pump installer. No changes have been made to the rule as a result of this comment.

COMMENT #2: Since proposal of the rule amendment, department staff determined that the proposed amendment may be interpreted to suggest that a previously mandatory department obligation had become discretionary. Because those terms may have different legal effect, the change may be misinterpreted.

RESPONSE AND EXPLANATION OF CHANGE: The department is revising the language to sections (1) and (6) to retain the word “shall” in order to clarify the department’s obligation.

10 CSR 23-3.050 Pump Installation and Wellhead Completion

(1) Pumps and Pumping Equipment.

(A) All wells shall have a pump installed that is either surface mounted or submersible.

(B) A pump shall be constructed so that no unprotected openings into the well casing exist. A hand pump, hand pump head, stand or similar device shall have a closed spout directed downward and a pump rod that operates through a stuffing box. A power driven pump shall be attached to the casing or approved suction or discharge line by a watertight connection.

(C) Backflow Prevention.

1. A backflow prevention device shall be installed on all wells where agricultural chemical injection or other pressurized contaminant sources are used.

2. A double check-spring loaded backflow prevention device shall be installed between the point of chemical injection and the water well in accordance with the manufacturer’s instructions and shall have the following:

A. A valve so that water can be drained from the system to prevent freezing;

B. A vacuum relief valve to prevent back-siphoning of chemicals into the well;

C. An automatic low pressure drain at least three-quarters inch (3/4") in diameter that drains the check valve body of water when operation of the pump is discontinued;

D. A watertight seal around the check valve;

E. An inspection port at least four inches (4") in diameter to allow inspections of the inside of the check valve; and

F. A check valve able to withstand a minimum hydraulic pressure of one hundred fifty (150) pounds per square inch (psi) without leaking and resistant to corrosion.

3. The well pump and the chemical injection pump shall be electrically or mechanically connected so that when the well pump stops, the chemical pump will shut off automatically.

(D) Electrical.

1. A permitted pump installation contractor shall perform all electrical wiring that impacts the operation of the pump or pressure system to the point of entry. Any person may perform electrical wiring on high yield wells.

2. The electric wire shall not be installed through the pitless connection and shall be grounded.

(E) Plumbing. A permitted pump installation contractor, except as exempted in section 256.607.2, RSMo, shall perform all plumbing which impacts the distribution of water from its source, through the pressure system to the point of entry. This includes, but is not limited to, pressure tanks, water treatment equipment and any other materials needed to complete the initial installation of the water system, inside and outside of the structure.

(6) Wellhead Completion.

(A) Above-ground connections shall—

1. Be a minimum of twelve inches (12") above ground surface or well house floor;

2. Have watertight piping and electrical connections that are mechanical or welded and sealed;

3. Have a protective well cap that seals tightly against the casing and has a screened vent or a casing seal that has a new rubber gasket. Cutting the rubber well seal for installation is not allowed;

4. When used, have surface driven pumps extending at least one inch (1") into the base of the motor;

5. Be provided with a minimum of one-half inch (½") diameter screened vent pointed downward;

6. Not use hubcap type well caps for permanent use; and

7. Not use temporary caps until a permanent cap or well seal is installed.

(B) Below-ground connections shall—

1. Use a pitless adaptor or pitless unit of sufficient strength to withstand normal operating stress;

2. Construct the hole cut in the casing for the installation of the pitless adaptor/unit to ensure a watertight seal with the pitless adaptor/unit in place;

3. Use a protective well cap that seals tightly against the casing and has a screened vent; and

4. Have native or grout material packed tightly around the casing and discharge pipe after installation.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

**10 CSR 23-3.060 Certification and Registration Reports
is rescinded.**

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2213). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-3.070 Plastic Well Casing is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2213). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.080 Liners is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2213–2218). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.090 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2218–2245). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made. The Department of Natural Resources received an additional thirteen (13) comments on the proposed amendment.

COMMENTS #1 and #2: The Missouri Department of Natural Resources' Hazardous Waste Program and Gene Gunn of the

Environmental Protection Agency both commented on proposed amendments to section 11 stating that there are two National Priorities List (NPL) Superfund Sites in proposed Area 11 for which lead and cadmium are contaminants of concern in groundwater: Oronogo-Duenweg Mining Belt (Jasper County) and Newton County Mine Tailings (Newton County). Allowing new wells to be drilled into the upper aquifer in the mine affected areas could potentially cause a human health risk. The Record of Decision (ROD) for groundwater (operable unit 04) at the Oronogo-Duenweg Mining Belt site specifically cites existing provisions of the Missouri Well Drillers' Act as an institutional control to "protect future residents from drinking contaminated ground water." It is not certain what Institutional Controls other than the existing provisions of the Missouri Well Drillers' Act could prevent potential exposure by future drilling of shallow wells in the county. In addition, the deeper aquifer may also be contaminated with lead and cadmium in localized areas due to improper construction or inadequate abandonment procedures in older wells. Therefore, the requirement to test the water from new wells screened in the deeper aquifer is also important to prevent exposure of residents to mine-related waste.

RESPONSE AND EXPLANATION OF CHANGE: Staff agree that upon further review of the proposed amendments to section (11) Area 11 that the impact areas, sampling requirements for the upper aquifer, and impact area expansion based on sampling results as prescribed in the current rule language are necessary measures to protect future residents from drinking contaminated groundwater that were overlooked in the proposed amendment and will be addressed here. Changes will remove references to TCE concern areas and the proposed definition, remove the term TCE from impact area, and expand the definition of impact area to include lead and cadmium. See 10 CSR 23-1.010 Definitions. Rule language will be changed to require sampling of new upper aquifer wells for lead, cadmium, and TCE and will subsequently expand impact areas based on results. References to sampling requirements for new wells drilled, cased, and grouted through the lower aquifer will be removed as proposed amendments include construction requirements that will prevent aquifer mixing addressing the Oronogo OU4 Record of Decisions concern that contamination of the deep aquifer throughout Drilling Area 11 be prevented.

COMMENTS #3, #4, and #5: John Harrington, Chairperson of the Environmental Task Force of Jasper and Newton Counties, Anthony Moehr of the Jasper County Health Department, and Jeff Wenzel of the Missouri Department of Health and Senior Services all commented that they are opposed to the proposed rule changes to section 11 because it will increase risk to public health of residents as well as potentially cause the need for additional costly remediation activities in the future as newly drilled wells into the shallow aquifer are found to be contaminated. Further, the ETF is concerned that well testing will not be required; residents may unknowingly be exposed to harmful levels of lead and cadmium.

RESPONSE: See response and explanation of change to comment #1. No additional changes have been made to the rule as a result of this comment.

COMMENT #6: Chris Schaefer from Sunbelt Environmental proposed that the current sensitive area C should be expanded to include all of Christian County because of data that supports the rapid urbanization of Christian county and the presence of fractured cavernous limestone and pollutants which are able to migrate quickly, both vertically and horizontally. The same reasons that Sensitive Area C was made to begin with. Currently if someone lives just outside of sensitive area C (for instance in Highlandville MO) they would only be required to install a domestic water well with eighty feet (80') of casing (no less than fifteen feet (15') into bedrock). Highlandville has a fault system which runs through it, adding to the complexity of karst and secondary porosity in the form of fractures. One well in partic-

ular (with eighty feet (80') of casing) was proven to be contaminated by a neighboring livestock operation. This could have been avoided if sensitive area C had extended to include all of Christian county. The presence of the Northview shale allows people living in these areas to have access to clean water from the Ozarks Aquifer rather than from the Springfield Aquifer which has been well documented to have issues with surface contamination.

RESPONSE: This proposed amendment was part of the Red Tape Reduction Initiative pursuant to Executive Order 17-03. The purpose of this initiative was to remove burdensome restrictions and streamline government regulations. This proposal to expand Drill Area 9 (Sensitive Area C) to include all of Christian County is outside of the scope of the Red Tape Reduction Initiative, however this comment will be considered for future rulemaking efforts. No changes have been made to the rule as a result of this comment.

COMMENT #7: Kevin Gilbreath, Realtor commented that hard copy maps should be provided and asked if the list of certified labs would be provided to permittees.

RESPONSE: Hard copies of these maps may be obtained by contacting the Missouri Department of Natural Resources, Missouri Geological Survey, 111 Fairgrounds Road, Rolla, MO 65401 pursuant to 10 CSR 23-3.090(11)(A)1. A list of laboratories certified for drinking water analyses is maintained on the Department's website (<https://dnr.mo.gov/env/wpp/labs/index.html>) a hard copy may be obtained by contacting the Missouri Department of Natural Resources, Water Protection Program, Public Drinking Water Branch, P.O. Box 176, Jefferson City, MO 65102 or 800-361-4827. No changes have been made to the rule as a result of this comment.

COMMENT #8: Gary Parone, Realtor asked about sampling requirements in Newton and Jasper Counties.

RESPONSE AND EXPLANATION OF CHANGE: Comments received during the public comment period brought forth information on the importance of sampling new wells drilled into the upper aquifer outside of impact areas in Area 11. These requirements are reinstated for new upper aquifer wells, however, references to sampling new wells drilled, cased, and grouted through the lower aquifer for new wells are removed because the proposed amendments include construction requirements that will prevent aquifer mixing.

COMMENT #9: Mrs. Robin Mitchell wrote to support the proposed changes to Drill Area 11 and commented that access to public drinking water is limited in the area and that these changes will allow her family to drill water wells without the financial burden from the regulations.

RESPONSE: Comments received during the public comment period brought forth information on the importance of maintaining the current impact areas and not allowing new upper aquifer wells in these areas to protect future residents from drinking contaminated groundwater. The response and explanation of change under comment #1 provides additional justification. As described in the response and explanation of change to comment #8, references to sampling new wells drilled, cased, and grouted through the lower aquifer for new wells will be removed as proposed amendments include construction requirements that will prevent aquifer mixing. No changes have been made to the rule as a result of this comment.

COMMENTS #10, #11, and #12: John G. Mitchell, Rachelle Bramlett, and Lisa Schade commented to support the proposed amendment changes to Drill Area 11. (10 CSR 23-3.090) These changes will allow land owners to drill wells on their property without the extra cost brought on by the restrictions. Allowing residents to drill without costly restrictions based on the fact that there are wells that were drilled before the area was zoned and are free of contaminants makes sense. These changes should, at least, be allowed for areas that do not have TCE contamination. The areas with these

contaminants are minimal and the rule changes should be allowed outside of these areas. At the minimum, should the rules be left in place; an option for testing should be allowed for individual land/homeowners that would allow them to apply for a special circumstance.

RESPONSE: Comments received during the public comment period brought forth information on the importance of maintaining the current impact areas and not allowing new upper aquifer wells in these areas to protect future residents from drinking contaminated groundwater. The response and explanation to comment #1 provides additional justification for making this change. As described in the response and explanation of change to comment #8, references to sampling new wells drilled, cased, and grouted through the lower aquifer for new wells will be removed because the proposed amendments include construction requirements that will prevent aquifer mixing. No changes have been made to the rule as a result of this comment.

COMMENT #13: Jim Harris with the Missouri Department of Natural Resources commented that Table 3.15 of the proposed rule should say Department of Army instead of Army Corps of Engineers and that it does not include all of the groundwater contaminants of concern for the Former Weldon Spring Ordinance Works. Groundwater contaminants of concern are: 2,4-dinitrotoluene (2,4-DNT), 2,6-dinitrotoluene (2,6-DNT), 2,4,6-trinitrotoluene (TNT), 1,3-dinitrobenzene (1,3-DNB), nitrobenzene (NB), ortho-nitrotoluene (o-NT), meta-nitrotoluene (m-NT), and para-nitrotoluene (p-NT). In addition the references to the contaminants exceeding MCL or AL of contaminants listed in Table 3.15 should also reference remedial goals stated in the Record of Decisions, or the risk-based value(s) calculated in the most recent site five-year review.

RESPONSE AND EXPLANATION OF CHANGE: Staff agree that these changes will clarify the contaminants of concern and any new information reflected in the Record of Decisions or five (5) year site reviews and have made the suggested changes to section (13) and Table 3.15.

COMMENT #14: Kaly Erwin representing Missouri Petroleum Storage Tank Insurance Fund commented that there is an error in the purpose statement where it says this rule sets construction standards and that Drill Area 5, Section 5 is missing a reference to domestic wells to make it consistent with the other sections. Ms. Erwin went on to state that an additional look be taken at unconsolidated wells in Area 5 to ensure the alluvial aquifer is not put at risk. Finally Ms. Erwin recommended wells drilled in the upper aquifer in Drill Area 11, Section 11 not be allowed out of concern for water quality in the upper aquifer.

RESPONSE: In the purpose statement to the proposed amendment 10 CSR 23-3.090, the bold italicized text is new text and the text in brackets is being removed. Proposed amendments to section (5)(B) address ambiguity in the regulations by providing construction requirements for unconsolidated wells that have casing diameters between six and five-eighths inches (6 5/8") and four inches (4"), while exempting small diameter (less than four inches) unconsolidated wells (i.e., sand-point wells) in Area 5. Previously it was unclear how wells that have casing diameters between six and five-eighths inches (6 5/8") and two inches (2") were regulated. For comments to section 11, Drill Area 11, see comment #1 and response and explanation of change. No changes have been made to the rule as a result of this comment.

10 CSR 23-3.090 Drilling Areas

(11) Area 11 (formerly Special Area 2). This area encompasses Newton and Jasper County and is delineated separately due to the contamination of portions of the upper aquifer by one (1) or more of the following: lead, cadmium, chlorinated VOCs including TCE,

TCE degradation products, or other contaminants pursuant to 10 CSR 60-4. The upper aquifer (Springfield Plateau Aquifer) and lower aquifer (Ozark Aquifer) are separated by low-permeability bedrock (Ozark Confining Unit). This low-permeability bedrock limits migration of groundwater and any associated contamination from the upper aquifer to the lower aquifer (see Figure 3.2).

(A) Bedrock Wells.

1. Consult the digital geospatial dataset "DRILL AREAS" developed by the Missouri Department of Natural Resources, Missouri Geological Survey. Hard copies may be obtained by contacting the Missouri Department of Natural Resources, Missouri Geological Survey, 111 Fairgrounds Road, Rolla, MO 65401. This dataset identifies the maximum well depth for wells completed in the upper aquifer; the required casing depth for a lower aquifer well; and Impact Areas.

2. Wells outside of Impact Areas may be installed in the upper aquifer provided they do not penetrate the Ozark Confining Unit; or wells may be installed and cased/sealed through the Ozark Confining Unit and open to only the lower aquifer.

3. New upper aquifer wells outside of Impact Areas.

A. Total depth of the well shall not penetrate the Ozark Confining Unit and not exceed the upper depth indicated digital geospatial dataset "DRILL AREAS".

B. A minimum of eighty feet (80') of casing shall be installed and extend a minimum of thirty feet (30') into solid bedrock. Example: If sixty feet (60') of residual material or broken rock is encountered during drilling above solid bedrock, then ninety feet (90') of casing will be installed.

C. The borehole for domestic wells shall be a minimum of eight and five-eighths inches (8 5/8") in diameter to casing depth.

D. Install new casing pursuant to 10 CSR 23-3.030(1)(A).

E. Grouting Requirements.

(I) The lowermost thirty feet (30') of casing shall be grouted. Table 3.10 lists the minimum amount of grout required by type and size of annulus or open hole.

(II) Grouting materials and methods shall be followed pursuant to 10 CSR 23-3.030(1)(C).

(III) The annular space above the grouted interval shall be filled with clean fill.

F. New upper aquifer wells shall follow sampling requirements pursuant to 10 CSR 23-3.090(11)(A)6.

4. New lower aquifer wells outside of the Impact Areas.

A. The casing shall be installed a minimum of ten feet (10') below the Ozark Confining Unit or to the lower depth indicated on the digital geospatial dataset "DRILL AREAS".

B. A casing point request may be submitted to the department.

C. Install new casing pursuant to 10 CSR 23-3.030(1)(A).

D. If steel casing is used, the borehole shall be a minimum of eight and five-eighths inches (8 5/8") in diameter to casing depth.

E. When steel casing is used and the minimum casing depth cannot be achieved due to geologic reasons, casing shall be installed to a minimum of eighty feet (80') extending thirty feet (30') into bedrock and a liner used to achieve the remaining casing depth provided the following requirements are met:

(I) Have a minimum annular space of one-half inch (1/2");

(II) Have a minimum of two (2) three- (3-) ribbed rubber packers (K-packers) secured at or below the bottom of the Ozark Confining Unit pursuant to 10 CSR 23-3.090(11)(A)4.A.;

(III) Have the top of the liner extend to within ten feet (10') of the top of casing;

(IV) Have packers placed a maximum of ten feet (10') apart;

(V) Grout pursuant to 10 CSR 23-3.090(11)(A)4.G. from the top packer to extend ten feet (10') inside the casing using the gravity or tremie grouting method using cement slurry or coated bentonite pellets; and

(VI) Liner specifications shall be followed pursuant to 10

CSR 23-3.080(1), (2), (4), and (5).

F. If plastic casing is used, the borehole shall be a minimum of ten inches (10") in diameter to the casing depth. When plastic casing is used liner shall not be used in lieu of casing.

G. Grouting Requirements.

(I) Full length grout is required.

(II) Grouting methods shall be Tremie Pressure, Pressure, or Positive Displacement pursuant to 10 CSR 23- 3.030(1)(C)1.C., 10 CSR 23-3.030(1)(C)1.D., and 10 CSR 23-3.030(1)(C)1.F.

(III) Grouting materials shall be cement slurry or high-solids bentonite slurry.

(IV) Wells with eighty feet (80') of casing may use grouting materials and methods pursuant to 10 CSR 23-3.030(1)(C).

H. All construction requirements pursuant to 10 CSR 23-3.030 shall be met except as provided in 10 CSR 23-3.090(11)(A)4.G.

5. Major reconstruction of wells in Area 11 that involve exceeding the upper depth indicated in the digital geospatial dataset "DRILL AREAS" or penetrating the Ozark Confining Unit requires advanced written approval from the department.

6. Sampling Requirements for new upper aquifer wells.

A. Water sampling and analysis shall be performed for lead, cadmium, TCE and its degradation products for new wells.

B. Permitted pump installers and owners who self-install pumps are responsible for ensuring sampling is completed according to laboratory sampling protocol and submitting sample results within sixty (60) days of pump installation.

C. The laboratory that analyzes the sample shall be certified by the EPA or the department for such analyses.

D. Prior to sampling, the well shall be purged continuously for a minimum of two (2) hours and water samples collected from the tap closest to the well.

E. All new upper aquifer wells shall be constructed with a sampling port or tap within twenty feet (20') of the wellhead.

F. If an upper aquifer well contains levels of lead, cadmium, TCE or its degradation products that are above MCL or AL, the well shall—

(I) Be plugged full length with approved grout material; or

(II) Be reconstructed and sealed through the Ozark Confining Unit pursuant to 10 CSR 23-3.090(11)(A)5.

7. Well installation in Impact Areas.

A. The casing shall be installed a minimum of ten feet (10') below the Ozark Confining Unit or to the lower depth indicated in the digital geospatial dataset "DRILL AREAS".

B. A casing point request may be submitted to the department.

C. Install new casing pursuant to 10 CSR 23-3.030(1)(A).

D. The borehole shall be a minimum of ten inches (10") in diameter to casing depth.

E. Grouting Requirements.

(I) Full length grout is required.

(II) Grouting methods shall be Tremie Pressure, Pressure, or Positive Displacement pursuant to 10 CSR 23-3.030(1)(C)1.C., 10 CSR 23-3.030(1)(C)1.D., and 10 CSR 23-3.030(1)(C)1.F.

(III) Grouting materials shall be cement slurry or high-solids bentonite slurry.

(B) Unconsolidated Material Wells.

1. If unconsolidated material wells are drilled in Area 11 outside of Impact areas, Drill Area 1 requirements for unconsolidated wells apply.

2. Advanced written approval from the department is required if unconsolidated material wells are drilled in Impact Areas.

stringent well construction standards for new wells that are drilled into the aquifer and to limit the deepening of existing upper aquifer wells (see Figure 3.10).

(13) Area 13 (formerly Special Area 4). This area encompasses portions of St. Charles County west of the city of Weldon Spring and is delineated separately due to contamination of portions of the aquifer by one (1) or more of the following known contaminants listed by source in Table 3.15. In this area it is necessary to implement more

Table 3.15. Known contaminants of Drill Area 13 by source.

Source	Known Contaminants ¹
U.S. Army	2,4,6-TNT, 2,4-DNT, 2,6-DNT, dinitrobenzene (1,3-DNB), nitrobenzene (NB), ortho-nitrotoluene (o-NT), meta-nitrotoluene (m-NT), para-nitrotoluene (p-NT)
Department of Energy Main Site	2,4,6-TNT, 2,4-DNT, 2,6-DNT, dinitrobenzene (1,3-DNB), nitrobenzene (NB), nitrate, uranium, and trichloroethylene (TCE)
Department of Energy Quarry	uranium and 2,4-DNT

¹May also include other contaminants pursuant to 10 CSR 60-4.

(A) New Wells.

1. Prior written approval and construction specifications shall be obtained from the department for any wells constructed in Area 13.
2. Water sampling for contaminants will be required pursuant to 10 CSR 23-3.090(13)(C).
3. Drilling shall cease and the department is to be notified immediately if contaminants listed in Table 3.15 or other contaminants pursuant to 10 CSR 60-4 are encountered at levels above the maximum contaminant level (MCL), action level (AL), remedial goals stated in the Record of Decisions, and/or the risk-based value(s) calculated in the most recent site five- (5-) year review. The department will determine further action.

(B) Reconstruction of Existing Wells.

1. Prior written approval and construction specifications shall be obtained from the department for any reconstructed wells in Area 13.
2. Groundwater sampling for contaminants listed in Table 3.15 or other contaminants pursuant to 10 CSR 60-4 will be required in advance of any deepening. Wells that are contaminated at levels exceeding maximum contaminant level (MCL), action level (AL), remedial goals stated in the Record of Decisions, and/or the risk-based value(s) calculated in the most recent site five- (5-) year review shall not be deepened.
3. Any well approved to be deepened which encounters contaminants listed in Table 3.15 or other contaminants pursuant to 10 CSR 60-4 at levels above maximum contaminant level (MCL), action level (AL), remedial goals stated in the Record of Decisions, and/or the risk-based value(s) calculated in the most recent site five- (5-) year review, drilling shall cease and the department shall be notified immediately. The department will determine further action.

(C) Water Sampling.

1. Groundwater sampling for contaminants is required according to laboratory sampling protocol for any new well or reconstruction and methods will be established on a case-by-case basis by the department.
2. The well installation contractor is responsible for ensuring sampling is conducted throughout the drilling process and results submitted in accordance with pre-approved department sampling methods. Final sampling of the well shall be completed by the pump installation contractor within sixty (60) days of pump installation. Wells will not be certified or registered until all sampling has been completed.

3. Sampling and analysis shall be performed for contaminants listed in Table 3.15.

4. The laboratory that analyzes the sample shall be certified by the EPA or the department for such analyses.

5. All new and deepened wells shall be constructed with a sampling port or tap at or before the pressure tank within twenty feet (20') of the wellhead.

(D) Plugging.

1. Wells shall be plugged full length using bentonite slurry or cement grout via one (1) of the tremie methods.

2. All plugging requirements in 10 CSR 23-3.110 shall be met except as required in 10 CSR 23-3.090(13)(D).

(E) All drilling-derived fluids, displaced water, and solid materials shall be containerized and sampled before disposal in accordance with federal, state, and local regulations based on analytical results.

(F) Any completed (new or reconstructed) well in which contaminants listed in Table 3.15 or other contaminants pursuant to 10 CSR 60-4 are encountered at levels above the maximum contaminant level (MCL), action level (AL), remedial goals stated in the Record of Decisions, and/or the risk-based value(s) calculated in the most recent site five- (5-) year review shall be plugged full-length (10 CSR 23-3.090(13)(D)) or with approval from the department the well owner may be allowed to use the well provided groundwater quality will not be degraded further.

(G) Notwithstanding these provisions, the federal government does not waive its rights and authority under federal law, regulations, or executive order within the boundaries and applicable jurisdiction of federal property.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-3.100 Sensitive Areas is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2246). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 3—Water Well Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-3.110 Plugging of Water Wells is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2246–2250). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-4.010 Definitions is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2250). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-4.020 Certification and Registration for Monitoring Wells is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2250). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-4.030 Location of Wells is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2250). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective

thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-4.050 General Protection of Groundwater Quality and Resources is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2250–2251). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-4.060 Construction Standards for Monitoring Wells is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2251–2255). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and one (1) comment was made.

COMMENT #1: Kaly Erwin representing the Missouri Petroleum Storage Tank Insurance Fund stated that they support the proposed amendment that all monitoring wells be uniquely identified at the surface completion.

RESPONSE: This amendment was proposed to provide clarity for well numbering while allowing flexibility on how each well is uniquely identified. No changes have been made to the rule as a result of this comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 4—Monitoring Well Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-4.080 Plugging of Monitoring Wells **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2255). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-5.010 Definitions **is rescinded.**

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2256). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-5.020 Certification and Registration of Heat Pump Systems **is rescinded.**

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2256). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section

256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-5.030 General Protection of Groundwater Quality and Resources **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2256). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-5.040 Location of Heat Pump Wells **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2256–2257). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-5.050 Construction Standards for Closed-Loop Heat Pump Wells **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2257–2259). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held on September 7, 2018, and the public comment period ended on September 14, 2018. At the public hearing, Department of Natural Resources staff explained the proposed amendment and zero (0) comments were made. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: An anonymous person stated remove the requirement to prenotify heat pump systems that are not full length grouted. Have there been any issues with the plugs since this became a requirement? Not making the groundwater safe, just another

requirement on the driller.

RESPONSE: Pursuant to 10 CSR 23-5.050(7)(B) prenotification is a requirement only for closed-loop heat pump wells less than two hundred feet (200') deep that are not grouted full length, but use a series of five foot (5') plugs. Prenotification provides staff advanced notice to witness these installations and ensure this plugging method is being completed in accordance with regulations. No changes have been made to this amendment as a result of this comment.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-5.060 Construction Standards for Open-Loop Heat Pump Systems **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2259). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 5—Heat Pump Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-5.080 Plugging of Heat Pump Wells **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2259–2260). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-6.010 Definitions **is rescinded.**

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg

2260). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-6.020 General Protection of Groundwater Quality and Resources **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2260–2261). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-6.030 Location of Test Holes **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2261). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code**

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-6.040 Construction Standards for Test Holes **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2261). No changes have been made in the text of

the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board amends a rule as follows:

10 CSR 23-6.050 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2261-2263). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

COMMENT: Since proposal of the rule amendment, department staff determined that the proposed amendment may be interpreted to suggest that a previously mandatory department obligation had become discretionary.

RESPONSE AND SUMMARY OF CHANGE: The department is revising the language to add the word “shall” to section (1) in order to clarify the department’s obligation.

10 CSR 23-6.050 Plugging of Test Holes

(1) All test holes, except those that are converted to other types of wells shall be plugged in accordance with this chapter within sixty days from the date that the well was drilled. Submit plugging registration records pursuant to section 256.614.1, RSMo. Test holes are exempt from submitting construction certification records.

(A) Plugging the Test Hole.

1. Test holes with no surface casing.

A. Fill the test hole from total depth to within two feet (2') of ground surface with grout.

B. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.

C. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.

D. Fill the top two feet (2') of hole with soil.

2. Test holes with removable surface casing pipe.

A. Remove the surface casing and any interior casing if used.

B. Fill the test hole from total depth to within two feet (2') of ground surface with grout.

C. If the borehole has collapse potential, add grout as casing is withdrawn.

D. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.

E. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.

F. Fill the top two feet (2') of hole with soil.

3. Test holes with grouted nonremovable surface casing.

A. Cut the casing off two feet (2') below ground surface or three feet in an agricultural area. If bedrock is encountered, cut the

casing flush with the top of bedrock.

B. Fill the test hole from total depth to within two feet (2') of ground surface with grout.

C. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.

D. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.

E. Fill the top two feet (2') of hole with soil.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 23—Well Installation
Chapter 6—Test Hole Construction Code

ORDER OF RULEMAKING

By the authority vested in the Well Installation Board under section 256.606, RSMo 2016, the board rescinds a rule as follows:

10 CSR 23-6.060 Confidentiality of Registration Report Form is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2263). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 1—General Procedures and Definitions

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-1.020 General Procedures is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2265-2266). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 1—General Procedures and Definitions

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-1.030 Definitions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2266-2268). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 1—General Procedures and Definitions**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-1.050 Assessment of Costs is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2268). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 6, 2018. At the public hearing, staff explained the proposed amendment and zero (0) comments were made. An additional comment was received. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: Joan Levick representing Spire Energy recommended changing section (1) subsection (I) from “each month the form or report” to “each month until any required form or report” to add clarity.

RESPONSE: The rule language Ms. Levick references was removed in the proposed amendment to add clarity. The new language reads, “A late fee of no more than one hundred dollars (\$100) per month assessed against the responsible party each month until the form or report has been submitted.”

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.010 Operator License is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (39 MoReg 2268-2269). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed amendment was held September 6, 2018. At the public hearing, staff explained the proposed amendment and zero (0) comments were

made. An additional comment was received. The Department of Natural Resources received one (1) additional comment on the proposed amendment.

COMMENT #1: Joan Levick representing Spire Energy recommended changing section (1) from “even if the well or storage facility” to “even if the well or gas storage facility” to add clarity.

RESPONSE: The rule language Ms. Levick references was removed in the proposed amendment to add clarity. The new language reads, “No person shall engage in oil or gas operations pursuant to Chapter 259, RSMo, and implementing regulations without first obtaining or renewing an operator license from the department, even if the well or storage facility is shut in or idle.”

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.020 Bonds is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2269-2271). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.030 Application for Permit to Drill, Deepen, Plug-Back, or Recomplete is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2272-2273). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.040 Drilling and Completion is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2273-2274). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.055 Injection Wells, Mechanical Integrity Testing, and Well Stimulation Treatment is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2274-2276). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.060 Shut-in Wells, Plugging, and Conversion to Water Well is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2276-2278). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.065 Operations is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2278-2279). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.080 Record Retention and Reporting is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2279-2280). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 50—Oil and Gas Council
Chapter 2—Oil and Gas Drilling and Production**

ORDER OF RULEMAKING

By the authority vested in the State Oil and Gas Council under section 259.070.5, RSMo 2016, the council amends a rule as follows:

10 CSR 50-2.090 Disposal of Fluids by Injection is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2280). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 80—Solid Waste Management
Chapter 3—Solid Waste Disposal Areas-Sanitary,
Demolition, and Special Waste Landfills**

ORDER OF RULEMAKING

By the authority vested in the Director of the Department of Natural Resources under section 260.225, RSMo 2016, the director amends a rule as follows:

10 CSR 80-3.010 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1,

2018 (43 MoReg 2280-2307). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing was held on September 18, 2018, and the public comment period ended September 25, 2018. At the public hearing, Department staff provided testimony on the proposed amendment. No verbal comments were received and one (1) written comment was received from Gredell Engineering. The department received written comments during the comment period from Gredell Engineering, Aqualaw, Weaver Consultants, SCS Engineering, and Barker Lemar Companies. There are ninety (90) consolidated comments listed below.

COMMENT #1. General Comment on the Rule Organization. Mr. Rickie Roberts with Gredell Engineering had the following general comment: "The consolidation of 10 CSR 80-3.010 and 10 CSR 80-4.010 into a revised rule 10 CSR 80-3.010 and entitling to revised rule Solid Waste Disposal Areas-Sanitary, Demolition, and Special Waste Landfills is a welcomed change and update. However, the proposed amendment as published encumbers numerous more stringent requirements into the rule for all the types of landfills addressed in it. In the proposed amendment the department has deleted from section (1) General Provisions (A) of the rule the designation of all succeeding rule subsections, the following designations: (A) Requirement. (The minimum levels of performance required of any landfill.); (B) Satisfactory Compliance-Design. and (C) Satisfactory Compliance-Operations. (The satisfactory compliance subsections presented as the authorized methods by which the objectives of the requirements subsections of the rule can be realized.) The elimination of these designations in the proposed amendment in all of the rule subsections (existing and new) elevates their status to the level of regulatory requirements. This eliminates the flexibility to use new design and operating technologies in applications for new permits and in permit modifications to satisfy performance based regulations. The proposed amendment now requires stringent adherence to specific current landfill design and operating practices which inevitably will become obsolete and substandard as being protective to human health and the environment. It will stifle the use and advancement of ingenuity and technological advancement in designing better landfills. My comment and recommendation is to take the existing 10 CSR 80-3.010 rule subsections 10 CSR 80-3.010 (1) (A), (2) (A), (3) (A), (4) (A), 5 (A), 6 (A), 7 (A), (8) (A), (9) (A), (10) (A), (11) (A), (12) (A), (13) (A), (14) (A), (15) (A), (16) (A), (17) (A), (18) (A), (19) (A) and (20) (A); modify them to address both sanitary and demolition landfills then combine the proposed subsections (21) (A) and (22) (A) to propose a revised rule which is a performance based regulation protective of human health and the environment. Such a proposed rule amendment will significantly reduce unnecessary red tape and allow the maximum use of professional judgement and utilization of new and advancing design and operating technology. The remaining subsections of the proposed amendment (subsections (B), (C), (D) and (E),-----) could be incorporated into a Solid Waste Disposal Area - Design and Operations Guide which would provide a designer, owner and permittee guidance on preparing an adequate permit application while allowing justification for alternative designs and operating practices.

RESPONSE: Resource Conservation and Recovery Act (RCRA) Subpart D is a design-based regulation. There are specific design requirements in 40 CFR 258 that must be in place to maintain a federally-approved state sanitary landfill program. Alternative designs are allowed under 10 CSR 80-3.010(1)(A), if they can be adequately demonstrated to the Department Director. No changes were made to the rule as a result of this comment.

COMMENT #2. Rule Title. A department staff member commented to change the rule title from Solid Waste Disposal Areas-Sanitary, Demolition, and Special Waste Landfills to Design and Operation.

RESPONSE AND EXPLANATION OF CHANGE: The department has incorporated the requested change, keeping the entity who is regulated in the title but adding the purpose of the chapter to the title.

COMMENT #3. Rule purpose. Ms. Renee Trenshaw with SCS Engineering stated the following regarding incorporation by reference of ASTM standards and EPA standards: What does this mean? How is state planning on using this? What about other standards?

RESPONSE: The department must reference the most recent ASTM International standards and Environmental Protection Agency (EPA) guidance by the publication date. No changes have been made to the rule as a result of this comment.

COMMENT #4. 10 CSR 80-3.010(1)(A) A department staff member requested that "the" be removed between "protect" and "human."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #5. 10 CSR 80-3.010(1)(B) Ms. Renee Trenshaw with SCS Engineering stated the following: Must have it on site and be accessible. Do our clients have this now? Can they find things?

RESPONSE: These questions appears to be unrelated to the proposed rule text and instead ask questions of the regulated landfill owner/operators. No changes have been made to the rule as a result of this comment.

COMMENT #6. 10 CSR 80-3.010(1)(C) Ms. Renee Trenshaw with SCS Engineering stated the following: What is the process for incorporating subsequent amendments? Can a site request a permit modification or does it have to be a regulation change?

RESPONSE: The department is required to reference a specific date for any ASTM standard or other referenced document adopted by rule. No changes have been made to the rule as a result of this comment.

COMMENT #7. 10 CSR 80-3.010(2)(A)4. Mr. Paul Calamita with Aqualaw requested we add "in the manner necessary to ensure that unacceptable and unapproved waste do not enter the landfill" to the end of the existing phrase which stated "The owner/operator shall inspect each load of special waste upon its arrival at the landfill."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested addition.

COMMENT #8. 10 CSR 80-3.010(2)(A)7. A department staff member requested that "(1)" be added following "one."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested addition.

COMMENT #9. 10 CSR 80-3.010(2)(A)8. Mr. Paul Calamita with Aqualaw requested we reword to state the following: "Any special waste that requires handling procedures significantly different from typical municipal solid waste shall be handled in accordance with the landfill operating record and any special conditions established by the landfill operator during the special waste approval process. The department reserves the right to require revisions to the landfill operating manual and landfill operations for special waste that may adversely affect the health and safety of landfill personnel or may be extremely difficult to handle."

RESPONSE AND EXPLANATION OF CHANGE: The department has incorporated the requested addition with modifications to clarify that special waste must be handled in accordance with the approved landfill operating "manual" and using the term "special procedures" instead of "special conditions."

COMMENT #10. 10 CSR 80-3.010(2)(A)8. A department staff member commented that this paragraph is missing closing punctuation.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #11. 10 CSR 80-3.010(2)(A)9. A department staff member requested that "specimens" be changed to samples.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #12. 10 CSR 80-3.010(2)(A)10. Ms. Renee Trenshaw with SCS Engineering stated the following: How to define? how to monitor? Addendum to CQA report required?

RESPONSE: The comment contains a series of questions that appear to be more appropriate for a landfill owner/operator to address in their submittal of a landfill operating manual. The department believes the contents of an operating manual should remain flexible as long as the contents are reasonable and protective of human health, safety, and the environment. As a result, this comment is believed to be outside the scope of the current rulemaking. No changes have been made to the rule as a result of this comment.

COMMENT #13. 10 CSR 80-3.010(2)(A)16. Ms. Renee Trenshaw with SCS Engineering stated the following: Seems like an odd place. MSW is located in following subsection under operations plan. What about special waste landfills?

RESPONSE: This paragraph is appropriate in subsection (2)(A) because it describes accepted waste; excluded waste is described in subsection (2)(B). Special Waste Landfills are addressed in section (22). No changes have been made to the rule as a result of this comment.

COMMENT #14. 10 CSR 80-3.010(2)(B)2.C. A department staff member requested that PCB be spelled out.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #15. 10 CSR 80-3.010(2)(B)2.F. A department staff member requested that "Subpart" be changed to lowercase "subpart."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #16. 10 CSR 80-3.010(2)(B)2.F. A department staff member commented that the acronym NESHAP, should be "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos (2004)."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #17. 10 CSR 80-3.010(2)(B)3. Ms. Renee Trenshaw with SCS Engineering stated the following: C&D included previously. What about special waste landfills?

RESPONSE: Special Waste Landfills are addressed in section (22). No changes have been made to the rule as a result of this comment.

COMMENT #18. 10 CSR 80-3.010(3)(B)2.A. A department staff member requested that needs a ":" after "will not."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #19. 10 CSR 80-3.010(3)(B)7. Ms. Anastasia Welch with SCS Engineering stated the following: What is "Base?" Top of subgrade underneath compacted soil layer?

RESPONSE AND EXPLANATION OF CHANGE: The base is considered the top of the subgrade underneath the compacted clay liner. The department has added clarification to the rule text.

COMMENT #20. 10 CSR 80-3.010(4). Ms. Renee Trenshaw with SCS Engineering stated the following: So what happens if a site does not have all of these but is an existing facility? Do have to make all these changes/revisions prior to being able to request a modification? What if soils testing did not use the same ASTM methods outlined here, etc.?

RESPONSE: An existing permitted facility will have approved plans and designs as applicable under rules in place at the time of approval. The proposed rule section is not retroactive. A permit modification request must comply with the currently applicable rule and any related standards (i.e., ASTM). Submittal of documents must be prepared, sealed, and signed by a licensed professional engineer. No changes have been made to the rule as a result of this comment.

COMMENT #21. 10 CSR 80-3.010(4). Ms. Renee Trenshaw with SCS Engineering stated the following: Procedures for construction? What does this mean? What is state envisioning?

Tech specs or the type of detail we already include with the construction quality assurance (CQA) Plans?

RESPONSE: The remainder of this section details the procedures for testing, site evaluation and preparation, and construction. CQA plans and certifications are a part of the construction process. No changes have been made to the rule as a result of this comment.

COMMENT #22. 10 CSR 80-3.010(4)(A)1. Ms. Renee Trenshaw with SCS Engineering stated the following: I dislike this...i get it...but most of our sites will definitely not fit on this.

RESPONSE: This paragraph allows for additional plan sheets to be submitted to cover the entire site. No changes have been made to the rule as a result of this comment.

COMMENT #23. 10 CSR 80-3.010(4)(A)5. Ms. Renee Trenshaw with SCS Engineering stated the following: What if existing landfill applying for permit mod?

RESPONSE: This provision would be applicable to new permits (i.e. horizontal expansions and new construction). The provision will not affect a permit modification. Further, this is an existing provision that was included in the previous rule and should already be part of landfill designs. No changes have been made to the rule as a result of this comment.

COMMENT #24. 10 CSR 80-3.010(4)(A)7. Ms. Renee Trenshaw with SCS Engineering stated the following: What is site thinking here? Design grades of ditches, etc.? Something else?

RESPONSE: This demonstration should include structures designed to improve surface water flow that would otherwise adversely impact geologic and hydrologic conditions. No changes have been made to the rule as a result of this comment.

COMMENT #25. 10 CSR 80-3.010(4)(F). Ms. Anastasia Welch with SCS Engineering stated the following: Suggest SDR 11 Minimum for sump and side slope riser design.

RESPONSE: Current practices employ several SDR sizes. This subsection is worded to allow for flexibility; the department does not want to limit options and require facilities to overdesign. No changes have been made to the rule as a result of this comment.

COMMENT #26. 10 CSR 80-3.010(4)(G). Ms. Renee Trenshaw with SCS Engineering stated the following: What is MDNR looking for with these? Intermediate grading/slopes or just a 2D phasing plan (lines with approximate locations of phases?)

RESPONSE: This is intended for the applicant to demonstrate the intermittent grading and slopes during each phase of construction and waste placement. This is critical for the sequencing of the landfill development. No changes have been made to the rule as a result of this comment.

COMMENT #27. 10 CSR 80-3.010(4)(H). Ms. Anastasia Welch with SCS Engineering stated the following: How to define groundwater elevations? from one well? the whole surface? the highest ever, within last 10 years, etc.

RESPONSE: Groundwater elevation is a professional determination by a geologist and/or hydrologist, and is determined during the detailed site investigation (DSI) from data typically collected from multiple wells over a period of time. No changes have been made to the rule as a result of this comment.

COMMENT #28. 10 CSR 80-3.010(4)(I). Ms. Anastasia Welch with SCS Engineering stated the following: What about existing landfills continuing construction?

RESPONSE: No new construction of pre-Subtitle D liner systems is allowed. 10 CSR 80-3.010 was revised in 1997, requiring composite liner construction. All new construction must comply with the current design and construction standards. No changes have been made to the rule as a result of this comment.

COMMENT #29. 10 CSR 80-3.010(4)(I)1.C. Ms. Anastasia Welch with SCS Engineering stated the following: Can we define what qualifies as protection? or the limit on the number of cycles that are acceptable?

RESPONSE: Construction means and methods must be implemented to prevent these effects from compromising the compacted soil liner. The required means and methods are site-specific field engineering, determined in consultation with the department. No changes have been made to the rule as a result of this comment.

COMMENT #30. 10 CSR 80-3.010(4)(I)1.D.(II) A department staff member requested that "200" be corrected to "two hundred (200)."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #31. 10 CSR 80-3.010(4)(I)1.E. Ms. Renee Trenshaw with SCS Engineering stated the following: Please confirm this means perpendicular to the pipes and along the pipes both?

RESPONSE: It means both, but perpendicular is more critical than along the pipe. No changes have been made to the rule as a result of this comment.

COMMENT #32. 10 CSR 80-3.010(4)(I)2.E.(II) A department staff member requested that "200" be corrected to "two hundred (200)."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #33. 10 CSR 80-3.010(4)(J). Ms. Renee Trenshaw with SCS Engineering stated the following: Please expand on what minimum design requirements/demonstration requirements should be included.

RESPONSE: This will be determined by the applicant in consultation with the Department on a case-by-case basis. No changes have been made to the rule as a result of this comment.

COMMENT #34. 10 CSR 80-3.010(4)(K). Ms. Renee Trenshaw with SCS Engineering stated the following: Forever? How do you show this? Perpetual pumping fund? What about after closure and post-closure care timeframes? Impacts to FAI?

RESPONSE: As long as leachate is being generated, the owner/operator is obligated to manage it. Models such as HELP can be used to estimate leachate generation for the design. No changes have been made to the rule as a result of this comment.

COMMENT #35. 10 CSR 80-3.010(4)(K)4.A. Ms. Renee Trenshaw with SCS Engineering stated the following: How is sufficient capacity defined?

RESPONSE: This is a design consideration discussed with the department as part of the permitting process. Models such as HELP can be used to aid in the design of storage capacity. No changes have been made to the rule as a result of this comment.

COMMENT #36. 10 CSR 80-3.010(4)(K)4.D. A department staff member requested that "a" be added between "during" and "twenty-four."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested addition.

COMMENT #37. 10 CSR 80-3.010(5)(B)1.B.(I) A department staff member requested that "(s)" be added to "meet."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested addition.

COMMENT #38. 10 CSR 80-3.010(5)(C)2. Ms. Renee Trenshaw with SCS Engineering stated the following: MDNR intention here? Why change in language?

RESPONSE AND EXPLANATION OF CHANGE: The term "excavated" was added to give flexibility for pre-qualification of borrow for the liner prior to construction. Additionally, Atterburg limits give a better indication of soil similarity than conductivity provides. No changes have been made to the rule as a result of this comment.

COMMENT #39. 10 CSR 80-3.010(5)(C)5.A. Ms. Renee Trenshaw with SCS Engineering stated the following: why bringing a new term in here? What is benefit of cap vs. final cover? What is cap?

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and will return the term to "final cover."

COMMENT #40. 10 CSR 80-3.010(5)(C)5.B. Ms. Renee Trenshaw with SCS Engineering stated the following: What about newer updates to Geosynthetic Institute GM 19 a and b? They release updates pretty routinely?

RESPONSE: The department is required to reference a specific date for any ASTM standard or other referenced document adopted by rule with a specific date. No changes have been made to the rule as a result of this comment.

COMMENT #41. 10 CSR 80-3.010(5)(C)5.B. Ms. Renee Trenshaw with SCS Engineering stated the following: Not sure I want to bring it up, but intention of specifying the type of seam?

RESPONSE: Seam type is determined by panel layout. The seam type and the testing will be determined in the Construction Quality Assurance plan. No changes have been made to the rule as a result of this comment.

COMMENT #42. 10 CSR 80-3.010(6)(B). Ms. Renee Trenshaw with SCS Engineering stated the following: No! What about sites with site specific coordinate systems!?! So much data on other coordinate systems.... Understandable for new sites, but what about existing sites? What is expectation here? This will be burdensome and could cause more errors. Please consider that having a State Plane control point established on the site and the ability to transform should be sufficient.

RESPONSE: The department currently uses these coordinate systems as specified in the proposed rule. This is to ensure compatibility with current standards for department geographical information system (GIS) databases. A closure plat of the facility will be required to meet the standardized data. No changes have been made to the rule as a result of this comment.

COMMENT #43. 10 CSR 80-3.010(7)(B)1. A department staff member requested that "storm water" be changed to "stormwater."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #44. 10 CSR 80-3.010(8)(C). Mr. Paul Calamita with Aqualaw and Ms. Renee Trenshaw with SCS Engineering have concerns with stormwater that comes in contact with leachate being considered leachate and being required to be treated prior to discharge into water of the state. Aqualaw stated "All landfills have leachate seeps, outbreaks, broken pipes, etc., and these often occur on side slopes or otherwise upstream of the storm water outfall."

RESPONSE: The department believes the language contained in 10 CSR 80-3.010(8)(C) is consistent with the EPA definitions of what constitutes leachate. The discharge of leachate in stormwater into waters of the state is not permitted under the Missouri Clean Water Law. If a facility wishes to discharge water from a basin that may contain leachate, they may collect water samples and test for constituents specific to the landfill type (sanitary, demolition, or special waste). If samples are not contaminated, they may discharge the stormwater in accordance with their NPDES permit. No changes have been made to the rule as a result of this comment.

COMMENT #45. 10 CSR 80-3.010(8)(C)1. A department staff member requested that "storm water" be changed to "stormwater" in both instances in this paragraph.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested changes.

COMMENT #46. 10 CSR 80-3.010(8)(C)2. Ms. Renee Trenshaw with SCS Engineering stated the following: I understand this. Seems conflicting that they specify a design storm though...

RESPONSE: These are operational and design considerations based on industry standards for engineering and operations. No changes have been made to the rule as a result of this comment.

COMMENT #47. 10 CSR 80-3.010(8)(C)5. Ms. Renee Trenshaw with SCS Engineering stated the following: Evaporated leachate cannot be blown or drift off-site? Perhaps a clarification of "in liquid form" should be added.

RESPONSE: The department believes the current language is clear. Leachate as vapor or mist should not blow off site. No changes have been made to the rule as a result of this comment.

COMMENT #48. 10 CSR 80-3.010(9)(A)2. Ms. Renee Trenshaw with SCS Engineering stated the following: How will this be defined? Can we reference gas or groundwater monitoring sections? Need to have a limit or definition of when this would be applied.

RESPONSE: This paragraph restates the department's authority to protect human health and the environment. No changes have been made to the rule as a result of this comment.

COMMENT #49. 10 CSR 80-3.010(9)(A)5.A. A department staff member requested that the "and" at the end be removed and added to the end of (9)(A)5.B.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #50. 10 CSR 80-3.010(9)(A)5.B. Ms. Anastasia Welch with SCS Engineering stated the following: Can we define this better? Not impacted "as demonstrated by statistical analysis" ?

RESPONSE AND EXPLANATION OF CHANGE: To be consistent with other Solid Waste Management rules and revisions, this subparagraph, which contains the phrase "not affected by the landfill," has been removed.

COMMENT #51. 10 CSR 80-3.010(9)(B)2. Mr. Andy Limmer with Weaver Consultants wishes to add: "as required by the Detection Monitoring List in Appendix I or an alternate detection monitoring list developed by the facility that includes the anticipated parameters of concern for the specific facility and is approved by the department." to the end of the existing phrase which stated " Each groundwater monitoring program shall include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measures monitoring constituents in groundwater samples."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment has incorporated the requested change.

COMMENT #52. 10 CSR 80-3.010(9)(C)1. Mr. Chris O'Brien with Barker Lemar stated: "Previous rule required establishment of background for indicator parameters and Appendix I and not for the full Appendix II list. Request that establishment of background for Appendix II constituents outside of the Appendix I list be addressed as described in 10 CSR 80.010(10)F."

RESPONSE: The department believes that including the assessment monitoring constituents in the initial background sampling will allow for more information to be available if alternative source demonstrations are needed. Having background samples prior to the placement of waste will eliminate uncertainty in determining the source of a detected contaminant. No changes have been made to the rule as a result of this comment.

COMMENT #53. 10 CSR 80-3.010(9)(C)1. Ms. Renee Trenshaw with SCS Engineering stated the following: What about Special Waste Landfills? Any groundwater monitoring requirements for them?

RESPONSE: See section (22) on special waste landfills. No changes have been made to the rule as a result of this comment.

COMMENT #54. 10 CSR 80-3.010(9)(G)2.C. A department staff member requested that "and" be removed.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #55. 10 CSR 80-3.010(9)(G)2.D. A department staff member requested that the period be changed to a semicolon.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #56. 10 CSR 80-3.010(9)(G)2.E. A department staff member requested that the period be changed to a semicolon.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #57. 10 CSR 80-3.010(9)(G)2.F.(II) A department staff member requested that the period be changed to a semicolon.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #58. 10 CSR 80-3.010(9)(G)2.G.(III) A department staff member requested that the period be changed to a semicolon and a "and" added to the end.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #59. 10 CSR 80-3.010(10). Mr. Andy Limmer with Weaver Consultants wishes to add: "and determined to be a result of a release of leachate or landfill gas from the facility," to make the statement read "Owners and operators of a sanitary, demolition, or special waste landfill that shows one (1) or more constituents listed in Appendix I, II, III, or IV of this rule being detected at levels above the groundwater protection standard as established, **and determined to be a result of a release of leachate or landfill gas from the facility,**" shall either proceed with corrective actions or submit a risk based corrective action plan as outlined in subsections (10)(A) through (C)."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #60. 10 CSR 80-3.010(10). A department staff member requested that "Risk Based Corrective Action" be removed from the section title, the phrase "in consultation with the Department" be added, and "risk based" be deleted to make the statement read "Owners and operators of a sanitary, demolition, or special waste landfill that shows one (1) or more constituents listed in Appendix I, II, III, or IV of this rule being detected at levels above the groundwater protection standard as established, shall **in consultation with the department** either proceed with corrective actions or submit a corrective action plan as outlined in subsections (10)(A) through (C)."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has made the requested changes.

COMMENT #61. 10 CSR 80-3.010(10)(B)2.A. A department staff member requested that "the" be removed between "of" and "human."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #62. 10 CSR 80-3.010(10)(C)1.C. A department staff member requested that "are" be changed to "is."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #63. 10 CSR 80-3.010(11)(D). Ms. Renee Trenshaw with SCS Engineering stated the following: Do we have to prove that the spray application from evaporators or misters does not leave the site?

RESPONSE: Yes. That is part of the operation parameters that the applicant must address. No changes have been made to the rule as a result of this comment.

COMMENT #64. 10 CSR 80-3.010(11)(E). Ms. Renee Trenshaw with SCS Engineering stated the following: I assume this is burning not on waste and in unconstructed areas of the permitted landfill footprint?

RESPONSE: Yes. This applies to burning within the permitted boundary, not on the waste mass. No changes have been made to the rule as a result of this comment.

COMMENT #65. 10 CSR 80-3.010(11)(E). A department staff member commented that due to changes in the open burning regulations as part of the Red Tape Reduction Initiative, subsection (E) should be rewritten as follows, "Burning at the landfill shall be conducted in accordance with Chapter 643, RSMo, the corresponding rules, the terms and conditions, or both, of the plans, permits, or both, and all local requirements. Burning within the permitted boundary of a sanitary or demolition landfill shall be limited to tree trunks, tree limbs, and vegetation resulting from land clearing related to landfill operation/development. Burning of all other solid waste is prohibited on the landfill property."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #66. 10 CSR 80-3.010(12)(A) A department staff member requested that "Subsection" be changed to lowercase subsection.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #67. 10 CSR 80-3.010(12)(B). Ms. Renee Trenshaw with SCS Engineering stated the following: Can we tighten up the language "if the department determines there is evidence"? Maybe through sample collection, detection of methane migration in building LEL monitors or gas probe activities?

RESPONSE: The department intends to leave this statement general in order to encompass all the situations (such as a well house explosion) to protect human health and the environment. No changes have been made to the rule as a result of this comment. Because this is a human health and safety issue, the department must maintain discretion to determine when corrective action must be taken to protect human health. No changes have been made to the rule as a result of this comment.

COMMENT #68. 10 CSR 80-3.010(12)(C). Ms. Renee Trenshaw with SCS Engineering stated the following: Can likely zones of migration be defined? Can we address hydraulic cutoffs? unsaturated zones, excessive buffer zones?

RESPONSE: No, this is site specific. See Landfill Gas Corrective Actions in section (14). No changes have been made to the rule as a result of this comment.

COMMENT #69. 10 CSR 80-3.010(12)(C)1.A.(I)(b). A department staff member requested that "(2)" be added between "two" and "adjacent."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #70. 10 CSR 80-3.010(12)(C)1.A.(I)(c). Ms. Renee Trenshaw with SCS Engineering stated the following: Timeframe for implementation of this if subject to this rule and need to add more wells?

RESPONSE: This is a geologic consideration as part of the DSI and the development of a gas monitoring plan. No changes have been made to the rule as a result of this comment.

COMMENT #71. 10 CSR 80-3.010(12)(C)1.A.(I)(c)II. A department staff member requested that "space(s)" be changed to "spaces."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #72. 10 CSR 80-3.010(13). Ms. Renee Trenshaw with SCS Engineering stated the following: This will be burdensome to facilities and difficult to effectively implement. No time frame given for when active system must be installed in a newly constructed area. Active gas extraction from areas with only daily or intermediate cover will significantly increase the risk of landfill fires. How to determine evidence of existing or potential harm? Could be interpreted too broadly.

RESPONSE: This initial language of this section describes the general applicability of landfill gas control measures. More site-specific gas control and collection system design and operation parameters follow, and corrective action time tables are located in section (14). The criteria is the same and is located in this section. Because each site is unique, general language allows flexibility for the department and responsible parties to provide protection to human health and the environment. No changes have been made to the rule as a result of this comment.

COMMENT #73. 10 CSR 80-3.010(13)(A). Ms. Renee Trenshaw with SCS Engineering stated the following: How to determine "warrant

control." Time frame for implementation of system? Or just a plan in case it is needed?

RESPONSE: Areas that warrant control are those that trigger 40 CFR Part 60 standard of Performance for New Stationary Sources (NSPS) compliance. This is site-specific, and the plan is submitted and approved prior to that time. No changes have been made to the rule as a result of this comment.

COMMENT #74. 10 CSR 80-3.010(12)(B). Mr. Paul Calamita with Aqualaw stated: We renew our comment that in both subsections the threshold for DNR requirements for action at earlier-closed landfills is proposed as "evidence of an existing or potential safety concern . . ." (emphasis added). The trigger for these older landfills should instead be stated as a DNR finding of the noted problem. Although we would not see that threshold to be particularly high for DNR, the simple observation of "evidence" of a problem is not an adequate threshold for action as to older, closed facilities. We ask that the words "evidence of" be deleted in both (12)(B) and (13). In the alternative, the regulations could refer to "sufficient evidence" as we earlier suggested.

RESPONSE: Because this is a human health and safety issue, the department must maintain discretion to determine when corrective action must be taken to protect human health. No changes have been made to the rule as a result of this comment.

COMMENT #75. 10 CSR 80-3.010 (12)(B). Mr. Paul Calamita with Aqualaw stated: Also in (13)(C)(2) we renew our objection to the specification of 50% of the Lower Explosive Limit as a trigger for methane concentration in soils. 100% of the LEL is an appropriate and adequate trigger, consistent with the manner in which the federal MSW regulations address the issue, 40 CFR § 258.23(a).

RESPONSE: Based on experience with migration and municipal sanitary waste landfills this requirement will remain. No changes have been made to the rule as a result of this comment.

COMMENT #76. 10 CSR 80-3.010(13)(A)2.G. Ms. Renee Trenshaw with SCS Engineering stated the following: What time frames are expected for the description of when the gas control and collection system is to be installed in each phase or cell of the landfill?

RESPONSE: This is dependent on site-specific conditions and when NSPS is triggered or some type of violation occurs (i.e. off-site odors above air regulations, gas migration occurs, etc.). No changes have been made to the rule as a result of this comment.

COMMENT #77. 10 CSR 80-3.010(13)(A)5. Ms. Renee Trenshaw with SCS Engineering stated the following: Can you provide some background on this?

RESPONSE: This provision is intended to provide the regulated entity with flexibility in controlling and collecting landfill gas and allows for proposing alternative technologies. No changes have been made to the rule as a result of this comment.

COMMENT #78. 10 CSR 80-3.010(13)(B). Ms. Renee Trenshaw with SCS Engineering stated the following: Did not see a mechanism for abandoning or decommissioning a gas well.

RESPONSE: Given the wide range of circumstances that would necessitate removing the well from the extraction system, the department did not prescribe a specific mechanism (i. e. lightning strike). No changes have been made to the rule as a result of this comment.

COMMENT #79. 10 CSR 80-3.010(13)(B)6. Ms. Renee Trenshaw with SCS Engineering stated the following: What is efficient operation entail? What are trying to accomplish here?

RESPONSE: This is intended for operators to focus on optimal performance and maintain consistent compliance with NSPS and avoid methane migration. Efficient collection of landfill gas prevents migration. No changes have been made to the rule as a result of this

comment.

COMMENT #80. 10 CSR 80-3.010(13)(C)1. Ms. Renee Trenshaw with SCS Engineering stated the following: Does this "Permitted Boundary" reference the limits of waste or is this include the land surrounding the landfill that is included in the Easement provided to MDNR? Please define "enclosed structures"

RESPONSE: The permitted boundary includes the waste, borrow, infrastructure, and buffer, etc. that was delineated in the approved permit. At a minimum, the easement covers the permitted boundary, ingress, and egress. Enclosed structures can be considered as any space that can collect and contain gas whereby the lower explosive limit can be reached. No changes have been made to the rule as a result of this comment.

COMMENT #81. 10 CSR 80-3.010(13)(C)2. Ms. Renee Trenshaw with SCS Engineering stated the following: Is this the permitted facility boundary or the landfill boundary?

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has changed property boundary to permitted boundary.

COMMENT #82. 10 CSR 80-3.010(14)(A)1.C. Mr. Paul Calamita with Aqualaw request that Notification for Owners and occupants of properties within one thousand feet (1000') of any compliance monitoring well exhibiting concentrations above the limit(s) provided in (13)(C) of this rule be changed from one thousand feet (1000') to five hundred (500').

RESPONSE: From a safety standpoint, one thousand feet (1000') is prudent based on prior department experience with landfill gas migration. No changes have been made to the rule as a result of this comment.

COMMENT #83. 10 CSR 80-3.010(14)(A)2. Ms. Anastasia Welch with SCS Engineering stated the following: Define structure.

RESPONSE AND EXPLANATION OF CHANGE: In this context, structure is any enclosed space that can collect and contain gas so that the lower explosive level can be reached. The department will add the term "enclosed" prior to structure.

COMMENT #84. 10 CSR 80-3.010(14)(A)2.B. Ms. Renee Trenshaw with SCS Engineering stated the following: If a condensate vault has methane gas but it is freezing outside is the LF supposed to open the vault to let the methane out and let the pipe freeze so that the leachate system shuts down or should we leave the gas in the vault and not freeze the line and deal with the vault as a confined space.

RESPONSE: A vault should be managed as a confined space with ventilation and monitoring performed prior to entry. Confined spaces should be handled as set out in the site safety plan. No changes have been made to the rule as a result of this comment.

COMMENT #85. 10 CSR 80-3.010(14)(A)5. Ms. Renee Trenshaw with SCS Engineering stated the following: Engineers may be awesome, but they're not this awesome. The prior draft said 60 days (okay doable). 45 days to create a plan to investigate the reason for the migration (tight but probably doable), describe the nature and extent of the migration (this would require a field investigation plan be prepared, hire a contractor, schedule a contractor, complete field testing, receive any lab reports, and generate a conclusion to determine the nature and extent of the migration.) and the Engineer is supposed to propose a remedy to correct the migration (The Engineer does not know the source, the extent or if it is even a LFG issue, how are we supposed to blindly create a solution within 45 days.) The State needs to extend this time, reduce their expectations or allow automatic time line extensions to be filed. Difficult for some municipalities depending on their contract things.

RESPONSE: Because of the imminent threat to human health, prompt action is necessary. A response within 45 days is warranted,

unless there are extenuating circumstances. The response may identify additional necessary investigations. No changes have been made to the rule as a result of this comment.

COMMENT #86. 10 CSR 80-3.010(14)(A)6.A. Ms. Renee Trenshaw with SCS Engineering stated the following: Call to Department or Spill hotline?

RESPONSE: Notification can be made by calling the department's Solid Waste Management Program during business hours and the spill line (573-634-2436) after hours and on weekends. No changes have been made to the rule as a result of this comment.

COMMENT #87. 10 CSR 80-3.010(14)(A)6.B. Ms. Anastasia Welch with SCS Engineering stated the following: Many times you do not plan to take a system out of service for over 24 hours, but a small repair may turn into a bigger issue. Suggest: "where possible" Also, for a non-NSPS site, a 24-hour time frame is very onerous, 48 hours would be better

RESPONSE: The intent of this requirement is to allow notification to the department of a site with known ongoing gas migration problems that the owner/operator is having difficulty maintaining the gas collection system in an operational state (i.e., a situation where gas migration may expand suddenly). No changes have been made to the rule as a result of this comment.

COMMENT #88. 10 CSR 80-3.010(14)(A)7. Ms. Renee Trenshaw with SCS Engineering stated the following: SWMP should be required to provide technical reasons for why they find that the plan does not provide sufficient data to support corrective actions or include an allowance for an extension.

RESPONSE: The department will provide comments in the disapproval letter. No changes have been made to the rule as a result of this comment.

COMMENT #89. 10 CSR 80-3.010(14)(A)8. A department staff member requested that "and" between "hundred" and "twenty" be removed.

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #90. 10 CSR 80-3.010(14)(A)9. Ms. Renee Trenshaw with SCS Engineering stated the following: This should be automatic, why should the landfill have to file additional paper work?

RESPONSE: This is part of the corrective actions in an enforcement case and needs to have department approval. Electronic correspondence is satisfactory for the request. No changes have been made to the rule as a result of this comment.

COMMENT #91. 10 CSR 80-3.010(14)(A)9. A department staff member requested that "(1)" be added between "one" and "year."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested addition.

COMMENT #92. 10 CSR 80-3.010(16)(A) A department staff member requested that opening parenthesis be added on (A)

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #93. 10 CSR 80-3.010(16)(A). Mr. Paul Calamita with Aqualaw request that subsection (A) be revised as follows: The sanitary, demolition or special waste landfill owner/operator shall operate the landfill in a manner specified by the permit to employ reasonable setbacks, screening or other design or operating features to avoid to the extent practicable adverse visual or other impacts to occupied properties offsite."

RESPONSE: The department believes the proposed language is substantially equivalent to the existing proposed rule text. No changes

have been made to the rule as a result of this comment.

COMMENT #94. 10 CSR 80-3.010(16)(C). Ms. Renee Trenshaw with SCS Engineering stated the following: Is this like a row of trees?

RESPONSE: A natural windbreak could consist of vegetation such as trees, and shrubs. No changes have been made to the rule as a result of this comment.

COMMENT #95. 10 CSR 80-3.010(17)(A). Ms. Renee Trenshaw with SCS Engineering stated the following: Too vague and subject to personal opinion.

RESPONSE: The intention of this is for final cover, including vegetation. No changes have been made to the rule as a result of this comment.

COMMENT #96. 10 CSR 80-3.010(17)(B)1.C. Ms. Renee Trenshaw with SCS Engineering stated the following: Of waste or any slope? Can soil slope exceed 33 1/3%?

RESPONSE: No covered slopes can exceed 33 1/3%. No changes have been made to the rule as a result of this comment.

COMMENT #97. 10 CSR 80-3.010(17)(B)2.A. Ms. Anastasia Welch with SCS Engineering stated the following: Fertilizer rate will vary with soil used and the time frame which it has been exposed.

RESPONSE: Fertilizing should be detailed in the closure plan and can be based on soil fertility testing. No changes have been made to the rule as a result of this comment.

COMMENT #98. 10 CSR 80-3.010(17)(B)2.A. A department staff member requested that "include" be changed to "including."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #99. 10 CSR 80-3.010(17)(B)3.B. Ms. Renee Trenshaw with SCS Engineering stated the following: Specific design criteria for drainage layer performance?

RESPONSE: Specific design criteria is to be determined by the applicant. No changes have been made to the rule as a result of this comment.

COMMENT #100. 10 CSR 80-3.010(17)(C)1. A department staff member requested that "methodologies" be changed to "method."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #101. 10 CSR 80-3.010(17)(C)3.A. A department staff member requested that "storm water" be changed to "stormwater."

RESPONSE AND EXPLANATION OF CHANGE: The department agrees with the comment and has incorporated the requested change.

COMMENT #102. 10 CSR 80-3.010(17)(C). Ms. Renee Trenshaw with SCS Engineering stated the following: What is compacted cover? Any requirements on this?

RESPONSE: This is normally considered to be a site available soil. Other forms of intermediate cover could be considered.

COMMENT #103. 10 CSR 80-3.010(17)(C)9. Ms. Renee Trenshaw with SCS Engineering stated the following: It seems that additional information regarding "equivalent" should be provided in the regulation with regard to alternative final cover systems. As an example consider longevity, the assumption that prescriptive covers will last forever after post-closure is not accurate and difficult to quantify. How does one demonstrate equivalence in that regard?

RESPONSE: The equivalency demonstration is left to the applicant and consulting engineer in consultation with and approval by the department. No changes have been made to the rule as a result of this comment.

COMMENT #104. 10 CSR 80-3.010(19)(J). Ms. Renee Trenshaw with SCS Engineering stated the following: Extinguished? Is this the right word? what if you cannot extinguished it? Is there a better way to say this? What if you try to extinguish it but it continues to smother. Potential regulatory violation.

RESPONSE: The goal is to extinguish immediately. No changes have been made to the rule as a result of this comment.

COMMENT #105. 10 CSR 80-3.010(20)(A)2. Ms. Renee Trenshaw with SCS Engineering stated the following: Can these be kept electronically? Do they have to keep ALL files now? For how long? Does not explain what is required to keep for 5 years and what is required to be kept indefinitely. Need a time frame on when we can get rid of things.

RESPONSE: (20)(A)2. States that upon department approval, current records may be stored electronically. At a minimum records listed under (20)(A)3. are required to be kept for the life of the landfill. No changes have been made to the rule as a result of this comment.

COMMENT #106. 10 CSR 80-3.010(20)(A)3.F. Ms. Renee Trenshaw with SCS Engineering stated the following: So the topographic maps need to be done in odd years?

RESPONSE: Yes, topographic maps need to be completed in odd years. No changes have been made to the rule as a result of this comment.

COMMENT #107. 10 CSR 80-3.010(22). Mr. Paul Calamita with Aqualaw stated: One of our principal points, that being that closure and post-closure requirements, rather than being in Chapter 3, section 3.010, are in Chapter 2. Because certain special wastes may be sufficiently inert or have other unique characteristics sufficient to justify closure/post-closure differences from municipal waste landfill permitting, we suggested specific cross reference language to authorize provisions different from those in 2.020.

Because of the unique characteristics of many special waste landfills, we request that DNR either (1) use the alternate wording provided below, or (2) otherwise confirm that the special waste landfill permitting may address differences in closure and post-closure. We also ask that DNR include the minor clarification to section (22)(B) noted below.

(A) Should an owner/operator request to permit a special waste landfill, the owner/operator shall include a list identifying what sections of this rule and as appropriate rule 2.020 are and are not applicable . . .

(B) The department may require any special waste landfill owner/operator to design, construct, operate, and maintain the landfill in accordance with any sanitary landfill requirement necessary to ensure the protection of human health and the environment.

RESPONSE: Special waste landfills will be handled on a case-by-case basis that is dependent upon the types of waste placed, the facility design, and the facility operation.

10 CSR 80-3.010 Design and Operation

PURPOSE: This rule pertains to the design and operation of solid waste disposal areas, specifically sanitary, demolition, and special waste landfills. This rule addresses the siting, groundwater monitoring, gas monitoring, liner, and cover design, seismic design, and the design and operation of leachate collection systems and methane recovery systems. This rule incorporates American Society for Testing and Materials International standards, and the Environmental Protection Agency standards by reference and sets forth additional state standards.

(1) General Provisions.

(A) This rule is intended to provide for sanitary, demolition, and special waste landfill operations that will have minimal impact on the environment. The rule sets forth requirements and the method of sat-

isfactory compliance to ensure that the design, construction, and operation of these landfills will protect human health and meet applicable environmental standards. If techniques other than those listed are used, it is the obligation of the landfill owner/operator to demonstrate to the department in advance that the techniques to be employed will satisfy the requirements. Procedures for the techniques shall be submitted to the department in writing and approved by the department in writing prior to being employed. Notwithstanding any other provision of these rules, when it is found necessary, the department may require by permit amendment changes in design and/or operation to protect human health and the environment. The department may require changes in design, operation, or maintenance of any operating or closed landfill to meet the objectives of the subsections of this chapter.

(B) This rule applies to new sanitary, demolition, and special waste landfill construction and operating permits issued on or after the effective date of this rule and those facilities in operation on the effective date of this rule. Prior to January 1, 2020, all operating sanitary, demolition, and special waste landfills shall demonstrate compliance with 10 CSR 80-3.010. Construction and operation of landfills shall be conducted in accordance with the engineering plans and specifications approved by the department. Approved permit documents shall be available on site per section (20). Notwithstanding any other provision of these rules, when it is found necessary, the department may require by permit amendment changes in design and/or operation to protect human health and the environment.

(C) The standards set forth in ASTM, ASTM method D422-63(2007), 2007, ASTM Test D2487-11, and ASTM D6391-11 Standard Test Method, 2011, ASTM D-5084-16, 2016, ASTM D1140-17 and ASTM method D4318-17, 2017, as published by ASTM International, West Conshohocken, PA 19428, are incorporated by reference. The standards set forth in the Methods Innovation Rule, 2005, and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, 2009 as published by the EPA, Washington, D. C. 20004 are incorporated by reference. The standards set forth in the Engineer Manual 1110-2-1906, as published by the Department of the Army Office of the Chief Engineers, Washington, D. C. 20314 are incorporated by reference. This rule does not incorporate any subsequent amendments or additions.

(2) Solid Wastes Accepted and Excluded.

(A) Acceptable Wastes. To determine whether a waste may be accepted for disposal, the landfill owner/operator shall consider the landfill design, material, and chemical properties of the landfill liner and environmental control systems, the quantity of the waste, the physical and chemical characteristics of the waste, the equipment and operational procedures to be utilized, the safety of the landfill employees and the general public using the landfill, and the protection of human health and the environment.

1. The landfill's design and operating plans submitted to the department for approval shall specify the following:

A. The types of waste to be accepted for disposal;

B. The handling and disposal procedures for each type of waste; and

C. The procedures to be used to review and approve special waste disposal requests at a sanitary landfill, determine when laboratory testing of special waste will be required, determine whether special handling of the waste may be required, and inspect the waste upon arrival at the landfill for disposal.

2. Disposal of special wastes which have been approved in a sanitary landfill's construction permit shall be conducted in accordance with the approved design and operating plans along with any additional procedures determined by the department to be necessary to protect human health and the environment.

3. For each special waste accepted for disposal—

A. The landfill owner/operator shall require the waste generator to complete a special waste disposal request form provided by the department;

B. The landfill owner/operator shall require the waste generator to provide all information necessary to describe the source and physical and chemical characteristics of the special waste, including laboratory test results on representative samples, prior to accepting the material for disposal. The information shall be attached to the request form;

C. The form shall be signed by the waste generator and the owner/operator of the landfill prior to acceptance and disposal of the waste; and

D. The completed request form and supporting information shall be retained on site in the landfill's operating record in accordance with section (20).

4. The owner/operator shall inspect each load of special waste upon its arrival at the landfill for disposal. The inspection shall be in a manner necessary to ensure that unacceptable and unapproved wastes do not enter the landfill.

5. To the extent practical, special waste shall be managed in a manner that minimizes the disruption of normal landfill operations.

6. The owner/operator shall ensure that each special waste is segregated from other waste with which it could be chemically incompatible.

7. If the landfill owner/operator anticipates accepting more than one (1) load of a specific type of special waste from the same source in a relatively short period of time, or the waste will be accepted from the same source on a routine, ongoing basis, only one (1) special waste disposal request form is required. However, if laboratory testing of the waste was initially required, the owner/operator must obtain yearly confirmation through testing or other documentation that the contaminant levels of concern have not increased or new contaminants of concern have not emerged. Should test results change a new special waste disposal request form shall be completed and kept on file.

8. Any special waste that requires handling procedures significantly different from typical municipal solid waste shall be handled in accordance with the landfill operating manual and any special procedures established by the landfill operator during the special waste approval process. The department reserves the right to require revisions to the landfill operating manual and landfill operations for special waste that may adversely affect the health and safety of landfill personnel or may be extremely difficult to handle.

9. Waste generated from the clean-up of a former manufactured gas plant (FMGP) site is considered to be a special waste. Prior to accepting FMGP waste for disposal, the landfill owner/operator shall have representative samples of the waste tested using the SW-846 test method 1311 toxicity characteristic leaching procedure (TCLP), Waste Management System: Testing and Monitoring Activities: Final Rule: Methods Innovation Rule (MIR) 2005. The waste shall not be accepted for disposal unless the concentrations of the following contaminants are below the regulatory levels listed in 40 CFR 261.24(b), Table 1:

- A. All metals listed in Table 1, with the exception of barium;
- B. Cresol, o-cresol, m-cresol, and p-cresol; and
- C. Benzene.

10. Bulky waste and other waste that is accepted at the landfill and has the potential to puncture the membrane liner shall be excluded from the first layer of waste placed above a composite liner.

11. Large quantities of containerized liquids shall be solidified prior to disposal at a sanitary landfill. Bulk containerized or non-containerized liquid waste is banned from being placed in a sanitary landfill unless—

- A. The waste is household waste other than septic waste; or
- B. The waste is leachate or gas condensate generated within the permitted boundary and is placed in the on-site sanitary landfill designed with a composite liner and leachate collection system as described in this rule, and the facility has departmental approval to recirculate leachate or gas condensate.

12. Radioactive material used in or resulting from medical processes or liquid radioactive material may be accepted if the mate-

rial has a half-life of less than thirty (30) days.

13. Naturally Occurring Radioactive Material (NORM) may be accepted with prior written approval from the department.

14. Accelerator-produced radioisotopes with a half-life of less than thirty (30) days may be accepted.

15. Smoke detectors, electron tubes, luminous wristwatches and clocks, luminous lock illuminators, luminous automobile shift quadrants, luminous marine compasses, and luminous thermostat dials and pointers in quantities less than ten (10) items from any single source may be accepted.

16. For a demolition landfill, the owner/operator shall prominently display a sign at the entrance of the landfill that lists the wastes that are approved for acceptance, in accordance with this rule and the landfill's approved operations plan.

(B) Excluded Wastes.

1. Any wastes not specifically listed in a proposed permit or a modification to an existing permit and approved by the department are excluded from disposal. The owner/operator shall describe in the operating plan of the sanitary, demolition, or special waste landfills the procedures for screening and removing excluded wastes, including, but not limited to:

A. At a minimum, random inspections of incoming waste loads unless the owner/operator takes other steps to ensure that incoming solid wastes do not contain wastes excluded from disposal at the landfill;

B. Records of any load inspections; and

C. Procedures that will be implemented to train appropriate landfill personnel in the identification and proper handling of radioactive materials, regulated hazardous waste, infectious waste, asbestos containing material, and other waste prohibited from disposal.

2. The owner/operator shall screen and inspect loads of incoming waste per the approved operations plan and notify the department immediately upon receiving any of the following types of excluded waste at the landfill:

A. Regulated hazardous waste;

B. Radioactive materials;

C. Regulated quantities of polychlorinated-biphenyls (PCB);

D. Explosives;

E. Highly flammable or volatile substances;

F. Any regulated asbestos containing material (RACM) that has been improperly transported to the site, such as RACM delivered to the landfill in improper packaging or containers, without proper shipment records, or RACM that has otherwise been transported in violation of the 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos (2004); or

G. Infectious waste.

3. For a sanitary landfill, the owner/operator shall prominently display a sign at the site entrance stating the following about excluded wastes: "Regulated hazardous waste, radioactive materials, polychlorinated biphenyls (PCBs), bulk liquids, highly flammable or volatile substances, septic tank pumpings, major appliances, waste oil, lead-acid batteries, whole scrap tires, yard waste, explosives, and regulated infectious waste are excluded from disposal."

(3) Site Selection.

(A) Prior to submitting an application for a construction permit for a new sanitary, demolition, or special waste landfill or a horizontal expansion of an existing landfill, the owner shall perform an evaluation of the proposed site and surrounding area, and a study of the geologic and hydrologic conditions at that site location. Applications for a landfill construction permit received on or after the effective date of this rule shall document compliance with all applicable siting restriction requirements contained in paragraphs (3)(B)1. through 7. of this rule for sanitary landfills and (3)(B)2. through 7. of this rule for demolition and special waste landfills.

(B) Location Restrictions.

1. Airport safety.

A. Owners/operators of sanitary landfills that are located within ten thousand feet (10,000') of any airport runway end used by turbojet aircraft or within five thousand feet (5,000') of any airport runway end used by only piston-type aircraft shall demonstrate to the department that the sanitary landfills are designed and operated so that the landfill does not create or pose a bird hazard to aircraft.

B. Owners/operators proposing to site new sanitary landfills and horizontal expansions of existing sanitary landfills within a five-(5-) mile radius of any airport runway end used by turbojet aircraft or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration (FAA).

2. Wetlands.

A. Landfills shall not be located in wetlands, unless the owner/operator makes the following demonstrations to the department:

(I) The presumption that a practicable alternative to the proposed landfill is available which does not involve wetlands is clearly rebutted;

(II) The construction and operation of the landfill will not:

(a) Cause or contribute to violations of any applicable state water quality standard;

(b) Violate any applicable toxic effluent standard or prohibition under section 307 of the federal Clean Water Act;

(c) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973; and

(d) Violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(III) The landfill will not cause or contribute to significant degradation of wetlands. The owner/operator shall demonstrate the integrity of the landfill and its ability to protect ecological resources by addressing the following factors:

(a) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the landfill;

(b) Erosion, stability, and migration potential of dredged and fill materials used to support the landfill;

(c) The volume and chemical nature of the waste disposed of in the landfill;

(d) Impacts on fish, wildlife, and other aquatic resources and their habitat from potential release of solid waste from the landfill;

(e) The potential effects of contamination of the wetland and the resulting impacts on the environment; and

(f) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

(IV) Steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by subparagraph (3)(B)2. A. of this rule, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (for example, restoration of existing degraded wetlands or creation of man-made wetlands); and

(V) The requirements of paragraph (3)(B)2. may be satisfied by the owner/operator obtaining a United States Army Corps of Engineers permit for construction in a wetland or by demonstrating that the wetland is not regulated by the United States Army Corps of Engineers, or other appropriate agency.

3. Floodplains. Owners/operators of landfills located within the one hundred-(100-) year floodplains shall demonstrate to the department that the landfill will not restrict the flow of the one hundred-(100-) year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health or the environment.

4. Fault Areas. Landfills located in the seismic impact zone

shall not be located within two hundred feet (200') of a fault that has had displacement in Holocene time unless that owner/operator demonstrates to the department that an alternative setback distance of less than two hundred feet (200') will prevent damage to the structural integrity of the landfill and will be protective of human health and the environment.

5. Seismic Impact Zones. Landfills shall not be located in seismic impact zones, unless the owner/operator demonstrates to the department that all containment structures, including liners, final covers, leachate collection systems, and surface water control systems, are designed to resist permanent cumulative earthquake displacements not to be greater than six inches (6"), resulting from the maximum credible Holocene time earthquake event's acceleration versus time history.

6. Unstable Areas. Landfills located in an unstable area shall demonstrate to the department that the landfill's design ensures that the integrity of the structural components of the landfill will not be disrupted. The owner/operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

A. On-site or local rock or soil conditions that may result in failure or significant differential settling;

B. On-site or local geologic or geomorphologic features; and

C. On-site or local human-made features or events (both surface and subsurface).

7. Placement Above the Uppermost Aquifer. Landfills permitted after the effective date of this rule, including horizontal expansions, must be constructed with a base (i.e., the subgrade prior to placing the compacted clay liner) that is located above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the landfill and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table).

(4) Design and Operations per the Permit Application. Plans, addendums, as-built drawings, or other documents which describe the design, construction, operation, or closure of a sanitary, demolition, or special waste landfill, or which request an operating permit modification for the landfill shall be prepared, sealed, and signed by a professional engineer and submitted to the department for review and approval. Procedures for testing, site evaluation and preparation, and construction of the landfill shall be included with the application and performed as described in the plans approved by the department. Plans, addendums, as-built drawings, or other documents which describe the design, construction, operation, or closure of a landfill, or which request an operating permit modification for the landfill shall be kept available for use and reference on-site.

(A) Plans accompanying the permit application for a sanitary, demolition, or special waste landfill that are submitted to the department shall include:

1. A map showing initial and proposed topographies at contour intervals of five feet (5') or less utilizing a scale of not less than one inch (1") equal to one hundred feet (100'). If the entire site cannot be illustrated on one (1) plan sheet, an additional map with appropriate horizontal and vertical scales that allows the site to be shown on one (1) standard plan sheet is required;

2. A map having a scale of not less than one inch (1") equals four hundred feet (400') identifying the land use and zoning within one-fourth (1/4) mile of the landfill including location of all known residences, buildings, wells, water courses, springs, lakes, rock outcroppings, caves, sinkholes, and soil or rock borings. All known electric, gas, water, sewer, and other utility easements or lines that are located on, under or over the landfill shall be shown on the map;

3. A description of the projected use of the closed landfill. In addition to maintenance programs and provisions, where necessary for monitoring and controlling decomposition gases and leachate, address the following ultimate use criteria:

A. Structures. Enclosed structures are not allowed on the

waste footprint of a landfill. If major structures are to be built outside of waste within the permitted area of any landfill, the structure must be approved by the department. A professional engineer shall approve the design and construction of the structure, including provisions for protection against potential hazards of solid waste decomposition gases; and

B. Other uses. Appropriate design, construction and operating provisions for the landfill shall be specified;

4. An evaluation of the characteristics and quantity of available soil on or off site with respect to its suitability for landfill construction and operation. The engineering properties and quantity estimates of the soil on site shall be discussed and include:

A. Texture. Sieve and hydrometer analyses shall be performed to determine grain size distribution of representative soil samples. Texture may be determined by using the procedures described in ASTM method D422-63(2007) ASTM International 100 Barr Harbor, West Conshohocken, PA 19428, Publication date 2007 or the procedures described in Appendix D of Engineer Manual 1110-2-1906, prepared by the United States Army Corps of Engineers;

B. Plasticity. The liquid limit, plastic limit and plasticity index of representative soil samples shall be determined. Plasticity may be determined by using the procedures described in ASTM method D4318-17 ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428 Publication date 2017 or the procedures described in Appendix III of Engineer Manual 1110-2-1906, prepared by the United States Army Corps of Engineers;

C. Hydraulic conductivity. Perform laboratory hydraulic conductivity tests upon undisturbed representative soil samples using a flexible wall permeameter (ASTM D-5084-16) ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428 Publication date 2016. If an aquifer is found to be laterally continuous across the anticipated limit of the proposed landfill, the hydraulic conductivity of each significant continuous geologic unit must be determined. Examples of accepted field tests are slug or pump tests which isolate the geologic unit of interest; and

D. Areal extent and depth. Determine the areal extent and depth of soil suitable for landfill construction, clearly describing any variations in soil depth.

5. Provisions for a minimum one hundred foot (100')-buffer zone between the outer edge of the landfill liner and any property line(s) or any right-of-way(s) of adjoining road(s) when the property line(s) is inside the right-of-way(s) to provide room for assessment and/or corrective actions;

6. An operating manual describing the various tasks performed during a typical shift, including routine and regular tasks (i.e., monitoring and inspections) performed throughout the life of the landfill;

7. A demonstration of how adverse geologic and hydrologic conditions may be altered or compensated for via surface water drainage diversion, underdrains, sumps, and other structural components, and detail all necessary site alterations in the plans;

8. Site-specific precipitation, evapotranspiration and climatological conditions; and

9. All computer models used in the landfill design, and list the limitations and assumptions of each model.

(B) Stability analyses shall be performed for all stages of landfill construction, all liner and leachate system components, and on all final cover system components, as well as an evaluation of the effect of waste settlement on the final cover system components, side slope liner system components, and surface water management system components. Results shall be submitted from all analyses and evaluations.

(C) Settlement and bearing capacity analysis shall be performed on the in-place foundation material beneath the disposal area, and the results submitted in the design plan.

(D) Analyze the effect of foundation material settlement on the liner and leachate collection system, and include the analytical results in the plan.

(E) Analyze leachate collection pipe material and drainage media

to demonstrate that these components possess structural strength to support maximum loads imposed by overlying waste materials and equipment, and include the results in the plan.

(F) Sump and side slope riser designs must consist of at least SDR 17 piping and be not less than eighteen inches (18") in diameter.

(G) Submit typical phase development drawings with the plan.

(H) Submit proposed cross-section drawings with the application that show groundwater elevations in relation to liner and final landfill height.

(I) Liner System Requirement. All landfills applying for a construction permit after the effective date of this rule shall have a composite liner as follows:

1. A composite liner must consist of two (2) components; the upper component consisting of, at a minimum, a thirty (30) mil geomembrane liner (GM), and the lower component consisting of at least a two foot (2') layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec). GM components consisting of high density polyethylene (HDPE) must be at least sixty (60) mil thick. The GM or upper liner component must be installed in direct and uniform contact with the compacted soil or lower liner component. The compacted soil liner component at a minimum shall be—

A. Constructed of six to eight inch (6–8") loose lifts of unfrozen soil;

B. Compacted to ranges of density and moisture such that are shown to provide for the liner to have a hydraulic conductivity no more than 1×10^{-7} cm/sec.;

C. Protected from the adverse effects of desiccation or freeze/thaw cycles after construction, but prior to placement of waste;

D. Composed of soils that meet following minimum specifications:

(I) Be classified under the Unified Soil Classification Systems as CL, CH, or SC (ASTM Test D2487-11) ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428 Publication date 2011;

(II) Allow more than thirty percent (30%) passing a number two hundred (200) sieve;

(III) Have a liquid limit equal to or greater than twenty (20) (ASTM Test D4318-17) ASTM International, 100 Barr Harbor West Conshohocken, PA 19428, Publication date 2017; and

(IV) Have a plasticity index equal to or greater than ten (10) (ASTM Test D4318-17) ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428, Publication date 2017; and

E. Installed so that the minimum bottom slope in any direction of flow is at least one percent (1%).

2. A test pad shall be constructed at the site and tested to verify that the proposed soils, construction equipment, and construction and quality control (QC) procedures are adequate to ensure that the soil component of the composite liner system will meet the requirements listed above.

A. Quality assurance (QA)/QC procedures and construction methods to be used during test pad construction shall be described in detail in the approved engineering report, and shall be identical to those proposed for liner construction with the following additions:

(I) At least two (2) laboratory hydraulic conductivity tests shall be performed on undisturbed samples of the completed test pad;

(II) At least five (5), with one (1) in-situ, hydraulic conductivity tests (ASTM D6391-11 Standard Test Method for Field Measurement of Hydraulic Conductivity Using Borehole Infiltration, ASTM International, 100 Barr Harbor West Conshohocken, PA 19428, Publication date 2011), shall be performed on the completed test pad; and

(III) At least two (2) test pits shall be excavated into the completed test pad to observe inter-lift bonding.

B. If test pad construction and testing shows that the proposed methods are not sufficient to meet the requirements of this rule, a new test pad shall be constructed using revised procedures approved

by the department.

C. For phased construction, only one (1) test pad will be required for a particular soil source, soil type, and equipment type.

D. A final report shall be submitted to the department that describes in detail the construction and QC procedures which were used to achieve satisfactory test pad performance.

(I) The report must be approved by the department prior to beginning construction of the soil component of the composite liner system in the disposal area.

(II) The report shall serve as guidance for construction of the soil component of the composite liner system.

E. The requirement for a test pad may be waived provided the applicant can demonstrate to the department's satisfaction the construction and QC procedures are identical to those described in the approved engineering report and will result in construction of a liner which meets the requirements of this rule, and the soils proposed for liner construction meet the following minimum specifications:

(I) Have a plasticity index greater than fifteen (15) and less than thirty (30) (ASTM test D4318-17 ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428, Publication date 2017);

(II) Allow more than fifty percent (50%) passage through a number two hundred (200) sieve (ASTM D1140-17 ASTM International, 100 Barr Harbor, West Conshohocken, PA 19428, Publication date 2017); and

(III) Allow less than ten percent (10%) by weight particle sizes greater than two millimeters (2 mm).

(J) Requests for using Alternative Composite Liners will be considered for approval on a site-by-site basis.

(K) The leachate collection and removal system at the landfill shall be designed, constructed, operated, and maintained to collect and remove leachate from the landfill as long as leachate is being generated.

1. The leachate collection and removal system shall be—

A. Designed and operated to maintain less than a thirty (30) centimeter (1 foot) depth of leachate over the liner system;

B. Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover materials, and equipment used at the landfill; and

C. Designed and operated to minimize clogging during the active life and post-closure care period.

2. Leachate flow quantities shall be estimated and the method(s) of leachate management outlined in the application submittal.

3. Leachate storage facilities shall comply with all currently applicable requirements of the Missouri Clean Water Law and corresponding rules.

4. Minimum design criteria for leachate collection systems shall include the following:

A. Ponds and/or tanks of sufficient capacity to store, equalize flow to disposal systems, and allow system/operating flexibility;

B. Collection systems designed and operated so that any leachate formed will flow by gravity into collection areas from which the leachate can be removed, treated if necessary, and disposed;

C. That proposed leachate management by application on the working face or by recirculation within the permitted fill area shall be conducted in accordance with an approved engineering method and designed, constructed, and operated to minimize off-site impacts; and

D. Any leachate collection system open to precipitation must be designed to prevent discharge during a twenty-four (24) hour, twenty-five (25) year storm event. Plans shall include the calculations detailing the design. At a minimum, sites using leachate pond(s) shall maintain an operational freeboard of no less than two feet (2') during normal operation, with a minimum freeboard of no less than one foot (1') after a twenty-four (24) hour, twenty-five (25) year storm event.

5. Design plans shall include a description of leachate manage-

ment activities by the landfill owner/operator under normal operating conditions. The plans shall also describe actions the landfill owner/operator shall take when the emergency level of less than two feet (2') of freeboard occurs in any pond, including at a minimum, how leachate will be removed from the pond and transported to a treatment or disposal facility, if necessary, a description of any testing requirements necessary prior to disposal, and a schedule by which time the leachate levels will be returned to the normal operating range, with at least two feet (2') of freeboard; the plans shall also include a contingency plan for leachate management in the event the on-site system becomes inoperable and leachate must be taken off-site for proper disposal.

(5) Quality Assurance/Quality Control (QA/QC).

(A) The construction, operation, corrective action, and closure of the sanitary, demolition, or special waste landfill shall include QA/QC measures to ensure compliance with approved plans and all applicable federal, state, and local requirements. The permittee shall be responsible for ensuring that the QA/QC supervision is conducted by a qualified professional.

(B) QA/QC plans shall include a detailed description of the QA/QC testing procedures that will be used for every major phase of construction. This description must include, at a minimum, the frequency of inspections, field testing, laboratory testing, equipment to be utilized, the limits for test failure, a description of the procedures to be used upon test failure, and a detailed procedure for the reporting and recording of QA/QC activities and testing results.

1. The QA/QC plan shall include the following components:

A. Leachate collection system. Reports prepared or approved by the professional engineer transmitting the results of the QA/QC procedures and stating that the leachate collection system was constructed according to the approved design or describing any deviations from the approved design; and

B. Liner. The liner specified by section (4) of this rule shall be constructed in accordance with the approved design specifications. The QA/QC procedures shall include:

(I) Evidence that the liner material(s) utilized meet(s) the minimum design specifications;

(II) Evidence that field construction techniques meet the minimum design specifications (for example, soil density test);

(III) Evidence that the liner construction is proceeding as designed through routine verification observations using a predetermined system of horizontal and vertical survey controls; and

(IV) Oversight of the liner construction and QA/QC procedures by a qualified professional, including submission of reports to transmit the results of the QA/QC procedures. Additionally, the report shall state that the liner was constructed according to design and describe any deviations from the approved design.

(C) At a minimum, QA/QC testing shall include:

1. Testing of each lift of the soil component of the final cover and landfill liner for field density and field moisture once per every ten thousand (10,000) square feet and providing relatively uniform coverage over the landfill surface;

2. Laboratory testing for Atterberg Limits (ASTM D-4318) and hydraulic conductivity of the soil used for liner construction once for every five thousand (5,000) cubic yards excavated;

3. Routine visual classification of borrow soil during landfill construction with oversight by an approving professional engineer;

4. Measuring the elevations of the final cover and the landfill liner on a maximum spacing of one hundred-foot (100') centers and at one hundred-foot (100') intervals along each line where a break in slope occurs;

A. Landfill liner. Measuring the elevations of the top and bottom of both the landfill liner and leachate collection systems;

B. Final cover. Measuring the elevations of the top and bottom of the landfill cover—

(I) The compacted clay layer; and

(II) The soil layer supporting vegetative growth;

5. For a geomembrane:

A. Nondestructive testing of all seams of the geomembrane in the landfill liner and final cover; and

B. Random destructive testing of the seams with results consistent with Geosynthetic Institute (GM 19a or GM 19b) 2017 of the geomembrane liner in the landfill liner and final cover on an average frequency of at least one (1) every five hundred (500) linear feet of seam.

(D) All testing shall be performed with oversight by an approving professional engineer for every major phase of construction.

(E) All QA/QC reports shall be reviewed, approved, and submitted by a professional engineer.

(6) Survey Control. Benchmarks, horizontal controls, and boundary markers at the landfill shall be established by a land surveyor registered in the state of Missouri to check and mark the location and elevations of the landfill ensuring compliance with design plans, phasing plans, and applicable conditions within the approved construction permit.

(A) At a minimum, a survey of the entire permitted acreage shall be conducted in accordance with the current Minimum Standards for Property Boundary Surveys 2 CSR 90 and include the establishment of a permanent monument used as a benchmark.

(B) All site survey information shall be reported in State Plane Coordinate System and North America Vertical Datum 1988.

(7) Water Quality.

(A) All permits and approvals necessary to comply with requirements of the Missouri Clean Water Law and corresponding rules shall be obtained from the department prior to commencement of operations at any landfill.

(B) The owner/operator of an existing or new landfill or any horizontal expansion shall design, construct, operate, and maintain—

1. On-site drainage, collection and control structures and channels for all stages of development to accommodate, at a minimum, the stormwater volume from a twenty-four (24)-hour, twenty-five (25)-year storm. The engineering calculations and assumptions shall be included and explained in the engineering report submitted to the department with the permit application; and

2. Surface water runoff diversion and control structures to minimize infiltration, erosion, ponding, run-on at the working face, and off-site transport of water and sediment (i.e. through ditches, berms, grading, etc.);

(C) The quantity of water coming in contact with solid waste shall be minimized by the daily operational practices.

1. Water which comes in temporary contact with the waste shall be managed in accordance with the approved stormwater management plans.

2. Water that passes through or emerges from waste and contains soluble, suspended, or miscible materials removed from such waste shall be managed in accordance with the approved leachate management plan.

(8) Leachate Management.

(A) Leachate collection media designated for use in the system must be of a material and placed in a manner that will not damage the liner (i.e. no sharp rocks and wires from tire chips).

(B) Leachate dispersion on the working face for purposes of waste compaction and densification is allowed in accordance with operational plans approved by the department.

(C) Leachate generated by the landfill shall be controlled on site, collected in a manner to protect the integrity of any containment system, and not be allowed to—

1. Enter the stormwater infrastructure, including ponds, where it will mix with stormwater;

2. Overtop its containment basin;

3. Discharge off of the landfill property;

4. Discharge into the waters of the state, except as allowed in the approved plans and through a permit under the Missouri Clean Water

Law and corresponding rules; and

5. Blow or drift off the lined areas of the facility from spray dispersal, or mist evaporative methods employed for leachate management.

(9) Groundwater Monitoring.

(A) The owner/operator of a sanitary, demolition, or special waste landfill shall implement a groundwater monitoring program capable of determining the landfill's impact on the quality of groundwater underlying the landfill.

1. Landfills permitted on or after the effective date of this rule must be in compliance with all of the groundwater monitoring requirements of this section before an operating permit is issued.

2. The department may require landfills permitted prior to the effective date of this rule to comply with part or all of this section, if it is determined necessary by the department to protect human health or the environment.

3. The owner/operator of a landfill shall establish the potential for migration of fluid generated by the landfill into the groundwater by an evaluation of—

A. A water balance of precipitation, evapotranspiration, runoff, and infiltration;

B. At a minimum, the following characteristics:

(I) Geologic materials;

(II) Description of soil and bedrock to a depth adequate to allow evaluation of water quality protection provided by the soil and bedrock;

(III) Groundwater elevation;

(IV) Proposed separation between the lowest point of the lowest cell and the maximum water table elevation;

(V) Proximity of the landfill to water supply wells or surface water;

(VI) Rate and direction of groundwater flow; and

(VII) Current and projected use of water resources in the potential zone of influence of the landfill.

4. Groundwater monitoring wells shall be installed so that the number, spacing, and depths of the wells shall be determined based upon site-specific technical information that shall include a thorough characterization of—

A. Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and

B. Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, and porosities. If the lower confining unit is one hundred feet (100') or more below the top of the uppermost aquifer, borings verifying the lower confining layer will not be required. The upper fifty feet (50') of uppermost aquifer will be characterized.

5. Groundwater monitoring wells shall be capable of yielding groundwater samples for analysis, effectively monitoring the site, and consisting of at least one (1) well installed hydraulically up gradient; that is, in the direction of increasing static head from the landfill and at least three (3) wells installed hydraulically downgradient; that is, in the direction of decreasing hydraulic head from the landfill. The numbers, locations, and depths shall be sufficient to yield groundwater samples that are—

A. Representative of background water quality in the groundwater near the landfill;

B. Capable of detecting any significant amounts of fluids generated by the landfill that migrate from the landfill to the groundwater; and

C. Monitoring wells, or clusters of monitoring wells, shall be capable at a minimum, of monitoring all saturated zones down to and including the uppermost aquifer. The maximum distance a monitoring well may be located from the waste boundary is one hundred fifty

meters (150 m) or four hundred ninety-two feet (492').

6. The design and installation of groundwater monitoring well systems shall be observed, supervised, and certified by a qualified groundwater scientist and approved by the department.

(B) Sampling and Reporting.

1. Each landfill's groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results provide an accurate representation of groundwater quality at monitoring wells installed in compliance with this section. The owner/operator shall submit the sampling and analysis program to the department for approval. The program shall include procedures and techniques for—

- A. Monitoring well maintenance;
- B. Monitoring well redevelopment;
- C. Monitoring well depth measurement and hydraulic levels;
- D. Monitoring well purging and sampling utilizing dedicated

equipment;

- E. Equipment calibration;
- F. Decontamination and field blanks;
- G. Sample and duplicate sample collection;
- H. Sample preservation;
- I. Sample labeling;
- J. Sample handling;
- K. Field measurements;
- L. Field documentation;
- M. Chain of custody control;
- N. Sample shipment;
- O. Analytical procedures;
- P. QA/QC control—field and laboratory; and
- Q. Statistical testing strategy for each parameter's concentra-

tions.

2. Each groundwater monitoring program shall include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure monitoring constituents in groundwater samples, as required by the Detection Monitoring List in Appendix I or an alternative detection monitoring list approved by the department, that includes the anticipated parameters of concern for the specific facility. Analysis shall be performed on unfiltered samples.

3. The owner/operator shall determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same solid waste disposal area shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow direction.

(C) Baseline/Background Monitoring.

1. The owner/operator of a new sanitary or demolition landfill shall establish background groundwater quality for each of the monitoring constituents required in Appendix I for sanitary landfills and Appendix III for demolition landfills.

2. To establish background, a minimum of eight (8) quarterly samples of statistically independent sample data shall be obtained and analyzed from all monitoring wells. Additional background samples may be required based upon the statistical methodology used.

3. Landfills may begin accepting waste upon completion of a minimum of four (4) independent baseline/background sampling events of constituents in Appendix I for sanitary landfills and Appendix III for demolition landfills.

4. Background concentrations also shall be established for monitoring constituents listed in Appendix II for sanitary landfills and Appendix IV for demolition landfills, and two (2) sets of samples shall be obtained prior to accepting waste. If constituents in Appendix II for sanitary landfills and Appendix IV for demolition landfills are not detected after two (2) background events, the background concentrations may be established as the detection limit for those organic constituents.

(D) Detection Monitoring.

1. The owner/operator of a sanitary or demolition landfill shall

obtain and analyze water samples from the groundwater monitoring wells during the months of March through May and September through November of each calendar year unless an alternative schedule is approved by the department. Sampling events must be six (6) months apart or an alternative schedule approved by the department.

2. The following constituents shall be analyzed each time a sample is obtained:

A. For a sanitary landfill, all constituents listed in Appendix I of this rule.

B. For a demolition landfill, all constituents listed in Appendix III of this rule.

C. The water level in each well shall be measured at the sanitary or demolition landfill at the time the sample is taken.

3. The sample results, and any results of statistical analysis determining statistically significant increases for any constituent shall be submitted to the department in one (1) report within ninety (90) days of when samples are collected. All groundwater data shall be submitted electronically, in the format and method as prescribed by the department.

4. In the case of all detection monitoring requirements previously listed, the department may specify an appropriate alternative frequency for repeated sampling and analysis during the active life of the landfill (including closure) and the post-closure period. The department may add additional constituents or delete constituents on a site-by-site basis through an evaluation of waste and leachate characteristics of the landfill.

(E) Statistical Method. The owner/operator of a sanitary, demolition, or special waste landfill shall specify statistical methods to be used in evaluating groundwater monitoring data for each monitoring constituent. These methods shall be in compliance with the EPA Unified Guidance, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities-March 2009.

(F) Response to Detection Monitoring Statistical Analysis.

1. If the statistical comparison shows a statistically significant increase (or pH change) over background, and attributes it to the landfill, the owner/operator of the sanitary, demolition, or special waste landfill shall submit this information to the department and conduct confirmation sampling during the next semiannual monitoring event.

2. If the results of the statistical analysis reveal a statistically significant increase (or pH change) over background, the owner/operator must demonstrate to the department within ninety (90) days that a source other than the landfill caused the contamination or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation. If the statistical methodology used by the owner/operator requires a confirmation sample or second confirmation sample, then the next required sampling event can be used as the confirmation sampling event.

(G) Assessment Monitoring.

1. If the owner/operator cannot make this demonstration to the department, the owner/operator shall submit a groundwater assessment monitoring plan and implement the plan upon approval by the department. The assessment monitoring plan shall specify the following:

- A. The number, location, and depth of wells;
- B. Sampling and analytical methods for the monitoring constituents listed in Appendix II or IV of this rule, as applicable;
- C. Evaluation procedures, including any use of previously gathered groundwater quality information;
- D. The rate and extent of migration of a contaminant plume in the groundwater; and
- E. The concentrations of the contaminant plume in the groundwater.

2. After obtaining the results from the initial or subsequent sampling events, the owner/operator shall—

- A. Within fourteen (14) days, advise the department which constituents have been detected;
- B. Within ninety (90) days, and on a semi-annual basis after

that, resample all wells and conduct analysis for all constituents listed in Appendix I and Appendix II that were detected during the initial or subsequent sampling events of assessment monitoring for the sanitary landfill, and Appendix III and IV that were detected during the initial or subsequent sampling events of assessment monitoring for the demolition landfill. Samples shall be analyzed for the complete list of Appendix II or Appendix IV constituents at least once every five (5) years for all wells in assessment monitoring. A minimum of one (1) sample from each well sampled shall be collected and analyzed during these sampling events;

C. Establish background concentrations for any new constituents detected during subsequent monitoring events;

D. Establish groundwater protection standards for all new constituents detected during subsequent monitoring events. For the purposes of this subparagraph, the site-specific groundwater protection standards shall be the maximum contaminant level (MCL) established under the National Primary Drinking Water Regulations sections 141.62 (June 29, 2004) and sections 141.66 (December 7, 2000), provided that if no MCL has been established or the site-specific background value is higher than the MCL, then the groundwater protection standards shall be the site-specific background value;

E. If the concentrations of all constituents listed in Appendix II or IV of this rule are shown to be at or below background levels as established in this rule for two (2) consecutive sampling periods, the owner/operator may reinstate detection monitoring;

F. If the concentrations of any constituents listed in Appendix II or IV of this rule are above background values, but all concentrations are below the groundwater protection standard established under this rule using the statistical procedures approved by the department for the landfill, the owner/operator shall notify the department and the department may require the owner/operator to—

- (I) Continue assessment monitoring; or
- (II) Develop a corrective action plan, or both;

G. If one (1) or more constituents listed in Appendix I, II, III, or IV of this rule are detected at levels above the groundwater protection standard, the owner/operator shall—

(I) Provide the department with a report assessing potential corrective actions as outlined in section (10);

(II) Characterize the nature and extent of the release by installing additional monitoring wells as necessary to determine the rate and extent of groundwater contamination, and notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of wells; and

(III) Continue assessment monitoring as per the groundwater quality assessment plan and implement the approved corrective action program specified in this rule; and

H. The results of implementation of the assessment monitoring program shall be submitted to the department at the end of each year or an alternate time period approved by the department.

(10) Corrective Action. Owners and operators of a sanitary, demolition, or special waste landfill that shows one (1) or more constituents listed in Appendix I, II, III, or IV of this rule being detected at levels above the groundwater protection standard as established, and determined to be a result of a release of leachate or landfill gas from the facility, shall in consultation with the department either proceed with corrective actions or submit a corrective action plan as outlined in subsections (10)(A) through (C).

(A) Assessment of Corrective Action(s).

1. Within ninety (90) days of finding that any of the constituents listed in Appendix II or IV of this rule have been detected at a statistically significant level exceeding the groundwater protection standards, the owner/operator shall initiate an investigation and assessment of potential corrective actions. This assessment shall be completed within a reasonable period of time, and a report describing the assessment of corrective actions shall be submitted to the department.

2. The owner/operator shall continue to monitor in accordance

with the assessment monitoring program as specified in this rule.

3. The assessment shall include an analysis of the effectiveness of potential corrective actions in meeting all of the requirements and objectives of the remedy as described in this rule, addressing at least the following:

A. The performance, reliability, ease of implementation, and potential impacts of appropriate potential corrective action(s), including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

B. The time required to begin and complete the action(s);

C. The costs of implementation; and

D. The institutional requirements such as state or local permit requirements or other environmental or human health requirements that may substantially affect implementation of the corrective action(s).

4. The owner/operator shall discuss the results of the corrective action(s) assessment, prior to the selection of a remedy, in a public meeting with interested and affected parties.

(B) Selection of Corrective Action(s).

1. Based on the results of the potential corrective action(s) assessment, the owner/operator shall propose a corrective action(s) plan. The owner/operator shall submit to the department, within fourteen (14) days of selecting a proposed corrective action(s) plan, a report describing the proposed corrective action(s) and how the proposed plan meets the standards of this rule.

2. Corrective action(s) shall—

A. Be protective of human health and the environment;

B. Attain the groundwater protection standard; and

C. Control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of constituents listed in Appendix I, II, III, or IV of this rule into the environment that may pose a threat to human health or the environment.

3. In proposing a corrective action, the owner/operator shall include the following evaluation factors:

A. The long- and short-term effectiveness and protectiveness of the potential action(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(I) Magnitude of reduction of existing risks;

(II) Magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of the proposed remedy;

(III) The type and degree of long-term management, including monitoring, operation, and maintenance;

(IV) Short-term risks that might be posed to the community, workers, or the environment during implementation of the corrective action(s), including potential threats to human health and the environment associated with excavation, transportation and redisposal, or containment;

(V) Time until full protection is achieved;

(VI) Potential for exposure of humans and environmental receptors to remaining waste, considering the potential threat to human health, and the environment associated with excavation, transportation, redisposal, or containment;

(VII) Long-term reliability of the engineering and institutional controls; and

(VIII) Potential need for replacement of the corrective action(s);

B. The effectiveness of the corrective action(s) in controlling the source to reduce further releases based on consideration of the following factors:

(I) The extent to which containment practices will reduce further releases; and

(II) The extent to which treatment technologies may be used;

C. The ease or difficulty of implementing the potential corrective action(s) based on consideration of the following types of factors:

(I) Degree of difficulty associated with constructing the corrective action(s) technology;

(II) Expected operational reliability of the proposed technologies;

(III) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(IV) Availability of necessary equipment and specialists; and

(V) Available capacity and location of needed treatment, storage, and disposal services; and

D. The degree to which community concerns are addressed by the proposed corrective action(s).

4. The owner/operator shall specify as part of the proposed corrective action(s) a schedule(s) for initiating and completing corrective action(s). This schedule shall require the initiation of corrective action(s) within a reasonable period of time. The owner/operator shall include the following factors in selecting corrective action(s):

A. Extent and nature of contamination;

B. Practical capabilities of remedial technologies in achieving compliance with groundwater protection standards pursuant to this rule and other objectives of the remedy;

C. Availability of treatment or disposal capacity for wastes managed during implementation of the corrective action(s);

D. Desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

E. Potential risks to human health and the environment from exposure to contamination prior to completion of the corrective action(s);

F. Resource value of any affected aquifer including:

(I) Current and future uses;

(II) Proximity and withdrawal rate of users;

(III) Groundwater quantity and quality;

(IV) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to the waste constituent;

(V) The hydrogeologic characteristic(s) of the facility and surrounding land;

(VI) Groundwater removal and treatment costs; and

(VII) The cost and availability of alternative water supplies;

G. Practicable capability of the owner/operator; and

H. Other relevant factors.

5. The department may determine that remediation of a release of any constituent listed in Appendix I, II, III, or IV of this rule from a landfill is not necessary if the owner/operator demonstrates to the satisfaction of the department that—

A. The groundwater is additionally contaminated by substances that have originated from a source other than the landfill and those substances are present in concentrations such that cleanup of the release from the landfill unit would provide no significant reduction in risk to actual or potential receptors;

B. The constituent(s) is present in groundwater that—

(I) Is not a current or potential source of drinking water; and

(II) Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) that represents a statistically significant increase over background concentrations;

C. Remediation of the release(s) is technically impracticable; or

D. Remediation would result in unacceptable cross-media impacts.

6. A determination by the department pursuant to paragraph (10)(B)5. of this rule shall not affect the authority of the state to require the owner/operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the groundwater, to prevent exposure to the groundwater, or to remediate the groundwater to concentrations that are technically practicable and which significantly reduce threats to human health or the environment.

(C) Implementation of the Corrective Action(s) Program.

1. Based on the schedule established for initiation and completion of corrective action(s), the owner/operator shall—

A. Establish and implement a corrective action(s) groundwater monitoring program that—

(I) At a minimum, meets the requirements of an assessment monitoring program of this rule;

(II) Indicates the effectiveness of the corrective action(s); and

(III) Demonstrates compliance with the groundwater protection standard.

B. Implement the corrective action(s) selected; and

C. Take any interim corrective action(s) necessary, any action(s) determined to be necessary by the department, or both, to ensure the protection of human health and the environment. Interim corrective action(s) shall, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any action(s) selected. The following factors shall be considered by an owner/operator, and will be considered by the department, in determining whether interim action(s) is necessary:

(I) Time to develop and implement a final remedy;

(II) Actual or potential exposure of nearby populations or environmental receptors to hazardous constituents;

(III) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(IV) Further degradation of the groundwater that may occur if a corrective action(s) is not initiated expeditiously;

(V) Weather conditions that may cause hazardous constituents to migrate or be released;

(VI) Risks of fire, explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and

(VII) Other situations that may pose threats to human health and the environment.

2. The department may determine, based on information developed after implementation of the corrective action(s) has begun, or other information, that compliance is not being achieved through the action(s) selected. In those cases, the owner/operator shall implement other methods or techniques that will achieve compliance with the requirements, unless the department makes the determination under paragraph (10)(C)3. of this rule.

3. If the department determines that compliance cannot be practically achieved with any currently available methods, the owner/operator shall—

A. Obtain the certification of a qualified groundwater scientist and approval from the department that compliance cannot be practically achieved with any currently available methods;

B. Implement alternative corrective action(s) to control exposure of humans or the environment to residual contamination, as necessary, to protect human health and the environment;

C. Implement alternative corrective action(s) for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are—

(I) Technically practicable; and

(II) Consistent with the overall objective of the corrective action(s); and

D. Submit a report to the department justifying the alternative corrective action(s). The alternative action(s) must be approved by the department prior to implementation.

4. All solid wastes that are managed pursuant to a corrective action(s) plan or an interim corrective action(s) plan shall be managed in a manner—

A. That is protective of the human health and the environment; and

B. That complies with all applicable state and federal requirements.

5. Remedies selected pursuant to this rule shall be considered complete when—

A. The owner/operator complies with the groundwater protection standards established under this rule at all points within the plume of contamination;

B. Compliance with the groundwater protection standards has been achieved by demonstrating that concentrations of all constituents listed in Appendix I, II, III, or IV of this rule have not exceeded the groundwater protection standard(s) for a period of three (3) consecutive years using the approved statistical procedures and performance standards. The department may specify an alternative length of time during which the owner/operator shall demonstrate that concentrations of all constituents listed in Appendix I, II, III, or IV of this rule have not exceeded the groundwater protection standard(s) taking into consideration—

(I) Extent and concentration of the release(s);

(II) Behavioral characteristics of the hazardous constituents in the groundwater;

(III) Accuracy of monitoring or modeling techniques, including any seasonal meteorological, or other environmental variabilities that may affect the accuracy; and

(IV) Characteristics of the groundwater; and

C. All actions required to complete the corrective action(s) plan have been completed.

6. Upon completion of the corrective action(s), the owner/operator shall submit a certification to the department within fourteen (14) days after the corrective action(s) has been completed and shall place a copy of the certification in the facility's operating record. The certification shall be signed by the owner/operator and by a qualified groundwater scientist and approved by the department.

7. When, upon completion of the certification, the owner/operator and the department determine that the corrective action(s) has been completed, the owner/operator shall be released from the requirements for financial assurance for corrective action under 10 CSR 80-2.030(4)(C).

(11) Air Quality.

(A) The design, construction, and operation of the sanitary, demolition, or special waste landfill shall minimize impacts or hazards to human health or the environment and shall comply with applicable ambient air quality and source control regulations.

(B) Design and operational plans shall include a description of efforts to be taken to prevent off-site emissions, including an effective dust and odor control program.

(C) Operation and maintenance of the landfill gas collection and control system shall be in accordance with the Missouri Solid Waste Management Law and Missouri Clean Air Law.

(D) The landfill owner/operator shall take steps to prevent excessive odors or dust or any leachate spray from application to the working face, from leaving the landfill property.

(E) Burning at the landfill shall be conducted in accordance with Chapter 643, RSMo, the corresponding rules, the terms and conditions, or both, of the plans, permits, or both, and all local requirements. Burning within the permitted boundary of a sanitary or demolition landfill shall be limited to tree trunks, tree limbs, and vegetation resulting from land clearing related to landfill operation/development. Burning of all other solid waste is prohibited on the landfill property.

(12) Landfill Gas Monitoring.

(A) The sanitary or demolition landfill owner/operator shall implement a landfill gas monitoring program as outlined in subsection (12)(C) prior to receiving an operating permit. Requirements for implementing a landfill gas monitoring plan at special waste landfills will be determined by the department on a case-by-case basis.

(B) The department may apply some or all of the requirements of this section to the design and maintenance of any landfill that has ceased accepting waste if the department determines there is evidence of an existing or potential safety concern or an existing or potential environmental impact, either of which that can be attributed to the adverse effects of landfill gas migrating from the landfill.

(C) Owners/operators of sanitary or demolition landfills receiving waste on or after the effective date of this rule shall develop a landfill gas monitoring plan prepared by an independent professional engineer capable of detecting landfill gases in the most likely zone(s) of migration to ensure concentrations of methane gas do not exceed limits set out in this rule. The plan shall describe the monitoring systems, equipment, and procedures that will be utilized to detect methane that is generated in the landfill and may accumulate in structures or migrate through the subsurface beyond the landfill property boundary.

1. The landfill gas monitoring plan shall include the following:

A. Provisions for monitoring the subsurface for migration of methane utilizing a network of landfill gas compliance monitoring wells installed within the permitted boundary.

(I) Gas monitoring well and well network – design and construction.

(a) Wells shall be designed and installed to monitor all unsaturated zones down to an elevation equal to the bottom elevation of waste at the lowest point in the landfill and include all site-specific information used as a basis for the design, construction, installation, and monitoring of the wells.

(b) The maximum spacing between landfill gas compliance monitoring wells shall be five hundred feet (500') at any two (2) adjacent well locations, unless the department approves documentation provided in the landfill gas monitoring plan that a hydrologic or topographic barrier to methane migration exists in a specific area of the site.

(c) The owner/operator shall assess the need for a closer well spacing to provide monitoring for:

I. Enclosed structures located within one thousand feet (1,000') of the permitted boundary;

II. Underground utility lines, trenches, vaults, manholes, and any other potential confined spaces that are located within the permitted boundary or within one thousand feet (1,000') of the permitted boundary, and may require entry by a worker or property owner, or that could act as a conduit for landfill gas flow;

III. Any known natural subsurface gas migration pathways, based on documentation of the geologic, hydrologic, and topographic conditions of the site and the surrounding property located within one thousand feet (1,000') of the permitted boundary;

IV. Any known manmade subsurface gas migration pathways, based on knowledge of the site and the surrounding property; and

V. Any area of the site that was subject to historical methane migration assessments or investigation.

(d) The department may waive the requirement to install landfill gas compliance monitoring wells within a specific defined area provided the landfill owner/operator demonstrates to the department that a hydrologic or topographic barrier exists between the landfill waste footprint and the permitted boundary within the defined area. The demonstration(s) shall be submitted to the department with, or as an addendum to, the landfill gas monitoring plan, and shall address the following:

I. Hydrologic barrier. This requires the owner/operator to submit documentation to the department, reviewed, signed, and sealed by an independent registered geologist, that hydrologic

conditions exist within the defined area that preclude the migration of landfill gas onto an adjacent property. To be classified as a hydrologic barrier, the hydrologic conditions must meet the following criteria:

a. The subsurface is continuously saturated in a zone defined by a vertical surface that exists between the landfill footprint and the permitted boundary and extends horizontally the entire width of the defined area, and extends vertically from an elevation equal to or lower than the bottom elevation of waste at the lowest point within the landfill footprint to an elevation equal to or greater than the elevation of the highest point along the permitted boundary within the defined area; and

b. The saturated conditions are permanent (i.e. not seasonal or weather dependent) within the defined area; and

II. Topographic barrier. This requires the owner/operator to submit documentation to the department, reviewed, signed, and sealed by an independent professional engineer, that the ground surface elevation along a continuous contour line between the landfill footprint and the permitted boundary and extending the entire width of the defined area, is below the bottom most elevation of any waste located within one thousand feet (1,000') of the defined area.

B. Provisions for monitoring for methane in each enclosed structure or confined space located within the permitted boundary of the landfill.

(D) Landfill Gas Monitoring Well Network – Operation and Maintenance.

1. Wells shall be constructed, installed, maintained, and plugged in accordance with the Missouri Monitoring Well Construction Code, 10 CSR 23-4.

2. The survey coordinates and the top-of-casing elevation for each well shall be established using conventional or GPS surveying techniques and submitted to the department with the monitoring system as-built drawings.

3. Each well shall be marked clearly in the field with a permanent placard or sign showing its identification number.

4. Each well shall be equipped with a sampling port to allow sampling without removal of the well cap.

5. All monitoring wells shall be protected from unauthorized access and kept locked and secured at all times.

6. The landfill owner/operator shall sample all landfill gas compliance monitoring wells at least quarterly, or more frequently if required by the department to protect human health or guide corrective actions.

7. The landfill owner/operator shall measure the following constituents in each landfill gas compliance monitoring well during each sampling event:

A. Methane concentration (percent methane by volume);

B. Oxygen concentration (percent oxygen);

C. Carbon dioxide concentration (percent carbon dioxide);

D. Atmospheric (barometric) pressure (inches Hg); and

E. Other constituents if the department determines that conditions at the landfill warrant the need for additional information to protect human health.

8. The landfill owner/operator shall submit all monitoring results electronically to the department within seven (7) days of collection—

A. At least quarterly, or more frequently if required due to detection of methane above limits specified in subsection (13)(C); and

B. In a format and manner prescribed by the department.

(13) Landfill Gas Collection and Control. Landfills accepting waste with the potential to generate methane shall be designed to prevent the migration of methane gases generated by the waste fill through an active gas collection and control system to avoid posing a hazard to the health and safety of the public and landfill personnel, or creating a negative impact to the environment. The department may apply some or all of the requirements of this section to the design of any

landfill that has ceased accepting waste, if the department determines there is evidence of an existing or potential human health concern or an existing or potential environmental impact, either of which can be attributed to the adverse effects of landfill gas migrating from the landfill. Unless notified otherwise by the department, owners/operators of landfills that are inactive or officially closed shall design the landfill to control methane in accordance with the regulations in effect at the time the landfill ceased receiving waste.

(A) Design.

1. Owners/operators of landfills receiving waste on or after the effective date of this rule shall submit to the department a design for an active landfill gas collection and control system to service areas of the landfill that warrant control, unless such design for an active landfill gas collection and control system has already been submitted and approved by the department. The system shall be designed to prevent the migration of methane through the subsurface into enclosed structures within the permitted boundary and/or onto surrounding properties.

2. The plans for the design and operation of the landfill gas collection and control system shall, at a minimum, include the following:

A. Drawings that show the layout and locations of all landfill gas, gas condensate, and, if applicable, pneumatic control system components and equipment, specifications of all piping systems, locations of all components, trench specifications, and system connections and piping configurations for all components;

B. Calculations verifying design and flow capacity over the intended use of the gas collection and control system;

C. Design specifications for all materials, components, and equipment used in the landfill gas collection and control system;

D. A landfill gas collection well schedule indicating, for each well, the approximate elevation of the landfill surface at the location of the well, the proposed elevation of the top of base liner at the location of the well, the proposed length of slotted and solid pipe in the well, and the proposed depth of the well;

E. A well construction diagram (cross-section drawing) illustrating the design details for a typical landfill gas collection well, and showing the diameter of the borehole, the material specifications for the well riser, the dimensions and material specifications for the borehole seals, the dimensions and material specifications for the filter pack, and the type of surface completion;

F. Construction diagrams illustrating the design details for all collection points, including, but not limited to, the horizontal collection trenches, passive systems, or surface collection components;

G. A description of when the system is to be installed in each phase or cell of the landfill, with respect to overall landfill development. Showing the conceptual sequence of installation of the landfill gas collection and control system on the phase development drawings pursuant to subsection (4)(G) of this rule satisfies this requirement; and

H. All applicable permits and approvals necessary to comply with the requirements of the Missouri Air Conservation Law and rules.

3. All landfill gas collection wells installed in waste shall be designed such that the bottom of the well borehole is not less than ten feet (10') above the top of the landfill liner.

4. The owner/operator also shall submit to the department a detailed operating and maintenance plan for the landfill gas collection and control system installed within the landfill footprint, and any landfill gas collection and control systems external to the landfill footprint. The operating and maintenance plan shall address the system(s) in its entirety and each system component individually.

5. The department may approve the use of an alternative gas system design on a case-by-case basis.

(B) Operation.

1. The owner/operator of a landfill shall control landfill gas on site so that it will not accumulate in explosive or toxic concentrations and migrate laterally from the waste footprint to endanger the health

of landfill employees or the public, or pose a threat to the environment.

2. The department may require landfill owners to install portions of the approved landfill gas collection and control system, or to install an interim landfill gas collection and control system, in specific areas of the landfill as necessary to control landfill gas.

3. The system shall be adjusted (tuned) as needed to optimize performance. The landfill owner/operator shall, in a timely manner, investigate the reason for reduced performance and make any necessary adjustment to, repair of, or replacement of a system component or components to return the system performance to optimal levels.

4. The system shall be maintained in accordance with the approved operating and maintenance plan(s).

5. The owner/operator shall inspect all components and portions of the system at least monthly.

6. The leachate level in landfill gas collection wells installed in the waste mass shall be checked and controlled at least quarterly to prevent methane migration and odors and ensure efficient operation of the collection wells.

(C) Methane shall not be allowed to accumulate above the following concentrations:

1. Twenty-five percent (25%) of the lower explosive limit (LEL) or one and one-quarter percent (1.25%) methane by volume in air in enclosed structures within the permitted boundary;

2. Fifty percent (50%) of the LEL or two and one-half percent (2.5%) by volume for methane in the soil at the permitted boundary of the landfill;

3. For purposes of this section, LEL means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at twenty-five degrees Celsius (25°C) and atmospheric pressure.

(14) Landfill Gas Corrective Action. In the event methane or other landfill gases are detected migrating from the landfill waste footprint and accumulating above the concentrations specified in this rule, the landfill owner/operator shall take immediate action to protect the health and safety of the public and landfill personnel and any threat to the environment. The owner/operator shall then take appropriate and timely corrective actions to control the landfill gas and alleviate the migration of methane onto any surrounding properties, or into enclosed structures or underground utility structures, as the situation warrants.

(A) Corrective Action. The landfill owner/operator shall take the following actions upon detection of elevated methane concentrations in structures and in the soil at the property boundary of the landfill.

1. Once the determination has been made to keep people out of any structure or away from any area, immediately notify the following parties that methane gas exceedance has been discovered:

A. Fire department or local emergency management personnel;

B. The department; and

C. Owners and occupants of properties within one thousand feet (1,000') of any compliance monitoring well exhibiting concentrations above the limit(s) provided in (13)(C) of this rule.

2. For concentrations of landfill gas(es) detected in on- or off-site enclosed structures above the limit(s) provided in (13)(C) of this rule, immediately take all appropriate actions to mitigate the effects of landfill gas accumulation in those structures until a permanent remediation is completed. These corrective actions may include, but are not limited to:

A. Emergency actions required by the fire department or local emergency management personnel, as needed, to protect employee, and human health and safety;

B. Ventilate any confined spaces that may trap landfill gases or install landfill gas detectors in confined spaces that may accumulate landfill gases; and

C. Establish a temporary landfill gas monitoring program in affected structures using an increased monitoring frequency from the

frequency in (12)(D)8. of this rule.

3. Once methane migration has been confirmed, the department may establish alternative, more frequent, schedules for monitoring, notification, and implementation of corrective actions, as needed, to protect the health and safety of landfill employees, the public, and the environment.

4. Within seven (7) days of detection, submit to the department a report describing the notification process and steps taken to protect employee and public health and safety;

5. Within forty-five (45) days of detection, submit to the department for approval a corrective action plan designed by a professional engineer to address the gas migration. The plan shall investigate the reason for the migration, describe the nature and extent of the migration, and propose a remedy to correct the migration. The department shall approve or disapprove the plan within fourteen (14) days of receipt.

6. If the landfill is experiencing ongoing methane gas migration, the owner/operator shall notify the department—

A. Within twenty-four (24) hours of discovering that the landfill gas collection and control system has been damaged, that a complete failure has occurred, or that a significant portion of the system has been taken out of service as a result of a malfunction; and

B. At least seven (7) days in advance of any scheduled activity that requires taking all or part of the landfill gas collection and control system off line or out of service for longer than twenty-four (24) hours if the landfill has methane gas migration.

7. If upon completion of the department's review of the corrective action plan, the department finds the plan does not provide sufficient data to support the corrective actions proposed in the plan, the department shall deny the plan. The landfill owner/operator shall submit a revised corrective action plan within thirty (30) days of the department's denial of the original corrective action plan.

8. Once the corrective action plan has been approved by the department, the landfill owner/operator shall implement the plan within one hundred twenty (120) days or an alternative timeframe approved by the department, monitor results of corrective actions taken, analyze and report to the department on the impact of corrective actions taken, and continue to propose and implement approved corrective actions until the methane gas concentrations fall to within compliance limits.

9. When the methane concentrations in all landfill gas compliance wells fall to below limits provided in (13)(C) of this rule and remain there for longer than one (1) month's time, the department will allow the resumption of a gradually reduced monitoring frequency. After one (1) year of methane concentrations remaining below the limits provided in (13)(C) of this rule, the landfill owner/operator may petition and receive approval from the department to return to a quarterly landfill gas monitoring schedule.

(15) Vectors. The landfill owner/operator shall operate and maintain the landfill in a manner that is unfavorable for the harboring, feeding, and breeding of vectors and immediately implement those procedures when vectors are first observed. The landfill operating manual shall include contingency plans for vector control, and the owner/operator shall be prepared to immediately implement those procedures when vectors are observed.

(16) Aesthetics.

(A) The sanitary, demolition, or special waste landfill owner/operator shall operate the landfill in an aesthetically acceptable manner.

(B) Wastes that are easily moved by wind shall be covered, as necessary, to prevent becoming airborne and scattered, and the landfill shall employ effective litter control methods and best management practices to prevent litter from leaving the permitted area of the landfill.

(C) On-site vegetation should be cleared only as necessary. Natural windbreaks, such as green belts, should be maintained where they will reduce noise, dust, and odors, and improve the appearance and

operation of the landfill.

(17) Cover.

(A) Cover shall be applied at the landfill to minimize fire hazards, infiltration of precipitation, odors and blowing litter; control gas venting and vectors; discourage scavenging; and provide a pleasing appearance.

(B) The owner/operator shall include in the landfill's operating plan a description of daily and intermediate cover at the landfill and also submit a written closure/post-closure plan that includes the design and construction of a final cover system over each phase or cell as it reaches the approved final elevation, in accordance with this rule.

1. The operating plan shall include:

A. The proposed cover sources, quantities, and soil classifications (Unified Soil Classification System or United States Department of Agriculture classification system). Soil classification is not necessary for soils used for daily and intermediate cover;

B. The capability of the cover to perform the functions listed above; and

C. Design, construction, and operations that ensure active, intermediate, and final slopes shall not exceed thirty-three and one-third percent (33 1/3%);

2. The closure/post-closure plan shall include:

A. A description of how the operating plan shall prepare the landfill for closure and the procedures to establish and maintain vegetative growth to combat erosion and improve appearance of idle and completed areas, including fertilizer rate, soil conditioning rate, seeding rate, and provisions for mulching;

B. Procedures to maintain cover integrity, for example, regrading and recovering;

C. Methods for borrow areas to be reclaimed on site so as to restore aesthetic qualities and prevent excessive erosion;

D. Provisions for construction of the final slope of the top of the landfill to have a minimum slope of five percent (5%);

E. A design of the final side slopes to minimize infiltration, promote run off without excessive erosion, and not to exceed twenty-five percent (25%), unless it has been demonstrated in a detailed slope stability analysis approved by the department that the slopes can be constructed and maintained throughout the entire operational life and post-closure period of the landfill;

F. Shear failure analyses where intermediate or final slopes exceed twenty-five percent (25%). However, the department will waive the analysis for slopes of twenty-five percent (25%) or less, except in seismic impact zones;

G. The design and installation of the geomembrane liner, which is to be in intimate contact with the underlying compacted clay;

H. The design and installation of the final cover system(s) and provisions for slope stability; and

I. A final cover system installation schedule as each phase of the landfill reaches approved elevations.

3. For landfills with composite liners, final cover shall be designed and constructed in composite layers, in order from top to bottom, as follows:

A. Two feet (2') of soil capable of sustaining vegetative growth;

B. A drainage layer;

C. A geomembrane liner at least as thick as the minimum thickness specified in subsection (4)(I); and

D. One foot (1') of compacted soil with a coefficient of permeability of 1×10^{-5} cm/sec or less;

4. For existing landfills without composite liners, the final cover shall consist of at least two feet (2') of compacted soil with a coefficient of permeability of 1×10^{-5} cm/sec or less and overlaid by at least one foot (1') of soil capable of sustaining vegetative growth.

(C) Operations – Cover.

1. For sanitary landfills, no less than six inches (6") of cover

shall be applied by the end of each operating day, regardless of weather, unless an alternative is approved by the department. The practice of peeling back and reusing cover is an approved practice so long as the method and practice is contained in the operating plan. Sanitary landfills operating twenty-four (24) hours per day shall cover the waste at least once every twenty-four (24) hours.

2. For demolition landfills, no less than twelve inches (12") of cover shall be applied at least once at the end of each operating week or immediately before the facility closes if the facility is to be closed for more than twenty-four (24) hours.

3. Alternative daily cover.

A. An alternative daily cover may be approved by the department on a site-specific basis, if the landfill owner/operator demonstrates that the alternative material controls stormwater run-on and runoff and prevents disease, vectors, fires, odors, and blowing litter, without presenting a threat to human health and the environment.

B. In the event the use of an alternative daily cover is approved by the department, the landfill owner/operator shall make all efforts to ensure that the use of alternative daily cover does not contribute to increased odor generation, leachate generation, litter blowing from the working face, or attraction of vectors.

4. Surface grades and side slopes shall be constructed and maintained to promote runoff without excessive erosion.

5. Re-grading and recovering shall be performed as necessary, followed by re-establishing vegetation, to maintain landfill cover, slope, and integrity.

6. In areas of the landfill where waste has not been accepted for more than sixty (60) days, cover shall be increased to a total thickness of at least one foot (1') of compacted cover, and steps taken to seed and encourage vegetative growth.

7. All final side slopes and the slope of the top of the landfill shall be constructed with provisions for slope stability and subsequently maintained to comply with the landfill's approved closure/post-closure plan.

8. Final cover at the landfill shall be constructed and installed in accordance with the landfill's approved closure/post-closure plan.

9. The department may approve the use of an alternative final cover system provided that the owner/operator can demonstrate to the department that the alternative design will be at least equivalent to the final cover system described in this rule.

10. Borrow areas shall be reclaimed in accordance with the approved plans.

11. Vegetation shall be established within one (1) year or other schedule approved by the department and maintained and re-established as necessary to achieve greater than eighty percent (80%) coverage to protect the landfill final cover and prevent surface water infiltration.

(18) Compaction.

(A) In order to conserve sanitary, demolition, or special waste landfill site capacity, thereby preserving land resources and minimizing moisture infiltration and settlement, solid waste and cover shall be compacted to the smallest practicable volume.

(B) The size of the working face shall be kept to a minimum.

(C) Equipment shall be maintained on site or readily available to ensure uninterrupted operations.

(19) Safety. The sanitary, demolition, or special waste landfill shall be designed, constructed, and operated to protect the health and safety of landfill personnel and the public.

(A) The landfill's operating plan shall include provisions to control access to and traffic on to the landfill in a manner that is compatible with the surrounding land use.

(B) Provisions shall be included in the plans to control dust, address emergency situations, and promote orderly operations. These provisions shall be revised as necessary to keep them up-to-date and relevant to the current landfill operations.

(C) Scavenging is prohibited at all times at the landfill.

(D) The landfill owner/operator shall employ dust control provisions as necessary for safety purposes and to prevent a nuisance to the surrounding area.

(E) Adequate communications equipment shall be available for use by landfill personnel.

(F) The landfill owner/operator shall prepare a plan of procedures to implement in the event of emergencies that occur at the landfill, including but not limited to, slope failure or firefighting. The owner/operator shall make the plan available to landfill personnel to provide them with the appropriate emergency contact information and delegation of authority to implement during each such emergency event.

(G) A fire extinguisher shall be provided on all waste handling equipment.

(H) A hot load area shall be established to contain loads that arrive with hotspots or open flames.

(I) Any fires discovered in wastes delivered to the landfill shall be extinguished away from the working face, whenever possible.

(J) Any surface fire discovered at the working face or subsurface fire, oxidation, or smoldering event shall be extinguished immediately; the landfill owner/operator shall notify the department as soon as it has been discovered.

(20) Records.

(A) The owner/operator of a landfill shall maintain records and monitoring data as specified by the department and file appropriate documents with the county recorder(s) of deeds.

1. The landfill owner/operator shall describe the methods for creating and maintaining records of operations and monitoring at the landfill.

2. Current records shall be maintained at the landfill office. Records five (5) years old or older may be stored electronically or off-site at an alternate site if approved by the department; such records must be made available to the department upon request.

3. The landfill files may be maintained on electronic media and shall include the following records, at a minimum:

A. Copies of approved permit documents and current permits;

B. Major operational problems, complaints, or difficulties; and any corrective actions taken;

C. Gas monitoring results from monitoring and any corrective action plans being implemented;

D. Any demonstration, certification, finding, monitoring, testing, or analytical data;

E. Housekeeping records to summarize efforts taken for vector, dust, odor, and litter control;

F. Quantitative measurements of the solid waste handled and an estimate of the air space left at the facility. By January 31st, on even numbered years the owner/operator shall submit to the department two (2) copies of a topographic map prepared during the previous calendar year, prepared under the direction of a land surveyor or by aerial photography, showing the current horizontal and vertical boundaries of solid waste in the landfill, the boundaries of the landfill and a form provided by the department listing airspace filled in the preceding period;

G. Description, source, and volume of special wastes that are received;

H. Any landfill design documentation for recirculation of leachate or gas condensate in a landfill, as applicable;

I. Closure and post-closure care plans and any associated monitoring, testing, or analytical data;

J. Most recently approved cost estimates and financial assurance documentation;

K. Inspection records and training procedures including screening for excluded wastes;

L. Records associated with tonnage fee; and

M. On or before January 31 of each calendar year and annually thereafter each solid waste disposal area shall submit a report to

the department specifying the amount of solid waste received for disposal from states other than Missouri.

(B) Once a landfill ceases accepting waste, the landfill owner shall record the existence of the landfill with the recorder(s) of deeds in the county(ies) where the landfill is located. The owner may request permission from the department to remove the notation from the deed if all wastes are removed from the landfill.

1. After the landfill ceases accepting waste, the owner/operator shall obtain a land surveyor to prepare a survey and plat meeting the requirements of the current Minimum Standards of Property Boundary Survey 2 CSR 90 and a detailed description of the landfill. The survey plat and detailed description, at a minimum, shall contain the following information:

A. The name of the property owner as it appears on the property deed;

B. The detailed description of the property;

C. The general types and location of the solid wastes and the depth(s) of fill within the property;

D. The location of any leachate collection system, gas collection and control system, and existing gas, surface water, groundwater monitoring system(s) which shall be maintained after closure, and the length of time that these systems are to be maintained; and

E. The permitted name and permit number(s) of the landfill.

2. The owner shall—

A. Submit to and obtain approval from the department of the survey plat and detailed description;

B. Have the approved plat notarized by a lawful notary public;

C. File the approved survey plat and detailed description with the county recorder(s) of deeds within thirty (30) days of departmental approval; and

D. Submit to the department within thirty (30) days of the date of filing, two (2) copies of the notarized and properly recorded plat and detailed description showing the recorder(s) of deeds' seal(s) or stamp(s), the book and page numbers, and the date of filing.

(21) Bioreactor Permits and Bioreactor Permit Modifications for Sanitary Landfills.

(A) The department may issue a permit or a permit modification to allow an owner/operator to design, construct, and operate a sanitary landfill as a bioreactor (bioreactor permit), utilizing innovative and new designs and/or operations which vary from specific criteria listed in this rule, provided the landfill systems are designed and operated in a manner protective of human health and the environment.

(B) For a proposed bioreactor at a new sanitary landfill, the design plans shall address all elements of landfill design, construction, and operation outlined in this rule, with special consideration for the effects of increased moisture content of the waste mass.

(C) For a proposed bioreactor at an existing sanitary landfill, the design plans shall include an assessment of all previously approved aspects of design, construction, and operation. Sanitary landfill systems and components shall be redesigned, construction procedures shall be developed, and all operating, monitoring, and quality control plans shall be revised, as necessary, with special consideration for bioreactor operations and the effects of increased moisture content of the waste mass.

(D) In addition, each bioreactor permit application shall include—

1. An explanation of the objectives of the research, development, and demonstration project;

2. Detailed explanations of the methods and procedures that will be used to add liquids, if applicable;

3. Detailed water balance calculations;

4. Detailed construction QA/QC procedures for all liquids addition systems;

5. A detailed operating and maintenance plan prepared as an addendum to the landfill's operating manual which includes:

A. Operating procedures for all bioreactor systems and other

systems whose operation could be affected by the increased moisture, including, but not limited to:

- (I) All liquids addition systems;
- (II) Leachate management systems; and
- (III) Landfill gas collection and control systems; and

B. A detailed plan for inspecting all landfill control and monitoring systems and maintaining accurate records of each inspection;

6. Provisions for leak testing of the geomembrane component of the composite liner system following installation; and

7. Facility designs that maintain a depth of leachate of less than one foot (1') on the landfill liner.

(22) Special Waste Landfills.

(A) Should an owner/operator request to permit a special waste landfill, the owner/operator shall include a list identifying what sections of this rule, and as appropriate 10 CSR 80-2.020, are and are not applicable to the landfill, as well as detailed discussion explaining how that determination was made. For special waste landfills in operation at the time of the effective date of this rule, the facility has until January 31, 2020, to submit a modification stating which parts of this rule are applicable and a detailed discussion explaining the rationale and for excluding certain requirements.

(B) The department may require any special waste landfill owner/operator to design, construct, operate, and maintain the landfill in accordance with any sanitary landfill requirement necessary to ensure the protection of human health and the environment.

Appendix I—Constituents for Detection Monitoring

Indicator Constituents

- Chemical Oxygen Demand (COD in milligrams per liter (mg/l));
- Chlorides (Cl, (mg/l)) dissolved;
- pH (units);
- Specific Conductance (Conductivity at twenty-five degrees Celsius (25°C) in micromhos per centimeter (μmho/cm));
- Total Dissolved Solids (TDS, (mg/l)); and

Inorganic Constituents

- Ammonia (NH3 as N, mg/l)
- Antimony (Sb, μg/l)
- Arsenic (As, μg/l)
- Barium (Ba, μg/l)
- Beryllium (Be, μg/l)
- Boron (B, μg/l)
- Cadmium (Cd, μg/l)
- Calcium (Ca, mg/l)
- Chromium (Cr, μg/l)
- Cobalt (Co, μg/l)
- Copper (Cu, μg/l)
- Fluoride (F, mg/l)
- Hardness (calculated, mg/l)
- Lead (Pb, μg/l)
- Magnesium (Mg, mg/l)
- Manganese (Mn, μg/l)
- Nickel (Ni, mg/l)
- Nitrate/Nitrite (NO3/NO2, mg/l)
- Phosphorus (total P, mg/l)
- Selenium (Se, μg/l)
- Silver (Ag, μg/l)
- Sodium (Na, mg/l)
- Sulfate (SO4, mg/l)
- Thallium (Tl, μg/l)
- Total Organic Carbon (TOC, mg/l)
- Vanadium (V, μg/l)
- Zinc (Zn, μg/l)

Organic Constituents

Acetone

- Acrylonitrile
- Benzene
- Bromochloromethane
- Bromodichloromethane
- Bromoform; Tribromomethane
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane; Ethyl chloride
- Chloroform; Trichloromethane
- Dibromochloromethane; Chlorodibromomethane
- 1,2-Dibromo-3-chloropropane; DBCP
- 1,2-Dibromoethane; Ethylene dibromide; EDB o-Dichlorobenzene;
- 1,2-Dichlorobenzene
- p-Dichlorobenzene; 1,4-Dichlorobenzene trans-1,4-Dichloro-2-butene
- 1,1-Dichloroethane; Ethylidene chloride
- 1,2-Dichloroethane; Ethylene dichloride
- 1,1-Dichloroethylene; 1,1-Dichloroethene;
- Vinylidene chloride
- cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene
- trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene
- 1,2-Dichloropropane; Propylene dichloride
- cis-1,3-Dichloropropene
- trans-1,3-Dichloropropene
- Ethylbenzene
- 2-Hexanone; Methyl butyl ketone
- Methyl bromide; Bromomethane
- Methyl chloride; Chloromethane
- Methylene bromide; Dibromomethane
- Methylene chloride; Dichloromethane
- Methyl ethyl ketone; MEK; 2-Butanone
- Methyl iodide; Iodomethane
- 4-Methyl-2-pentanone; Methyl isobutyl ketone
- Styrene
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene; Tetrachloroethene;
- Perchloroethylene
- Toluene
- 1,1,1-Trichloroethane; Methylchloroform
- 1,1,2-Trichloroethane
- Trichloroethylene; Trichloroethene
- Tichlorofluoromethane; CFC-11
- 1,2,3-Trichloropropane
- Vinyl acetate
- Vinyl chloride
- Xylenes

Appendix II—List of Hazardous Inorganic and Organic Constituents¹

Common Name ²	CAS RN ³
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Acetone	67-64-1
Acetonitrile; Methyl cyanide	75-05-8
Acetophenone	98-86-2
2-Acetylaminofluorene; 2-AAF	53-96-3
Acrolein	107-02-8
Acrylonitrile	107-13-1
Aldrin	309-00-2
Allyl chloride	107-05-1
4-Aminobipheny	192-67-1
Anthracene	120-12-7
Antimony	(Total)
Arsenic	(Total)
Barium	(Total)

Benzene	71-43-2	1,3-Dichlorobenzene	541-73-1
Benzo[a]anthracene; Benzanthracene	56-55-3	p-Dichlorobenzene;	
Benzo[b]fluoranthene	205-99-2	1,4-Dichlorobenzene	106-46-7
Benzo[k]fluoranthene	207-08-9	3,3'-Dichlorobenzidine	91-94-1
Benzo[ghi]perylene	191-24-2	trans-1,4-Dichloro-2-butene	110-57-6
Benzo[a]pylene	50-32-8	Dichlorodifluoromethane; CFC 12;	75-71-8
Benzyl alcohol	100-51-6	1,1-Dichloroethane; Ethyldidene	
Beryllium	(Total)	chloride	75-34-3
alpha-BHC	319-84-6	1,2-Dichloroethane; Ethylene	
beta-BHC	319-85-7	dichloride	107-06-2
delta-BHC	319-86-8	1,1-Dichloroethylene;	
gamma-BHC; Lindane	58-89-9	1,1-Dichloroethene; Vinylidene	
Bis(2-chloroethoxy)methane	111-91-1	chloride	75-35-4
Bis(2-chloroethyl) ether;	111-44-4	cis-1,2-Dichloroethylene;	
Dichloroethyl ether		cis-1,2-Dichloroethene	156-59-2
Bis(2-chloro-1-methylethyl) ether;	108-60-1	trans-1,2-Dichloroethylene	
2,2'-Dichlorodiisopropyl ether;		trans-1,2-Dichloroethene	156-60-5
DCIP	See Note 3	2,4-Dichlorophenol	120-83-2
Bis(2-ethylhexyl) phthalate	117-81-7	2,6-Dichlorophenol	87-65-0
Bromochloromethane;		1,2-Dichloropropane;	
Chlorobromomethane	74-97-5	Propylene dichloride	78-87-5
Bromodichloromethane;		1,3-Dichloropropane;	
Dibromochloromethane	75-27-4	Trimethylene dichloride	142-28-9
Bromoform; Tribromomethane	75-25-2	2,2-Dichloropropane;	
4-Bromophenylphenyl ether	101-55-3	Isopropylidene chloride	594-20-7
Butyl benzyl phthalate;		1,1-Dichloropropene	563-58-6
Benzyl butyl phthalate	85-68-7	cis-1,3-Dichloropropene	10061-01-5
Cadmium	(Total)	trans-1,3-Dichloropropene	10061-02-6
Carbon disulfide	75-15-0	Dieldrin	60-57-1
Carbon tetrachloride	56-23-5	Diethyl phthalate	84-66-2
Chlordane	See Note 4.	O,O-Diethyl O-2-pyrazinyl	
p-Chloroaniline	106-47-8	phosphorothioate; Thionazin	297-97-2
Chlorobenzene	108-90-7	Dimethoate	60-51-5
Chlorobenzilate	510-15-6	p-(Dimethylamino)azobenzen	60-11-7
p-Chloro-m-cresol;		7,12-Dimethylbenz[a]anthracene	57-97-6
4-Chloro-3-methylphenol	59-50-7	3,3'-Dimethylbenzidine	119-93-7
Chloroethane; Ethyl chloride	75-00-3	2,4-Dimethylphenol; m-Xylenol	105-67-9
Chloroform; Trichloromethane	67-66-3	Dimethyl phthalate	131-11-3
2-Chloronaphthalene	91-58-7	m-Dinitrobenzene	99-65-0
2-Chlorophenol	95-57-8	4,6-Dinitro-o-cresol	
4-Chlorophenyl phenyl ether	7005-72-3	4,6-Dinitro-2-methylphenol	534-52-1
Chloroprene	126-99-8	2,4-Dinitrophenol;	51-28-5
Chromium	(Total)	2,4-Dinitrotoluene	121-14-2
Chrysene	218-01-9	2,6-Dinitrotoluene	606-20-2
Cobalt	(Total)	Dinoseb; DNBP;	
Copper	(Total)	2-sec-Butyl-4,6-dinitrophenol	88-85-7
m-Cresol; 3-methylphenol	108-39-4	Di-n-octyl phthalate	117-84-0
o-Cresol; 2-methylphenol	95-48-7	Diphenylamine	122-39-4
p-Cresol; 4-methylphenol	106-44-5	Disulfoton	298-04-4
Cyanide	57-12-5	Endosulfan I	959-98-8
2,4-D; 2,4-Dichlorophenoxyacetic		Endosulfan II	33213-65-9
acid	94-75-7	Endosulfan sulfate	1031-07-8
4,4'-DDD	72-54-8	Endrin	72-20-8
4,4'-DDE	72-55-9	Endrin aldehyde	7421-93-4
4,4'-DDT	50-29-3	Ethylbenzene	100-41-4
Diallate	2303-16-4	Ethyl methacrylate	97-63-2
Dibenz[a,h]anthracene	53-70-3	Ethyl methanesulfonate	62-50-0
Dibenzofuran	132-64-9	Famphur	52-85-7
Dibromochloromethane;		Fluoranthene	206-44-0
Chlorodibromomethane	124-48-1	Fluorene	86-73-79
1,2-Dibromo-		Heptachlor	76-44-8
3-chloropropane;DBCP	96-12-8	Heptachlor epoxide	1024-57-3
1,2-Dibromoethane; Ethylene	106-93-4	Hexachlorobenzene .	118-74-1
dibromide; EDB		Hexachlorobutadiene	87-68-3
Di-n-butyl phthalate	84-74-2	Hexachlorocyclopentadiene	77-47-4
o-Dichlorobenzene;		Hexachloroethane	67-72-1
1,3-Dichlorobenzene	95-50-1	Hexachloropropene	1888-71-7
m-Dichlorobenzene;		2-Hexanone; Methyl butyl ketone	591-78-6

Indeno(1,2,3-cd)pyrene	193-39-5	Sulfide	18496-25-8
Isobutyl alcohol	78-83-1	2,4,5-T;	
Isodrin	465-73-6	2,4,5-Trichlorophenoxyacetic acid	93-76-5
Isophorone	78-59-1	1,2,4,5-Tetrachlorobenzene	95-94-3
Isosafrole	120-58-1	1,1,1,2-Tetrachloroethane	630-20-6
Kepone	143-50-0	1,1,2,2-Tetrachloroethane	79-34-5
Lead	(Total)	Tetrachloroethylene; Tetra-	
Mercury	(Total)	chloroethene; Perchloroethylene	127-18-4
Methacrylonitrile	126-98-7	2,3,4,6-Tetrachlorophenol	58-90-2
Methapyrilene	91-80-5	Thallium	(Total)
Methoxychlor	72-43-5	Tin	(Total)
Methyl bromide; Bromomethane	74-83-9	Toluene	108-88-3
Methyl chloride; Chloromethane	74-87-3	o-Toluidine	95-53-4
3-Methylcholanthrene	56-49-5	Toxaphene	See Note 6.
Methyl ethyl ketone; MEK;		1,2,4-Trichlorobenzene	120-82-1
2-Butanone	78-93-3	1,1,1-Trichloroethane;	
Methyl iodide; Iodomethane	74-88-4	Methylchloroform	71-55-6
Methyl methacrylate	80-62-6	1,1,2-Trichloroethane	79-00-5
Methyl methanesulfonate	66-27-3	Trichloroethylene; Trichloroethene	79-01-6
2-Methylnaphthalene	91-57-6	Trichlorofluoromethane; CFC-11	75-69-4
Methyl parathion; Parathion		2,4,5-Trichlorophenol	95-95-4
methyl	298-00-0	2,4,6-Trichlorophenol	88-06-2
4-Methyl-2-pentanone;		1,2,3-Trichloropropane	96-18-4
Methyl isobutyl ketone	108-10-1	0,0,0-Triethyl phosphorothioate	126-68-1
Methylene bromide; Dibromomethane	74-95-3	sym-Trinitrobenzene	99-35-4
Methylene chloride;		Vanadium	(Total)
Dichloromethane	75-09-2	Vinyl acetate	108-05-4
Naphthalene	91-20-3	Vinyl chloride; Chloroethene	75-01-4
1,4-Naphthoquinone	130-15-4	Xylene (total)	See Note 7.
1-Naphthylamine	134-32-7	Zinc	(Total)
2-Naphthylamine	91-59-8		
Nickel	(Total)		
o-Nitroaniline; 2-Nitroaniline	88-74-4		
m-Nitroaniline; 3-Nitroaniline	99-09-2		
p-Nitroaniline; 4-Nitroaniline	100-01-6		
Nitrobenzene	98-95-3		
o-Nitrophenol; 2-Nitrophenol	88-75-5		
p-Nitrophenol; 4-Nitrophenol	100-02-7		
N-Nitrosodi-n-butylamine	924-16-3		
N-Nitrosodiethylamine	55-18-5		
N-Nitrosodimethylamine	62-75-9		
N-Nitrosodiphenylamine	86-30-6		
N-Nitrosodipropylamine;			
N-nitroso-N-dipropylamine			
Di-n-propylnitrosamine	621-64-7		
N-Nitrosomethylethylamine	10595-95-6		
N-Nitrosopiperidine	100-75-4		
N-Nitrosopyrrolidine	930-55-2		
5-Nitro-o-toluidine	99-55-8		
Parathion	56-38-2		
Pentachlorobenzene	608-93-5		
Pentachloronitrobenzene	82-68-8		
Pentachlorophenol	87-86-5		
Phenacetin	62-44-2		
Phenanthrene	85-01-8		
Phenol	108-95-2		
p-Phenylenediamine	106-50-3		
Phorate	298-02-2		
Polychlorinated biphenyls; PCBs;	See Note 5.		
Aroclors			
Pronamide	23950-58-5		
Propionitrile; Ethyl cyanide	107-12-0		
Pyrene	129-00-0		
Safrole	94-59-7		
Selenium	(Total)		
Silver	(Total)		
Silvex; 2,4,5-TP	93-72-1		
Styrene	100-42-5		

Appendix III—Constituents for Detection Monitoring for Demolition Landfills

Indicator Constituents

Aluminum (Al, $\mu\text{g/l}$)
Ammonia (NH ₃ as N, mg/l)
Antimony (Sb, $\mu\text{g/l}$)
Arsenic (As, $\mu\text{g/l}$)
Barium (Ba, $\mu\text{g/l}$)
Beryllium (Be, mg/l)
Boron (B, $\mu\text{g/l}$)
Cadmium (Cd, $\mu\text{g/l}$)
Calcium (Ca, mg/l)
Chemical Oxygen Demand (COD, mg/l)
Chloride (Cl, mg/l)
Chromium (Cr, $\mu\text{g/l}$)
Cobalt (Co, $\mu\text{g/l}$)
Copper (Cu, $\mu\text{g/l}$)
Fluoride (F, mg/l)
Hardness (calculated, mg/l)
Iron (Fe, $\mu\text{g/l}$)
Lead (Pb, $\mu\text{g/l}$)
Magnesium (Mg, mg/l)
Manganese (Mn, $\mu\text{g/l}$)
Mercury (Hg, $\mu\text{g/l}$)
Nickel (Ni, mg/l)
pH (units)
Potassium (K, mg/l)
Selenium (Se, $\mu\text{g/l}$)
Silver (Ag, $\mu\text{g/l}$)
Sodium (Na, mg/l)
Specific Conductance (Conductivity at 25°C, mho/cm)
Sulfate (SO ₄ , mg/l)
Thallium (Tl, $\mu\text{g/l}$)
Total Dissolved Solids (TDS, mg/l)
Total Organic Carbon (TOC, mg/l)
Total Organic Halogens (TOX, mg/l)

Zinc (Zn, $\mu\text{g/l}$)

Appendix IV—Constituents for Assessment Monitoring for Demolition Landfills

Inorganic Constituents

Nitrate/Nitrite (NO₃/NO₂, mg/l)
Phosphorus (total P, mg/l)
Vanadium (V, $\mu\text{g/l}$)
Zinc (Zn, $\mu\text{g/l}$)

Organic Constituents

Acetone
Acrylonitrile
Benzene
Bromochloromethane
Bromodichloromethane
Bromoform; Tribromomethane
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane; Ethyl chloride
Chloroform; Trichloromethane
Dibromochloromethane; Chlorodibromomethane
1,2-Dibromo-3-chloropropane; DBCP
1,2-Dibromoethane; Ethylene dibromide; EDB
o-Dichlorobenzene; 1,2-Dichlorobenzene
p-Dichlorobenzene; 1,4-Dichlorobenzene
trans-1,4-Dichloro-2-butene
1,1-Dichloroethane; Ethylidene chloride
1,2-Dichloroethane; Ethylene dichloride
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride
cis-1,2-Dichloroethylene;
cis-1,2-Dichloroethene
trans-1,2-Dichloroethylene;
trans-1,2-Dichloroethene
1,2-Dichloropropane; Propylene dichloride
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
2-Hexanone; Methyl butyl ketone
Methyl bromide; Bromomethane
Methyl chloride; Chloromethane
Methylene bromide; Dibromomethane
Methylene chloride; Dichloromethane
Methyl ethyl ketone; MEK; 2-Butanone
Methyl iodide; Iodomethane
4-Methyl-2-pentanone; Methyl isobutyl ketone
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene
Toluene
1,1,1-Trichloroethane; Methylchloroform
1,1,2-Trichloroethane
Trichloroethylene; Trichloroethene
Trichlorofluoromethane; CFC-11
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride
Xylenes

Notes

1. The regulatory requirements pertain only to the list of substances.

2. Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

3. This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2'-oxybis, 2-chloro- (CAS RN 39638-32-9).

4. Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

5. Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5).

6. Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

7. Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 80—Solid Waste Management
Chapter 4—Demolition Landfill**

ORDER OF RULEMAKING

By the authority vested in the Director of the Department of Natural Resources under section 260.225, RSMo 2016, the director rescinds a rule as follows:

10 CSR 80-4.010 Design and Operation is rescinded.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on August 1, 2018 (43 MoReg 2307-2308). No changes have been made to the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES
Division 10—Division of Finance and Administrative Services
Chapter 4—Abortions**

ORDER OF RULEMAKING

By the authority vested in the Department of Social Services, Division of Finance and Administrative Services, under sections 11.715 and 11.800, HB 2011, First Regular Session, Ninety-ninth General Assembly, 2018, and sections 208.153, 208.201, and 660.017, RSMo 2016, the division adopts a rule as follows:

13 CSR 10-4.010 Prohibition Against Expenditure of Appropriated Funds for Abortion Facilities is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on August 15, 2018 (43 MoReg 2462–2464). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Social Services (DSS) received multiple comments from two (2) interested parties regarding the regulation: Missouri Family Health Council and Planned Parenthood. In summary of the various comments, the parties contend that the regulation is in violation of federal law, may have a negative effect on access to Medicaid health care services, and encouraged the Department of Social Services (DSS) to redefine multiple definitions.

COMMENT #1: The commenters stated that the regulation prevents access to care for Medicaid participants. They suggest that the regulation impairs participant access to services, such as birth control, cancer screenings, Sexually Transmitted Infection (STI) testing and treatment, and other preventive health care services. They also suggest the regulation disproportionately affects minorities, the LGBTQ+ communities, and people with low incomes, and will impair patient health. One (1) commenter stated without Planned Parenthood, seventeen (17) of Missouri's thirty-four (34) Senate districts will have no providers that offer accessible and comprehensive care.

RESPONSE: The DSS is committed to building the capacity of individuals, families, and communities to secure and sustain healthy, safe, and productive lives. The DSS does not agree that diminished access will occur as a result of this regulation. The DSS continually monitors access to health care services for its Medicaid participants. Medicaid participant data is closely monitored to assess the number of participants in each category of assistance. The DSS continually monitors the provider enrollment data to demonstrate the number of providers available in each county. The DSS also monitors utilization of services to analyze access. The DSS analyzed the top ten services billed by Planned Parenthood and compared the same ten services to other providers in the same geographic areas. The DSS determined that of those services 78.8% were provided by five hundred twenty-eight (528) other health care providers to Medicaid participants. This among other data analyzed by the DSS indicates that this regulation will have no negative impact to access to health care for Medicaid participants. The DSS has not made a change to the proposed regulation as a result of this comment.

COMMENT #2: The commenters stated that the regulation restricts the ability of patients to receive care from their provider of choice and would also prevent specific facilities, affiliates, or associates from providing such care impacting the state's health care safety net. One (1) commenter stated that the regulation prevents Planned Parenthood from participating in Medicaid and stated that the DSS is in violation of federal law regarding free choice of provider.

RESPONSE: The DSS complies with all federal and state laws in the administration of the Title XIX Medicaid program, including the provisions regarding free choice of provider. The DSS has not made a change to the proposed regulation as a result of this comment.

COMMENT #3: The commenters recommend the definition of "counsels women to have an abortion" should be changed to allow facilities and providers to present comprehensive, factual, and neutral information about all pregnancy options, including abortion, to patients and to include a clarifying definition of referral that provides contact information for referrals for all options in a neutral manner. They also recommend the DSS change the definitions of 'affiliate' and 'associate' to allow providers who do not share the same facilities, financial reimbursement and expenses, equipment, and employees the ability to participate in Medicaid.

RESPONSE: The DSS is not changing the definitions in the pro-

posed regulation as a result of this comment.

COMMENT #4: One (1) commenter suggested that the DSS does not have authority to promulgate the regulation because the underlying appropriation bill is unconstitutional as it violates the single subject rule and impermissibly legislates through the budget process. The commenter also alleges that the regulation is unconstitutional because withholding public funding punishes providers for constitutionally protected activity.

RESPONSE: The DSS has the statutory authority to adopt, amend, and promulgate rules necessary to carry out the duties of the programs it administers. The DSS disagrees with the commenter's claims. Article III, Section 23 of the *Missouri Constitution*, expressly excludes appropriation bills from the single subject clause. Further, the DSS does not agree that the regulation leverages funding to regulate constitutionally protected activity. The regulation implements the General Assembly's legitimate interest in defining the limits of government spending to ensure state funds are not expended to subsidize abortion facilities or their affiliates and associates. The DSS has not made a change to the proposed amendment as a result of this comment.

Title 13—DEPARTMENT OF SOCIAL SERVICES Division 65—Missouri Medicaid Audit and Compliance Chapter 3—Participant and Provider Procedure

ORDER OF RULEMAKING

By the authority vested in the Department of Social Services, Missouri Medicaid Audit and Compliance Unit under sections 208.201 and 660.017, RSMo 2016, the division adopts a rule as follows:

13 CSR 65-3.010 is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on September 4, 2018 (43 MoReg 2555–2556). Those sections with changes are reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Social Services, Missouri Medicaid Audit and Compliance Unit received two (2) comments from one (1) interested party on the proposed rule.

COMMENT #1: The Missouri State Medical Association (MSMA) requested that DSS allow physicians selected by the participant or Missouri Medicaid Audit and Compliance (MMAC) if the participant fails to make a selection be allowed the opportunity to decline to be the participant's sole treating physician for the lock-in period.

RESPONSE: Section (6) of the rule states that the participant may not select a single physician if the single physician declines to serve as the participant's single physician. No changes have been made to the rule as a result of this comment.

COMMENT #2: MSMA requested that DSS include precise definitions of the terms "MMAC approved physician" and "MMAC approved pharmacy" in the definition section of the rule.

RESPONSE AND EXPLANATION OF CHANGE: Definitions "MMAC approved physician" and "MMAC approved pharmacy" will be added to section (1).

13 CSR 65-3.010 Participant Lock-In Program

(1) Definitions applicable to the administration of this program are as follows:

(F) "MMAC approved pharmacy" means a licensed pharmacy that

is currently enrolled with MO HealthNet and is not currently sanctioned or under investigation by any federal or state authority.

(G) “MMAC approved physician” means a licensed physician that is currently enrolled with MO HealthNet and is not currently sanctioned or under investigation by any federal or state authority.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

15 CSR 30-70.010 Definitions is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2869–2870). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

**15 CSR 30-70.020 Application Assistant Training, Registration,
and Renewal is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2870). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

**15 CSR 30-70.030 Program Participant Application and
Certification Process is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2870–2871). No changes have been made in the text

of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

**15 CSR 30-70.040 Cancellation of Program Certification
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2871–2872). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

**15 CSR 30-70.050 Exercise of Program Participant’s Privileges
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2872). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality
Program**

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

15 CSR 30-70.060 Service of Process is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2872). No changes have been made in the text of

the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality Program

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

15 CSR 30-70.070 Program Participant Renewal is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2872-2873). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality Program

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

15 CSR 30-70.080 Agency Disclosure Request is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2873). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 15—ELECTED OFFICIALS
Division 30—Secretary of State
Chapter 70—Safe at Home: Address Confidentiality Program

ORDER OF RULEMAKING

By the authority vested in the secretary of state under section 589.681, RSMo 2016, the secretary amends a rule as follows:

15 CSR 30-70.090 Disclosure to Law Enforcement is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2873-2874). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publica-

tion in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2040—Office of Athletics
Chapter 2—Licenses and Permits

ORDER OF RULEMAKING

By the authority vested in the Office of Athletics under section 317.006, RSMo Supp. 2018, the office amends a rule as follows:

20 CSR 2040-2.011 Licenses is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2878-2882). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2040—Office of Athletics
Chapter 2—Licenses and Permits

ORDER OF RULEMAKING

By the authority vested in the Office of Athletics under section 317.006, RSMo Supp. 2018, the office amends a rule as follows:

20 CSR 2040-2.021 Permits is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2883-2885). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2110—Missouri Dental Board
Chapter 1—Organization and Description of Board

ORDER OF RULEMAKING

By the authority vested in the Missouri Dental Board under section 332.031, RSMo 2016, the board amends a rule as follows:

20 CSR 2110-1.010 General Organization is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2886). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed

amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2110—Missouri Dental Board
Chapter 1—Organization and Description of Board**

ORDER OF RULEMAKING

By the authority vested in the Missouri Dental Board under section 332.031, RSMo 2016, the board amends a rule as follows:

20 CSR 2110-1.020 Board Compensation is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2886). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2110—Missouri Dental Board
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the Missouri Dental Board under section 332.031, RSMo 2016, the board amends a rule as follows:

**20 CSR 2110-2.131 Definition of a Public Health Setting
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2886-2887). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2110—Missouri Dental Board
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the Missouri Dental Board under section 332.031, RSMo 2016, the board amends a rule as follows:

20 CSR 2110-2.170 Fees is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1,

2018 (43 MoReg 2887-2889). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2150—State Board of Registration for the
Healing Arts
Chapter 5—General Rules**

ORDER OF RULEMAKING

By the authority vested in the State Board of Registration for the Healing Arts under section 334.125, RSMo 2016, the board amends a rule as follows:

**20 CSR 2150-5.025 Administration of Vaccines Per Protocol
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2890-2892). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2210—State Board of Optometry
Chapter 1—Organization and Description of Board**

ORDER OF RULEMAKING

By the authority vested in the State Board of Optometry under section 336.150, RSMo 2016, the board amends a rule as follows:

20 CSR 2210-1.010 General Organization is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2892-2893). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2210—State Board of Optometry
Chapter 1—Organization and Description of Board**

ORDER OF RULEMAKING

By the authority vested in the State Board of Optometry under section 336.150, RSMo 2016, the board amends a rule as follows:

20 CSR 2210-1.020 Board Member Compensation is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2893). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2210—State Board of Optometry
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the State Board of Optometry under section 336.150, RSMo 2016, the board amends a rule as follows:

20 CSR 2210-2.011 Licensure by Endorsement is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2893). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2210—State Board of Optometry
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the State Board of Optometry under section 336.150, RSMo 2016, the board amends a rule as follows:

20 CSR 2210-2.030 License Renewal is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2893-2895). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2210—State Board of Optometry
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the State Board of Optometry under section 336.150, RSMo 2016, the board amends a rule as follows:

20 CSR 2210-2.060 Professional Conduct Rules is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2895-2896). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,
FINANCIAL INSTITUTIONS AND PROFESSIONAL
REGISTRATION
Division 2220—State Board of Pharmacy
Chapter 2—General Rules**

ORDER OF RULEMAKING

By the authority vested in the State Board of Pharmacy under section 338.140, RSMo 2016, the board amends a rule as follows:

20 CSR 2220-2.200 Sterile Compounding is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2018 (43 MoReg 2896-2897). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

This section may contain notice of hearings, correction notices, public information notices, rule action notices, statements of actual costs, and other items required to be published in the *Missouri Register* by law.

**Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits**

IN ADDITION

3 CSR 10-7.455 Turkeys: Seasons, Methods, Limits

As a matter of public information, the following dates and bag limits shall apply to turkey hunting seasons for 2019. These are based on the formula for season dates set out in subsections (1)(A), (1)(B) and (1)(D) of this rule in the *Code of State Regulations*, and actions of the Conservation Commission on December 14, 2018, to annually establish the season length and bag limit of the spring, fall, and youth hunting seasons.

The 2019 spring turkey hunting season will be twenty-one (21) days in length (April 15–May 5, 2019). A person possessing the prescribed turkey hunting permit may take two (2) male turkeys or turkeys with a visible beard during the season; provided, only one (1) turkey may be taken the first seven (7) days of the season (April 15–April 21, 2019) and only one (1) turkey may be taken per day from April 22–May 5, 2019. Shooting hours: one-half (1/2) hour before sunrise to 1:00 p.m., Central Daylight Saving Time.

Youth Spring Season Dates: April 6–7, 2019. One male turkey or turkey with a visible beard may be taken during this season. Shooting hours: one-half (1/2) hour before sunrise to sunset, Central Daylight Saving Time. (Opening date for the youth spring turkey hunting season is set in the *Wildlife Code* as the Saturday nine (9) days prior to the Monday opening of the spring turkey hunting season, except that when the youth season would overlap with Easter, the season will open on the Saturday prior to Easter weekend.)

The 2019 fall turkey hunting season will be thirty-one (31) days in length (October 1–October 31, 2019). Two turkeys of either sex may be taken during the season. Shooting hours: one-half (1/2) hour before sunrise to sunset, Central Daylight Saving Time.

**Title 19—DEPARTMENT OF HEALTH AND
SENIOR SERVICES
Division 60—Missouri Health Facilities Review
Committee
Chapter 50—Certificate of Need Program**

**NOTIFICATION OF REVIEW:
APPLICATION REVIEW SCHEDULE**

The Missouri Health Facilities Review Committee has initiated review of the CON applications listed below. A decision is tentatively scheduled for March 4, 2019. These applications are available for public inspection at the address shown below.

Date Filed

Project Number: Project Name
City (County)
Cost, Description

12/20/2018

#5664 RS: Family Partners Ballwin
Ballwin (St. Louis County)
\$2,935,085, Establish 24-bed ALF

#5662 HS: Cox Medical Centers Branson
Branson (Taney County)
\$1,119,479, Replace MRI unit

#5668 HS: Cox Monett Hospital
Monett (Barry County)
\$44,803,200, Replace 25-bed hospital

12/21/2018

#5666 RS: Vantage Pointe at Adworth Drive
Mehlville (St. Louis County)
\$14,553,243, Establish 71-bed ALF

#5665 RS: Springhouse Village East
Springfield (Greene County)
\$2,125,550, Add 15 ALF beds

5670 HS: Mercy Hospital Joplin
Joplin (Newton County)
\$2,277,830, Replace existing Robotic Surgery System

Any person wishing to request a public hearing for the purpose of commenting on these applications must submit a written request to this effect, which must be received by January 25, 2019. All written requests and comments should be sent to—

Chairman
Missouri Health Facilities Review Committee
c/o Certificate of Need Program
3418 Knipp Drive, Suite F
PO Box 570
Jefferson City, MO 65102
For additional information contact Karla Houchins at karla.houchins@health.mo.gov.