

**805 KAR 1:170. Content of the operations and reclamation plan.**

RELATES TO: KRS 349.015, 349.105, 349.120, 349.130, 349.155, 353.180, 353.510, 353.520, 353.561 – 353.564, 353.590, 353.5901, 353.592, 353.595, 353.597, 353.651, 353.652, 353.6601 – 353.6606, 353.730, 353.737, 353.991

STATUTORY AUTHORITY: KRS 349.130, 353.540, 353.550, 353.5901, 353.670

NECESSITY, FUNCTION, AND CONFORMITY: KRS 353.5901(1) requires an oil or gas well operator to submit to the Department for Natural Resources an operations and reclamation plan. KRS 349.130 requires an applicant for a coal bed methane well permit submit to the Department for Natural Resources an operations and reclamation proposal when applying for a permit. This administrative regulation establishes the content of the operations and reclamation plan, establishes the form on which that plan is to be filed, and establishes the form on which well transfers are indicated.

Section 1.

(1) The operations and reclamation plan shall be filed on a completed and notarized Operations and Reclamation Plan, Form OG-10.

(2) In addition to the requirements set out in KRS 353.5901 and KRS 349.130, the following information shall be submitted on Form OG-10:

(a)

1. The operator's and surface owner's names, addresses, and telephone numbers;
2. The county in which the well is proposed to be drilled; and
3. The well number;

(b)

**RECOMMENDED HERBACEOUS MIXTURES FOR REVEGETATION**

Note: A species enclosed in parenthesis may be substituted for the species to the left. Its seeding rate is enclosed in parentheses.

Species Mixture	Seeding Rate (Pounds/acre PLS)
Spring - February 15 to May 15	
1. Orchardgrass	10
White or Ladino clover	2
Red clover	6
2. Orchardgrass	10
White or Ladino clover	1
Red clover	4
Kobe lespedeza	10
3. Orchardgrass	10
Birdsfoot trefoil (Alfalfa)	8 (15)
Red clover	6
4. 31 Tall fescue	20
5. Wheat (Spring oats)	25 (32)
Switchgrass	10
Indiangrass	10
Big bluestem	5

Little bluestem	5
Birdsfoot trefoil	6

Except for mixture 5, add one (1) of the following quick cover species to the selected permanent spring seeding mixture:

Wheat (before April 15)	30
Spring oats (before April 15)	32
Balbo rye (before April 15)	30
Perennial ryegrass	10
Annual ryegrass	5
Weeping lovegrass (after April 1)	2

Summer - May 15 to August 1

Orchardgrass	10
Kobe lespedeza	15
Red clover	4
White clover (Birdsfoot trefoil)	1 (6)
Alfalfa	12

Add one (1) of the following quick cover species to the permanent summer seeding mixture:

Sorghum	20
Foxtail (German) millet	12
Japanese millet	15
Soybeans	40
Cowpeas	40
Pearl millet	10
31 Tall fescue	20

Fall - August 1 to October 1

1. Orchardgrass	10
White or Ladino clover	2
Red clover	6
2. Orchardgrass	10
Alfalfa (Birdsfoot trefoil)	15 (8)
Red clover	6
3. 31 Tall fescue	20
4. Deertongue	12
Birdsfoot trefoil	8
Red clover	6

Add one (1) of the following quick cover species to the selected permanent fall seeding mixture:

Winter wheat	30
Balbo rye or Winter rye	30
Winter oats	32
Perennial ryegrass	10
Annual ryegrass	5

Mixtures for Wet or Poorly Drained Areas and Pond Borders

Spring - February 15 to May 15

Japanese millet	10
Redtop (Reed canarygrass)	3 (15)
Alsike clover	4
31 Tall fescue	20
Common annual lespedeza (quick cover species)	10

Fall - August 1 to October 1

Redtop	3
Reed canarygrass	15
Alsike clover	6
31 Tall fescue	20
Common annual lespedeza (quick cover species)	10

Mixture for Areas to be Stocked With Woody Plants

Spring or Fall Seeding

Redtop	3
Perennial ryegrass	5
Birdsfoot trefoil (Appalow lespedeza)	10 (20)
Foxtail millet (quick cover species)	5

If both Appalow lespedeza and birdsfoot trefoil are used, cut their seeding rates in half.

1. A listing or description of fertilizers and soil amendments to be used and seed mixes or trees to be planted as established in the table in this subparagraph.
  2. The requirements in subparagraph 1. of this paragraph shall apply for each affected area requiring revegetation treatment; and
- (c) A detailed map of the road, well location, and proposed area of disturbance, which shall be in sufficient detail to allow ready identification of surface features and which shall satisfy the requirements established in subparagraphs 1. through 4. of this paragraph.
1.
    - a. The surface owner's tract shall be identified on the map, with the name of the surface owner if not listed on the legend.
    - b. The map shall indicate the acreage to be disturbed.
  2. The map may be made over an enlarged section of the United States Geological Survey (USGS) 1:24000 topographic map, or an equivalent format, and shall be:
    - a. Enlarged to 1"=400'; and
    - b. Submitted on a minimum of an eight and one-half (8 1/2) inch by fourteen (14) inches sheet, using the symbols established on Form OG-10.
  3. The map shall have a legend with the operator's and surface owner's names not listed on the map, the scale of the map, the well name and number, and the lease name. Within 500 feet of the permitted wellsite boundary and 100 feet of the well site access road centerline, the map shall show:
    - a. The location of all features listed on the legend of form OG-10;
    - b. All water bodies; and
    - c. If reasonably ascertainable, public utility infrastructure.

4. The map shall show the drainage pattern on and away from the area to be affected, including the direction of flow, proposed constructed drainways, natural drainways to be used for drainage, and the streams or tributaries to receive discharges from the proposed operation.

(3) A signature of the surface owner shall be obtained in instances of a complete severance of the ownership of the oil, gas, or coalbed methane from the ownership of the surface to be disturbed. Signatory sections for the operator and surface owner shall be completed on Form OG-10 pursuant to paragraphs (a) and (b) of this subsection.

(a) The name and title, if any, of the operator shall be indicated and his or her signature notarized.

1.

a. The signature shall be either that of an officer of the company or of a person who holds a duly recorded power of attorney to execute documents.

b. A copy of the power of attorney shall be filed with the division.

2. If the prospective operator is an individual, the signatory shall be in the same name as the applicant's. If someone other than the applicant signs the form, the signatory shall hold a duly recorded power of attorney.

(b) The surface owner's name shall be indicated and his or her signature notarized if he or she approves of the operations and reclamation plan, together with any attachments submitted with it.

Section 2. Unsigned Reclamation Forms. If the owner of the surface of the severed minerals tract is unwilling or for some other reason has failed to sign Form OG-10, the operator shall file:

(1) A written petition for mediation; and

(2) The items established in paragraphs (a) and (b) of this subsection.

(a) A copy of the certified mail receipt verifying that the operations and reclamation plan, the statement required in KRS 353.5901(4)(b), and the plat were mailed to and received by the surface owner or, if not received, the original or a copy of the unclaimed envelope. A copy of the operations and reclamation plan and the attachments enclosed in the envelope mailed to the surface owner shall also be included.

(b) If the surface owner cannot be reached at his last known address of record and certified mail is returned as undeliverable or unknown, the operator shall publish a notice of intended activity, together with a request for information on the whereabouts of the surface owner.

1. The publication shall be made two (2) consecutive times in a local newspaper in the county where the proposed well is located and once in a newspaper of general circulation.

2. A copy of the notice of intended activity and request for surface owner information shall be included with the operator's application for permit and shall include:

a. The name and address of the operator;

b. A brief description of the intended activity as established in the operations and reclamation plan; and

c. A statement of where interested persons may obtain additional information as to the operator's intended activity.

3. The surface owner shall respond to the notice established in this paragraph.

Section 3. Mediation of Dispute.

(1) The surface owner may file with the division a request for mediation after receiving from the operator the proposed operations and reclamation plan, but only after the operator has filed his request for mediation and not later than the time set forth in the

Notice of Request for Mediation provided by the department and mailed to the surface owner. The surface owner's request to participate in mediation shall include the mediation fee, in accordance with KRS 353.5901(6), or a request for waiver of the fee.

(2) Contents of a request for fee waiver. The request for waiver of the mediation fee shall include:

(a) A brief statement of facts underlying the request for a determination that the individual is financially unable to pay the mediation fee required by KRS 353.5901(6); and

(b)

1. Documentation that the individual is receiving or has been deemed eligible to receive public assistance; or

2. An affidavit, subject to penalties for perjury, establishing:

a. The applicant's individual income;

b. The applicant's household income;

c. Property owned;

d. Outstanding obligations;

e. The number and age of dependents; and

f. A copy of his or her most recent Kentucky and federal income tax returns.

(3) Waiver determination.

(a) Within thirty (30) days of filing of the petition, the mediator shall issue a determination accepting or denying the request for fee waiver. If the fee waiver is denied, the applicant shall be informed in writing and the applicant shall be given thirty (30) days from the mailing of the mediator's waiver denial to submit the mediation fee to the department, or the surface owner shall be deemed to have failed to satisfy the statutory requirements applicable to mediation and a report shall be issued pursuant to subsection (4) of this section.

(b) The mediator's waiver determination shall not be subject to appeal.

(c) In considering the request for fee waiver, the mediator shall consider the statement and affidavit submitted by the surface owner and consult the Federal Poverty Guidelines in effect upon the date the request is mailed.

(d) The mediator shall waive the mediation fee for any surface owner whose household income is at or below 100 percent of the Federal Poverty Guidelines.

(e) The mediator shall waive the mediation fee for any surface owner whose household income exceeds 100 percent of the Federal Poverty Guidelines if the mediator determines that the surface owner has demonstrated financial inability to pay the fee.

(f) It shall be presumed that the surface owner has the financial ability to pay the mediation fee if that person:

1. Is not receiving, or is not eligible to receive, public assistance payments upon the date the affidavit is submitted; or

2. Owns more than one (1) motor vehicle.

(4) If the surface owner does not file the mediation fee within the time and in the manner required in the Notice of Request for Mediation, the surface owner shall be deemed to have failed to satisfy the statutory requirements applicable to mediation. The mediator shall file a report noting the failure and recommend the acceptance of the operator's operations and reclamation plan.

(5)

(a) The mediator shall not settle damage claims or make any determinations regarding damage claims in the report.

(b) Information presented by the operator or surface owner as to costs incurred by either party as a result of the projected drilling and the loss of minerals or surface damage may be utilized by the mediator in recommending the placement of roads, pits,

or other construction and reclamation activities in a manner that has the least adverse surface impact.

(6) If the operator withdraws his or her application for a permit to drill, deepen, or reopen a well after receipt by the division of the surface owner's mediation fee, that fee shall be refunded to the surface owner.

#### Section 4. Construction, Reclamation, and Maintenance.

(1) Pre-construction planning shall be performed to design access roads, wellsite, and pits along existing topography to minimize erosion and identify locations for sediment control practices and devices in accordance with the operations and reclamation plan.

(2) Construction activities shall incorporate BMPs for erosion and sedimentation control on all disturbed areas.

(a) All cuts and fills shall have side slopes that are stable for the soil or fill material utilized.

(b) A wellsite shall be constructed on a stable base.

(c) Pits shall comply with the construction requirements in subparagraphs 1. through 7. of this paragraph.

1.

a. Except as established in clause b. of this subparagraph, pits shall be constructed on the cut or highwall side of well sites in non-fill areas.

b. If site conditions prevent compliance with clause a. of this subparagraph, then pits may be constructed in fill areas if a division representative has determined that the location is stable and will prevent failure of the pit.

2. Pits shall be located above the 100-year floodplain in order to maximize the distance from surface waters of the Commonwealth.

3. Pits shall be of sufficient size and shape to contain all drilling fluids, cuttings, well completion, and treatment fluids from the well.

4.

a. Pits shall be lined with an impermeable synthetic material having a minimum thickness of ten (10) mils to prevent movement of pit fluids into the subsurface.

b.

(i) The liner requirement may be waived by a division representative if the drilling mud circulation system utilizes bentonite clay and the division representative observes soil conditions confirming the presence of clay, which shall create an impermeable barrier preventing infiltration of pit fluids into the underlying soil and rock strata.

(ii) The division representative shall not approve waivers to clause a. of this subparagraph in areas as identified by Kentucky Geologic Survey mapping as being underlain by bedrock with high or moderate potential for karst development.

5. Diversion ditches shall be constructed up slope of the pit to divert surface runoff so that the pit has no additional drainage area.

6. Pits shall be constructed to maintain a continuous freeboard of at least two (2) feet above ground level to prevent overflow.

7. A steel tank, of sufficient size and shape to contain all drilling fluids, cuttings, well completion, and treatment fluids, may be used in lieu of an excavated pit.

(d) A disturbed area shall be graded and stabilized so that soil erosion, surface disturbances, and stream sedimentation is minimized utilizing best management practices, in accordance with the approved operations and reclamation plan.

(e) If practicable, all topsoil present in the area to be disturbed shall be removed and segregated for redistribution during reclamation.

- (f) Temporary erosion control measures shall be implemented during construction of the road to minimize sedimentation and erosion until permanent control measures including seeded and mulched road ditches can be established.
- (3) If the well produces and the site is kept open for long-term use for well servicing and for oil and gas removal, the operator shall:
- (a) Maintain access roads in a manner as to:
    - 1. Allow access by the operator without causing unreasonable settlement of the roadbed or slides of the cut slopes; and
    - 2. Provide that maintenance shall be in accordance with the operations and reclamation plan;
  - (b) Establish drainage:
    - 1. To adequately accept runoff from access roads, the well site, and other areas in a manner that shall prevent unreasonable interference with the surface owner's property, roads, farming operations, and buildings; and
    - 2. In accordance with the operations and reclamation plan;
  - (c)
    - 1. Repair access roads, the well site area, and pits damaged by events as floods, landslides, or excessive settlement of the embankment as soon as practicable after the damage has occurred;
    - 2. Not be responsible for damage attributable to another party's use of the access road not relating to the drilling, construction, or operation of the well by the operator; and
  - (d) Maintain and operate pits in accordance with subparagraphs 1. through 5. of this paragraph.
    - 1.
      - a. Pits shall not remain open for more than thirty (30) days after drilling or well completion, unless an extension is requested and approved by the director.
      - b. A multi-well pad shall be closed within thirty (30) days after drilling or well completion of the last well on the well site.
      - c. Upon written request, the director may, with good cause, extend the allowable life of the pit to a maximum ninety (90) days after drilling or well completion.
    - 2. Pits shall not be used to dispose of garbage.
    - 3. The pit and applicable portion of the well site not utilized for production purposes shall be closed in accordance with Section 6(1)(b).
    - 4. Discharge from a pit or any activity associated with the drilling or completion of a well to any surface or ground waters or in a location where it is likely to cause pollution to any surface or groundwater shall be prohibited.
    - 5. Pits shall be monitored for integrity and slope stability until closure of the pit.

#### Section 5. Site closure.

- (1) The department shall consider a wellsite closed after:
- (a) All surface production facilities have been removed;
  - (b) Pits have been closed in accordance with subparagraphs 1. through 4. of this paragraph:
    - 1. All standing fluids in the pit shall be removed and disposed of in accordance with 805 KAR 1:110;
    - 2. The operator shall ensure solidification of drill cuttings by mixing earthen material within the pit;
    - 3. Pit solids shall be encapsulated in the liner and buried prior to surface restoration and reclamation; and
    - 4. The pit shall be back-filled with earthen material to establish natural grade with the surrounding wellsite;

- (c) The well has been plugged under direction of the department;
  - (d) Written notice has been provided by the operator to the division that final reclamation and site closure has been completed pursuant to the operations and reclamation plan; and
  - (e) The cabinet has verified that the reclamation work complies with the operations and reclamation plan in the approved permit package.
- (2) The bond required in KRS 353.590(7), (8), (9) or KRS 349.120 shall not be released until a division inspector has:
- (a) Made an inspection of the well site one (1) year after the date of the letter of notification from the operator of final reclamation and plugging; and
  - (b) Filed a report to the director documenting that the following have occurred:
    - 1. All areas disturbed by the operator have been secured in a manner to prevent runoff, sedimentation, settlement of the roadway, or sliding of cut slopes or any fill material;
    - 2. A diverse and effective permanent vegetative cover has been established; and
    - 3. Any matters relating to settlement, inadequate vegetative cover, or erosion have been corrected.

#### Section 6. Transfer of Wells having Existing Reclamation Plans.

- (1) Prior to transferring a well for which an approved operations and reclamation plan is on file with the division, the operator shall:
- (a) Provide the successor operator a copy of the approved reclamation forms and attachments on file with the division before signing Well Transfer Form OG-13;
  - (b) Advise the successor operator of any reclamation responsibility the transferring operator had with regard to the well and related surface disturbance;
  - (c) Secure from the successor operator a letter indicating that the operator has received from the transferring operator a copy of Form OG-10 and that he or she is willing to accept responsibility for the reclamation of the well site and other surface disturbances related to the operation of the well;
  - (d) Submit to the division the completed and notarized Well Transfer, Form OG-13, applicable fee, and the letter of the successor operator's agreement to accept responsibility for reclamation in the manner established on Form OG-10; and
  - (e) Provide the surface owner of record with a copy of form OG-13 upon submission to the division.
- (2) The division shall not transfer the well until the requirements of this section are satisfied and shall advise the transferring and successor operators in writing upon transfer of the well.
- (3) The transferee of a well shall assume all obligations in accordance with the terms of the permit, this section, and KRS 353.590(23) upon transfer.

#### Section 7.

- (1) If a well is to be drilled and completed on federal lands, the director shall accept a copy of a surface use reclamation agreement between the well operator and the federal agency in lieu of the operations and reclamation plan.
- (2) If the operator elects to submit this agreement, it shall be submitted with the application for permit to drill a well.

#### Section 8.

- (1) If a field inspection indicates there is noncompliance with the approved operations and reclamation plan or the requirements of Section 5 of this administrative regulation, a written notice of violation describing the noncompliance shall be given to the operator, together with a statement of the action required to correct the noncompliance.



(2) The written notice of violation shall allow the operator up to forty-five (45) days to correct the violation.

(3) An operator may file for an extension of time to correct a violation. A request for an extension of time shall be submitted via a letter to the director describing the need for that extension. If the director concludes that the reasons for the request are beyond the operator's control and that an extension of time will not violate the requirements of this administrative regulation or applicable statutes, the director shall grant the request for extension of time.

(4) The operator's bond shall be forfeited to the department's oil and gas well plugging fund, pursuant to KRS 353.590(27), if the operator fails to make required corrections.

(5) An operator who, after a hearing, is determined by the department to be in noncompliance with any section of this administrative regulation, or who fails to abate any noncompliance of the approved operations and reclamation plan, shall be subject to the penalties described in KRS 353.991.

#### Section 9. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) "Operations and Reclamation Plan", OG-10, October 2019; and

(b) "Well Transfer", OG-13, June 2019.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Oil and Gas, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m., Eastern Prevailing Time.

(23 Ky.R. 3655; 4182; 24 Ky.R. 90; 365; eff. 7-9-1997; TAm eff. 8-9-2007; 41 Ky.R. 2366; 42 Ky.R. 58; eff. 9-4-2015, TAm eff. 7-6-2016; Crt eff. 6-27-2018; 46 Ky.R. 685, 1509, 2068; eff. 2-3-2020.)