

**Proposed Revisions to Water Quality Rules and Regulations, Commercial Oilfield
Waste Disposal Facilities**

Response to Comments For Outreach Comment Period Ending February 25, 2019



Revised November 1, 2019

Revisions highlighted in yellow

Prepared by:
Wyoming Department of Environmental Quality
Water Quality Division
Water and Wastewater Program

Commenters:

Environmental Defense Fund and Wyoming Outdoor Council
Paragon Consulting Group, Inc.
U.S. Fish and Wildlife Service

Comments and Responses

U.S Fish and Wildlife Service: “The electronic link under the Greater Sage-Grouse Core Area Protection section does not take one to an active page.”

Department Response: The link in the October 24, 2013 revision to the commercial oilfield wastewater disposal facilities (COWDF) Guidelines is outdated and the hyperlink is broken. WDEQ/WQD will update the link information in the guideline updates that will accompany the final rule.

U.S Fish and Wildlife Service: “The Service would like to thank the Wyoming Department of Environmental Quality for identifying protections from hydrocarbons for migratory birds and other wildlife.”

Department Response: WDEQ/WQD appreciates the support of U.S. Fish and Wildlife Service.

3.1 Permit Application Requirements

Paragon Consulting Group, Inc.: “We understand the current requirements; however, streamlining is generally a positive step. It might be beneficial to develop an application process that no longer requires original signatures since many other agencies and permitting authorities now accept electronic signatures. This would streamline the process a bit for the applicants.”

Department Response: WDEQ/WQD is in the process of an on-going review of our paperwork requirements. Our current plans involve implementing systems to allow for more electronic submittals and fewer hard copy submittals. In a separate rulemaking action, WDEQ/WQD is proposing to revise our permit application requirements in Water Quality Rules and Regulations, Chapter 3, by removing the reference to hard copies. This proposal will allow WDEQ/WQD to adjust the methods in which applications are received without necessitating a rulemaking action each time a

process adjustment is needed. While WDEQ/WQD recognizes that other agencies accept electronic signatures, the Division has identified specific programs that need to require wet signatures/hard copies in order to satisfy federal and state requirements.

3.2 Minimum Design, Construction, and Operation Standards

Paragon Consulting Group, Inc.: “Again, we have significant experience and understand the current standards; however, streamlining, clarifying and updating are generally positive steps. It might be beneficial to develop an electronic submittal process with a single paper copy. This would streamline the process a bit for the reviewers and the applicants. We have followed the relevant Chapter 20 rules when designing and permitting COWDFs in the past. We suggest some small changes to the sub cell and collection line requirements, but do not believe this is the venue for such detailed comments.”

Department Response: As stated above, WDEQ/WQD is in the process of an on-going review of our paperwork requirements. Our current plans involve implementing systems to allow for more electronic submittals and fewer hard copy submittals. In a separate rulemaking action, WDEQ/WQD is proposing to revise our permit application requirements in Water Quality Rules and Regulations, Chapter 3, by removing the reference to hard copies. This proposal will allow WDEQ/WQD to adjust the methods in which applications are received without necessitating a rulemaking action each time a process adjustment is needed. While WDEQ/WQD recognizes that other agencies accept electronic signatures, the Division has identified specific programs that need to require wet signatures/hard copies in order to satisfy federal requirements.

WDEQ/WQD intends to propose sub cell and collection line requirements that are similar to those in Chapter 20. The draft chapter will be open for public comment and WDEQ/WQD will consider any comments submitted after the notice period ends.

Environmental Defense Fund and Wyoming Outdoor Council “We recommend that all surface impoundments for retaining oilfield waste be double lined with leak detection. An impoundment with only a compacted clay liner creates an increased risk of contamination because a failure of this liner may not to be detected until a release has occurred of sufficient quantity to be recognized by a drop in water level (hard to discern since wastewater is being added and removed as part of routine facility operation), identified in nearby monitor wells or show a visible appearance at the surface or nearby surface water bodies. In all cases, by the time the leak/release is

identified it will be significant and costly to remediate...Double lining with leak detection allows for constant monitoring and more rapid identification of a loss of integrity of the primary liner. As long as a leak in the primary liner is quickly identified, the secondary liner should prevent the leak from becoming a release...”

Department Response: WDEQ/WQD agrees that oilfield ponds need a primary and secondary liner with a leak detection system and intends to propose regulations that require minimum design standards for these systems.

Environmental Defense Fund and Wyoming Outdoor Council “...In addition to development of plans and specifications, it is equally important to require a formal construction quality assurance (CQA) plan be developed and implemented. A CQA plan details activities performed during the course of impoundment construction to ensure construction meets design requirements. This includes a formal process to review and approve any field change orders, verification that field tests (like liner seam integrity test) are conducted and results evaluated and action taken if there is an indication that design and specification requirements are not met, and development of as-built plans (sealed by the engineer responsible for implementation of the COA plan) following construction.”

Department Response: The proposed rule will require that the installation and testing of HDPE liners conforms with industry standards.

3.3 Applicability

Paragon Consulting Group, Inc.: “We agree that new regulations should apply to all new facilities. We are unclear regarding the definition of “modified” facilities and hope that currently approved applications would be grandfathered under the rules in place at the time the application was approved.”

Department Response: WDEQ/WQD intends to propose that the regulations apply to construction and modification of existing permitted facilities.

3.4 Site Suitability

Paragon Consulting Group, Inc.: “We understand that the WDEQ/WQD is considering some additional setback requirements from perennial streams and are interested in commenting on any such proposals. At this time, it appears the setback requirements in Chapter 20, Section 24.e are similar to those contained in II.a.i.E of the

above-referenced guidelines. Clarification of III.b.ii of the above-referenced guidelines may be helpful.”

Department Response: WDEQ/WQD agrees that the setback requirements in Chapter 20 and the current guidelines are similar. WDEQ/WQD intends to propose clarified setback requirements.

Environmental Defense Fund and Wyoming Outdoor Council ... related to siting, the current guidelines state:

- “Ponds shall not be located within the ordinary high water mark of perennial rivers, streams, or creeks; not in the bottoms of rivers, streams, creek, draws, coulees, or other natural drainages into which natural runoff may flow and/or enter.”
- “Ponds shall be protected from structural damage which could be caused by a 100-year flood event.”

Structural damage resulting from flooding occurs not just because of elevated water levels but also from debris carried in the floodwaters. It is practically impossible to construct barriers that protect from the significant forces resulting from both flowing water and debris carried in that water. Therefore, we recommend not allowing any waste disposal facilities be constructed within the 100-year flood plain.

Department Response: WDEQ/WQD intends to include a requirement that prohibits siting within the 100-year floodplain.

3.5 Monitoring and Reporting Requirements

Paragon Consulting Group, Inc.: As previously stated, we have significant experience and understand the current requirements; however, streamlining, clarifying and updating are generally positive steps.

Department Response: WDEQ/WQD intends to propose clarified monitoring and reporting requirements.

Environmental Defense Fund and Wyoming Outdoor Council The current monitoring requirements for the leak detection system include analysis for total petroleum hydrocarbons by EPA Method 8015 (modified for gasoline and diesel range hydrocarbons), chlorides, total dissolved solids, and sulfates. For the purposes of identifying if a leak has occurred, this list of analytes is appropriate and we do not

recommend the current analyte list be shortened. However, there may be rationale for additional constituents to be added to the analyte list based on specifics of the facility so the guidance should allow for additional analyses as warranted.

Department Response: WDEQ/WQD intends to propose regulations that include a statement noting that the analyte list and monitoring frequency will be subject to revision, as determined by the Administrator. This passage will allow WDEQ/WQD to include tailored conditions for facilities on a case-by-case basis, as needed.

3.6 Operation and Maintenance Plan

Paragon Consulting Group, Inc.: As previously stated, we have significant experience and understand the current requirements; however, streamlining, clarifying and updating are generally positive steps.

Department Response: WDEQ/WQD intends to propose clarified operation and maintenance plan requirements.

Environmental Defense Fund and Wyoming Outdoor Council The current Operation and Maintenance Plan requirements stipulate that this plan is required for all new or modified disposal facilities with specific items to be included. The current guidance also allows for the WDEQ to require additional items based on the facility. We assume that “modified disposal facility” means that if modifications are made to an existing permitted facility, a revised operation and maintenance plan must be developed. We recommend this requirement be clearly stated. Additionally we recommend annual certification via letter to the WDEQ that the operation and maintenance plan is current, either as updated to address any facility operations or the facility operations have not changed in the prior year.

Department Response: WDEQ/WQD intends to propose requirements for annual reporting that includes operational details of the permitted facilities.

3.7 Financial Assurance

Paragon Consulting Group, Inc.: We endorse rule changes that would ensure consistency among permittees. We recommend that the final rule be flexible and recognize that not all facilities are the same nor are they constructed in the same soil/geologic/topographic conditions. It would be efficient if the final rule were to

continue to allow for the application of good engineering practice and judgement in developing financial assurance costs.

Department Response: The proposed rule continues to allow for the application of good engineering practice and judgement in developing financial assurance costs.

Environmental Defense Fund and Wyoming Outdoor Council The current guidelines specify that financial assurance be provided for “closure and post-closure activities, and for corrective action if required under Section 3(e)(iii).” It further details methodology for determining financial assurance requirements and documentation. Providing sufficient financial assurance is necessary to protect against financial burdens for facility closure and cleanup (if required) being borne by the public. Care must be exercised to insure any modification to this guidance strengthens, not weakens, the financial assurance provisions.

Department Response: Comment noted.

Revised Department Response: *WDEQ/WQD agrees that the financial assurance provisions must not be weakened. WDEQ/WQD has proposed clarifications to Chapter 14, Section 3(d) to ensure more consistency in the documentation submittals from operators. Operators will still be subject to the financial assurance requirements of Chapter 14, which covers closure, post-closure, and corrective action costs.*

3.8 Public Participation

Paragon Consulting Group, Inc.: We believe that the permitting process should be transparent. We have seen the public participation process be used as a method of trying to control nearby and not-so-nearby land-use changes for other than technical issues. We have also seen competitors use this process as a barrier to entry for business reasons rather than for sound technical reasons. Therefore, these possible issues should be considered if a public participation process is contained in the possible rule.

Department Response: WDEQ/WQD has received several public requests for public participation requirements related to COWDFs. WDEQ/WQD intends to propose public participation requirements that are consistent with other programs in the Division. The public participation process is well defined in order to give permittees and the public a fair and balanced opportunity to participate.

Environmental Defense Fund and Wyoming Outdoor Council We commend Wyoming DEQ for addressing public participation in the permitting process. A critical aspect of a permitting process is transparency of the information used in developing a permit and the permit evaluation process. Important to this process is public engagement, providing access to the information for public review and comment.

Department Response: WDEQ/WQD appreciates the support of U.S. the Environmental Defense Fund and the Wyoming Outdoor Council. WDEQ/WQD has received several public requests for public participation requirements related to COWDFs. WDEQ/WQD intends to propose public participation requirements that are consistent with other programs in the Division. The public participation process is well defined in order to give permittees and the public a fair and balanced opportunity to participate.