



Ohio Administrative Code

Rule 1501:9-2-02 Horizontal well site construction.

Effective: May 6, 2024

This rule applies to a well site for the drilling of one or more horizontal wells and associated production operations. The well site will be designed and constructed in a manner that supports the safe drilling and production operations of one or more horizontal wells, and in a manner that protects public health and safety and minimizes damage to natural resources, including conservation of topsoil where present, by managing stormwater, protecting surface water, and minimizing soil erosion. Compliance with this rule does not eliminate the requirement that a person comply with any applicable state or federal law. Standards referenced in this rule may be found under rule 1501:9-12-01 of the Administrative Code.

(A) Permit receipt and approval.

(1) No person may begin construction of a well site until receipt of a horizontal well site construction permit issued by the chief.

(2) No person may alter a well site, in a manner that will result in a material modification of the well site without prior approval from the chief.

(B) Application. An application for a permit to construct a well site may only be submitted to the chief on a form prescribed by the chief. The application may be submitted at any time regardless of whether the applicant has applied for or received a permit under section 1509.06 of the Revised Code and will contain all of the following:

(1) The name and address of the applicant, and if a business entity or association, the name and address of the statutory agent;

(2) The signature of the applicant. When an authorized agent of the applicant signs an application, the application will be accompanied by a certified copy of the appointment of such agent;



(3) The county, township, and section or lot number where the well site will be located, and a name for the proposed well pad;

(4) Emergency contact information of the applicant, including the 911 address of the proposed well site;

(5) Coordinates of the intersection of the centerline of the access road at the public right-of-way using latitude and longitude, in a format of decimal degrees, to a minimum of six significant figures; and

(6) Well site plans submitted in accordance with paragraph (C) of this rule.

(C) Well site plans. The chief may waive any item identified to be submitted under paragraphs (C)(2) to (C)(6) of this rule upon written request by the applicant. The request shall be signed by the applicant and the professional engineer who prepared the well site plans and include a detailed explanation of the basis for the request and of the potential impacts to the proposed well site and the surrounding area. The request for a waiver will be submitted with the application.

(1) All of the following apply to a well site plan:

(a) The plans for a proposed well site will be developed, signed, and sealed by a professional engineer;

(b) The plans will be prepared using commonly accepted drafting standards and be clear, legible, and drawn to a scale that sufficiently shows all information necessary for compliance with this rule;

(c) Each plan sheet will be American national standards institute (ANSI) size D, twenty-two by thirty-four inches;

(d) All elements contained in the plans under paragraph (C) of this rule will be located horizontally in relation to the North American datum of 1983 and will be located vertically in relation to the North American vertical datum 1988; and



(e) The plans will include the detailed drawings, plans, and reports identified under paragraphs (C)(2) to (C)(6) of this rule.

(2) Detailed drawings. The detailed drawings will include all of the following:

(a) A title page that contains the name of the applicant; emergency contact information; the name of the proposed well pad; the county, township, and section or lot number where the proposed well site will be located; coordinates of the entrance intersection of the centerline of the access road at the public right-of-way using latitude and longitude, in a format of decimal degrees, to a minimum of six significant figures; and a sheet index;

(b) A plan sheet consisting of a color orthorectified aerial image with pixels that represent no larger than one foot showing the location of the proposed well site;

(c) A plan sheet signed and sealed by a professional surveyor showing the location of the proposed well site boundary, including state plane coordinates or latitude and longitude at all deflection points in order to be able to replicate the well site boundary exactly. The plan sheet will include the control points used to generate the map;

(d) A general layout, plan views, elevations, sections, and supplementary views that in conjunction with the specifications provide the working information related to all aspects of the proposed construction;

(e) The scale in feet, legend, graphical scale, and north arrow;

(f) The proposed and existing contours with an intermediate contour interval not greater than two feet and an index not greater than ten feet;

(g) Unless already described in the reports and plans set forth under paragraph (C) of this rule, the applicant is to disclose the design considerations that were used to address paragraph (C)(2)(g)(i) to (C)(2)(g)(xvi) of this rule and identify and locate all of the following items in the detailed drawings:

(i) The classified soil types for the area within one hundred feet of and within the proposed well site



boundary. The classification will be consistent with the United States department of agriculture soil series;

(ii) Plugged wells, producing wells, and idle and orphaned wells, which may be determined using information available from the Ohio department of natural resources and other publicly available or readily accessible sources that are located within one hundred feet of and within the proposed well site boundary;

(iii) Structural and geotechnical components that are to be located within the proposed well site boundary, including those identified in the geotechnical report;

(iv) Geotechnical borings and other geotechnical investigative means, which are located within the proposed well site boundary, as identified in the geotechnical report;

(v) Boundaries of parcels of land, existing occupied and unoccupied structures, and existing utilities known to the applicant at the time of the design process that are located within one hundred feet of and within the proposed well site boundary;

(vi) All springs, wetlands, streams, lakes, rivers, ponds, creeks, and water wells, which may be identified using reasonably available public resources and a field review, within one hundred feet of and within the proposed well site boundary;

(vii) Surface and underground mines, which may be determined using information available from the Ohio department of natural resources and other publicly available or readily accessible sources, that the professional engineer determines may affect design and performance of the well site;

(viii) Any areas the applicant seeks to protect during construction of the proposed well site;

(ix) All flood hazard areas delineated on the "National Flood Insurance Rate Map" within one hundred feet of and within the proposed well site boundary;

(x) All locations where materials that result from the construction, operation, or plugging of a horizontal well are planned to be used at the well site pursuant to section 1509.074 of the Revised



Code and rules adopted under it;

(xi) Roads within the proposed well site boundary, including emergency access routes, signage to safely manage traffic flow on the site, the entrance to the well site, and any pull-off areas that may be used to manage excess traffic;

(xii) Pipes, ditches, and other conveyances, and hydraulic control structures located within the well site boundary, as identified in the stormwater hydraulic report and in the sediment and erosion control plan;

(xiii) All areas within one hundred feet of and within the proposed well site boundary that are located within the five-year time of travel associated with a public drinking water supply, as delineated or endorsed under the "Source Water Assessment and Protection Program";

(xiv) All areas within one hundred feet of and within the proposed well site boundary that are located within the emergency management zone of a public water system intake;

(xv) General location and construction details of the proposed well cellars, that may be installed during construction or after certification; and

(xvi) Any other factors that the professional engineer determines may affect design and performance of the well site.

(h) Emergency release conveyance map. The emergency release conveyance map must be included in the detail drawings on a separate sheet.

(3) Sediment and erosion control plan. The sediment and erosion control plan for the proposed well site will describe procedures to minimize the discharge of construction related sediment to any area outside of the proposed well site boundary and specifically comply with and include all of the following:

(a) Sediment and erosion controls suitable for the well site conditions and that are consistent with generally accepted engineering design criteria and the controls comply with the manufacturer's



specifications;

(b) A sediment basin or sediment trap if the proposed well site is within or includes a total contributing drainage area that is greater than five acres in size. The minimum capacity of the sediment basin or sediment trap will be one hundred seventeen cubic yards and designed in accordance with the "Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection." However, diversionary techniques to decrease drainage area size or sediment controls specifically designed for the equivalent capture efficiency may be used in lieu of the sediment basin or sediment trap;

(c) An identification of each location of each outlet of a confined discreet conveyance that may leave the proposed well site;

(d) A delineation of contributing drainage area boundaries and size, measured in acres, that will be used to design the proposed sediment and erosion controls;

(e) A description of the soil stabilization measures, including vegetation, mulch, and other means of controlling erosion, that will be used at the proposed well site. In addition, the description will include a schedule of the implementation of the soil stabilization measures; and

(f) The applicant may submit a schedule that identifies alternate options for implementation of the erosion and sediment controls and measures. The schedule will identify when and under what criteria the alternate controls would be implemented.

(4) Dust control plan.

(5) Geotechnical report.

(a) When developing the geotechnical report, the factor of safety for bearing capacity is to be 3 or more.

(b) When developing the geotechnical report, the factor of safety for slope stability is to be 1.5 or more.



(6) Stormwater hydraulic report.

(a) All stormwater and hydraulic control structures will be designed to and be capable of managing a ten-year storm event.

(b) The stormwater conveyance system will be designed to include sufficient stormwater storage capacity on the proposed well site to facilitate screening for potential contamination of the stormwater prior to discharge.

(7) All GIS shape files (.shp, .dbf, .shx, .prj) necessary to show the well site boundary, access road alignment, and well pad location.

(D) Completeness review. Not later than ten business days after receipt of an application for approval to construct a well site, the chief will review the application to determine if the application is complete and notify the applicant in writing or by other means approved by the chief. If the chief determines that the application is not complete, the chief will notify the applicant and identify the missing application components. The applicant may correct the application and submit the missing application components within five business days of receipt of the notification or the application will be returned to the applicant and processing of the application will be terminated. Not later than five business days after receipt of all of the missing application components, the chief will review the application for completeness and notify the applicant of the chief's determination.

(E) Site review. A site review for the proposed well site, which is set forth in division (H) of section 1509.06 of the Revised Code, will occur no later than fifteen business days after the applicant's receipt of notification that the application is complete under paragraph (D) of this rule, unless otherwise mutually agreed on by the applicant and the chief.

(1) Prior to the site review and for the site review meeting, the applicant will install stakes at the proposed well site in a quantity and in a manner that delineates the proposed well site. The installation of the stakes will show the proposed well site boundary, the corners of the proposed well pad, proposed roads, items and areas that are identified in the application that will remain undisturbed, and all other items that allow an understanding of the planned construction of the



proposed well site.

(2) The chief, the applicant's designee, and the professional engineer who is responsible for the plans prepared under paragraph (C) of this rule or another person under the professional engineer's direct supervisory control will meet at the proposed well site for a site review meeting. At the site review meeting, the chief may conduct a physical review of the proposed well site, discuss the application, identify items that are necessary to ensure compliance with this rule, identify site-specific terms and conditions that may be attached to a permit that approves an application to construct a well site, and identify site-specific terms and conditions that may be attached to a permit to drill a horizontal well.

(F) Review procedures.

(1) Not later than thirty days after the site review meeting conducted under paragraph (E) of this rule, the chief will review the application to determine if the application to construct the proposed well site is in accordance with this rule.

(2) If the chief identifies items that are necessary to ensure the well site design and application complies with this rule, the chief will notify the applicant of the items and the applicant may submit a revised application or portions of a revised application with an identification of all revisions. The chief may require the resubmission of the entire application. The chief will review the revisions or resubmitted application within fifteen business days of receipt. If after sixty business days from the date the chief notified the applicant of the items and the applicant has not submitted the revised application or portions of the revised application, the chief will return the application to the applicant and the application will be terminated by the division. The chief may approve a longer period of time for submission of the revised application or portions of the revised application, upon written request by the applicant.

(3) After completing the review of the application, the chief will either issue a permit to construct a well site or issue an order denying the application. If the chief issues a permit to construct a well site, the chief may include terms and conditions.

(4) At any time, the chief may require the applicant or person to submit additional information pertaining to the design or construction of the proposed well site that the chief determines is



necessary for the protection of public health or safety or to prevent substantial damage to natural resources or is necessary to ensure compliance with this rule.

(G) Construction and Operation.

(1) A person who has received a permit approving an application from the chief to construct a well site may initiate construction of the proposed well site. The proposed well site will be constructed in conformance with the approved application and in accordance with Chapter 1509. of the Revised Code and rules adopted under it. The person will inform the chief in writing at least forty-eight hours prior to commencement of construction unless another time period is agreed to by the chief.

(2) Beginning with the commencement of construction, a person who has received a permit from the chief approving an application to construct a well site is to do all of the following;

(a) Ensure as-built construction drawings to the approved application for which a permit was issued by the chief are current and available at the well site;

(b) Maintain a sign that is legible from the public right-of-way that includes the well pad name, a twenty-four-hour emergency contact number, county, township, section or lot number, and the 911 address of the well site;

(c) Maintain emergency response access;

(d) Maintain safe traffic flow near the entrance to the well site;

(e) Maintain sediment and erosion controls and/or soil stabilization measures so that they perform as designed in the approved application;

(f) Ensure that the pipes, ditches, and other conveyances of surface water and hydraulic control structures perform as designed in the approved application;

(g) Ensure that the dust controls perform as designed in the approved application; and



(h) Maintain well site stability as designed in the approved application.

(H) Modification of application.

(1) All modifications to the approved application are to be documented within one working day on a modification summary form prescribed by the chief. The form will be submitted electronically, be updated daily if a modification is performed and be current and available for review at the well site.

(2) All material modifications to a well site or to an approved application are to be approved by the chief prior to implementation. All proposed material modifications will be submitted to the chief in writing, or other means approved by the chief, and include all of the following:

(a) A detailed description of the proposed material modification and the potential impact to the performance of the well site;

(b) A specific identification of every portion of the application, as applicable, that is proposed to be modified; and

(c) Revised application documents, as applicable, pertaining to the material modifications.

(3) After receipt of a material modification submittal, the chief will review the material modification. Within five business days of receipt of the material modification submittal, the chief will either approve the proposed material modification or identify any items that are necessary to ensure compliance with this rule. If the chief identifies items that are necessary to ensure compliance with this rule, the person will submit a revised material modification that includes the identified items for approval. The chief will review the revisions within five business days of receipt. The chief may require a site review prior to determining whether to approve the proposed material modification or identifying items necessary to ensure compliance with this rule. If the chief requires a site review, the five business days period established under this paragraph will be suspended until completion of the site review. The site review will occur no later than five business days after the chief's request for a site review, unless mutually agreed on by the applicant and the chief.

(4) The chief may require the person to submit a certification in accordance with paragraph (I)(1) of



this rule upon completion of a material modification.

(5) Nothing in paragraph (H) of this rule precludes a person from taking emergency actions necessary to prevent harm to human health or safety or to prevent harm to the environment. If the actions will result in a material modification, the person will submit a summary of the activities within twenty-four hours of the actions. In addition, the person will submit modification documents for the emergency actions taken in accordance with paragraph (H) of this rule within three business days of the event that posed a threat to human health or safety or to the environment, or within another time frame as agreed to by the chief.

(6) Alternate options contained in the approved application that are or are not implemented will not be considered material modifications, but will be documented in the same manner as a modification in paragraph (H)(1) of this rule.

(7) The chief may waive all or part of the submission established in paragraph (H) of this rule.

(I) Horizontal well site reclamation modification. This applies to a well site for which construction commenced on a well pad with the intention to drill one or more horizontal wells and associated production operations. The well site reclamation will be designed and constructed in a manner that protects public health and safety and minimizes damage to natural resources.

(1) In order to proceed with a horizontal well site reclamation modification, a person is to do all of the following:

(a) Develop and submit to the division well site reclamation construction documents per applicable sections of paragraphs (C) and (H) of this rule. When submitting documents per paragraph (C) of this rule, the chief may approve a minimum factor of safety for slope stability not less than 1.3.

(b) After receipt of a reclamation modification submittal, the chief will review the reclamation modification. Within fifteen business days of receipt of the reclamation modification submittal, the chief will either accept the proposed reclamation modification or identify any items that are necessary to ensure compliance with this rule. If the chief identifies items that are necessary to ensure compliance with this rule, the person will submit a revised reclamation modification that



includes the identified items for approval. The chief will review the revisions within fifteen business days of receipt. The chief may require a site review prior to determining whether to approve the proposed reclamation modification or identifying items necessary to ensure compliance with this rule. If the chief requires a site review, the fifteen business days period established under this paragraph will be suspended until completion of the site review. The site review will occur no later than five business days after the chief's request for a site review, unless mutually agreed on by the applicant and the chief.

(2) Reclamation certification

(a) After the completion of any well site reclamation construction, the person who received the reclamation modification approval will submit to the chief a signed and sealed certification from the professional engineer who has personal professional knowledge of the construction of the well site reclamation. The certification will be on a form prescribed by the chief and specifically state: "The documents were designed in accordance with all applicable statutes and rules adopted under them and the well site reclamation was constructed in reasonably close conformity with the approved reclamation modification submittal, including all modifications." In addition, the reclamation certification submittal will include the record drawings, the modification summary form described in paragraph (H)(1) of this rule and if applicable, the landowner waiver on a form prescribed by the chief pursuant to section 1509.072(B) of the Revised Code. A reclamation construction certification is due to the division in accordance with the following as applicable:

(i) Within the timeframes set forth in section 1509.072(B) of the Revised Code for final reclamation after all wells on a well site have been plugged.

(ii) Within the timeframes set forth in paragraph (J) (7) (b) of this rule for final reclamation on well sites with expired certification.

(iii) Within the timeframes set forth in paragraph (J)(2) of this rule for final reclamation on well sites with expired horizontal well site construction permit.

(iv) For partial well site reclamation, prior to submission of a material modification to remove the reclaimed area from the well site boundary.



(3) A reclamation construction certification will be maintained for a period of two years from the date of submission of the complete reclamation certification.

(a) At any time prior to final release the chief may require the person to obtain the services of a professional engineer to evaluate the reclaimed well site and to develop a design to remediate the conditions where the reclaimed well site does not perform or is not likely to perform as designed; fails to protect public health and safety; or is likely to fail to prevent substantial damage to natural resources. If the chief requires the evaluation of a professional engineer, the chief may extend the certification period established in paragraph (I)(3) of this rule up to an additional 2 years.

(b) After the period of two years, the division will perform a final inspection to verify site performance and compliance with the approved reclamation modification.

(c) Final release may be obtained sooner with a landowner release on a form prescribed by the chief and approval by the chief.

(d) Upon written request of the applicant, the chief may reduce the time period established in paragraph (I)(3) of this rule if:

(i) The site is graded and terraced;

(ii) Vegetation is planted, seeded, sodded;

(iii) Vegetation is established; and

(iv) The site will not result in substantial erosion and sedimentation.

(J) Certification.

(1) Not later than three years after the effective date of the permit approving an application for construction of a well site and prior to the mobilization of any drilling equipment to the well site, the person who received the permit will submit to the chief a signed and sealed certification from the



professional engineer who has personal professional knowledge of the construction of the well site. The certification will be on a form prescribed by the chief and specifically state: "The application documents were designed in accordance with all applicable statutes and rules adopted under them and the well site was constructed in reasonably close conformity with the approved application, including all modifications." In addition, the certification submittal will include the record drawings and the modification summary form described in paragraph (H)(1) of this rule. Mobilization of any equipment associated with drilling or well stimulation to the well site may commence beginning two business days after receipt of the complete certification submittal or upon notice from the chief.

(2) If after three years, construction is started but the site has not been certified, the well site will be reclaimed within nine months.

(3) Pending receipt of the record drawings in accordance with paragraph (J)(1) of this rule and upon written request of the person, the chief may authorize limited and conditional use of the well site if all the following have been received by the chief:

(a) The certification form as described under paragraph (J)(1) of this rule;

(b) As-built construction drawings documenting all modifications and material modifications to the approved drawings for which a permit approving an application to construct a well site was issued by the chief; and

(c) The modification summary form prescribed in paragraph (H)(1) of this rule that is signed by the professional engineer.

(4) If the chief determines that the certification submitted under paragraph (J)(1) of this rule is incomplete or does not accurately document the constructed well site, the chief may issue an order ceasing operations on the well site. The chief will rescind the cessation order upon the submission of a new certification and updated record drawings.

(5) At any time before final reclamation, the chief may require the person to obtain the services of a professional engineer to evaluate the well site and to develop a design to remediate the conditions that under paragraph (J)(4) of this rule are the basis for a chief's order ceasing operations on the well



site. The design to remediate the causes and conditions will comply with paragraphs (H)(2) to (H)(7) of this rule. The chief will rescind the cessation order upon implementation of the remedial design and the submission of a new certification and updated record drawings. The chief may issue an order ceasing operations on the well site if any of the following apply:

- (a) The constructed well site does not perform or is not likely to perform as designed;
 - (b) The constructed well site does not perform or is not likely to perform in a manner that supports the safe drilling and production operations of one or more horizontal wells;
 - (c) The constructed well site fails or is likely to fail to protect public health and safety; or
 - (d) The constructed well site fails or is likely to fail to prevent substantial damage to natural resources.
- (6) If an order ceasing operations has been issued under paragraph (J)(4) or (J)(5) of this rule and the person fails to provide a certification of the well site, the person will reclaim the well site under paragraph (J)(7)(b) of this rule.
- (7) If within two years of the chief's receipt of the original certification, a horizontal well has not been spudded, a horizontal well has been spudded but not completed, or drilling is not progressing with due diligence, the person will do either of the following:
- (a) Certify the well site in accordance with either of the following:
 - (i) If after two certifications a horizontal well has not been spudded, a horizontal well has been spudded but not completed, or dilling is not progressing with due diligence, the person will reclaim the well site under paragraph (J)(7)(b) of this rule; or
 - (ii) A person may request a third certification if the person has obtained a valid drilling permit for a horizontal well to be located on the well site and the person submits a written justification demonstrating a viable plan to utilize the well site. The chief may accept or reject the certification request.



(b) Reclaim the well site to its original land use and approximate pre-construction conditions within nine months of the certification being terminated unless either of the following apply:

(i) The chief, upon written application submitted by the person, approves an extension of the time; or

(ii) The chief, upon written request for a waiver submitted by the person, releases the person from responsibility to perform any or all restoration requirements. The request will contain the signature of the surface owner approving the release sought. The chief will approve the request unless the chief finds upon inspection of the well site that the request would likely result in substantial damage to adjoining property, substantial contamination of surface or underground water, substantial erosion or sedimentation, or otherwise threatens public health and safety or substantial damage to natural resources.

(K) Well site transfer.

(1) Except as set forth in paragraph (K)(3) of this rule, if ownership of a well site is transferred, all of the following apply:

(a) The transferor will notify the chief on a form prescribed and provided by the chief.

(b) The transferee will be responsible for future certification(s) in accordance with this rule.

(2) Upon transfer of a well site, the transferee is responsible for operation and maintenance of the well site in accordance with Chapter 1509. of the Revised Code and rules adopted under it.

(3) This provision does not apply to the transfer of a constructed well site to the surface owner in accordance with paragraph (J)(7)(b)(ii) of this rule.

(4) A permit issued pursuant to these rules and regulations is not transferable.