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TITLE 312 NATURAL RESOURCES COMMISSION

Proposed Rule LSA Document #02-104

DIGEST

Amends 312 IAC 25-1 by adding new definitions. Amends 312 IAC 25-4-43, 312 IAC 25-4-47, 312 IAC 25-4-85, and 312 IAC 25-4-93 with respect to performance standards for the protection of ground water quality. Adds 312 IAC 25-6-12.5 and 312 IAC 25-6-76.5 to establish application procedures and performance standards consistent with 327 IAC 2-11 as regulated under IC 14-34. Effective upon the Department of Natural Resources receiving notice of approval from the Office of Surface Mining and Reclamation of the U.S. Department of the Interior and notice of that approval being published in the Indiana Register.

312 IAC 25-1-45.5	312 IAC 25-4-85
312 IAC 25-1-60.5	312 IAC 25-4-93
312 IAC 25-4-43	312 IAC 25-6-12.5
312 IAC 25-4-47	312 IAC 25-6-76.5

SECTION 1. 312 IAC 25-1-45.5 IS ADDED TO READ AS FOLLOWS:

312 IAC 25-1-45.5 “Drinking water well” defined

Authority: IC 14-34-2-1
Affected: IC 14-34

Sec. 45.5. “Drinking water well”, for the purposes of 312 IAC 25-6-12.5 and 312 IAC 25-6-76.5, means a bored, drilled, or driven shaft or a dug hole that meets each of the following:

- (1) Supplies ground water for human consumption.**
- (2) Has a depth greater than its largest surface dimension.**
- (3) Is not permanently abandoned under 312 IAC 13-10-2.**

(Natural Resources Commission; 312 IAC 25-1-45.5)

SECTION 2. 312 IAC 25-1-60.5 IS ADDED TO READ AS FOLLOWS:

312 IAC 25-1-60.5 “Ground water management zone” defined

Authority: IC 14-34-2-1
Affected: IC 14-34

Sec. 60.5. “Ground water management zone” means a three (3) dimensional region of ground water around a potential or existing contaminant source where a contaminant is or was managed to prevent or mitigate deterioration of ground water quality such that the criteria established in 312 IAC 25-6-12.5(a) or 312 IAC 25-6-76.5(a) are met at and beyond the boundary of the region. *(Natural Resources Commission; 312 IAC 25-1-60.5)*

SECTION 3. 312 IAC 25-4-43 IS AMENDED TO READ AS FOLLOWS:

312 IAC 25-4-43 Surface mining permit applications; reclamation and operations plan; maps

Authority: IC 14-34-2-1
Affected: IC 14-34

Sec. 43. Each application shall contain maps and plans of the proposed permit and adjacent areas as follows:

(1) The maps and plans shall depict the lands proposed to be affected throughout the operation and any change in a facility or feature to be caused by the proposed operations if the facility or feature was shown under sections 37 and 38 of this rule.

(2) The following shall be shown for the proposed permit area and adjacent area within one thousand (1,000) feet:

(A) Buildings, utility corridors, and facilities to be used.

(B) The area of land to be affected within the proposed permit area according to the sequence of mining and reclamation.

(C) Each area of land for which a performance bond will be posted under 312 IAC 25-5.

(D) Each coal storage, cleaning, and loading area.

(E) Each topsoil, spoil, coal waste, and noncoal waste storage area.

(F) Each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used.

(G) Each source of waste and each disposal facility relating to coal processing or pollution control.

(H) Each facility to be used to protect and enhance fish and wildlife and related environmental values.

(I) Each explosive storage and handling facility.

(J) Location of each:

(i) siltation structure;

(ii) permanent water impoundment;

(iii) coal processing waste bank; and

(iv) coal processing waste dam and embankment;

in accordance with section 49 of this rule, and fill area for the disposal of excess spoil in accordance with section 54 of this rule.

(K) Each air pollution collection and control facility if required.

(3) Maps, plans, and cross sections required under subdivision (2)(D) through (2)(F) and (2)(J) shall be prepared by, or under the direction of, and certified by a registered professional engineer or professional geologist, with necessary assistance from experts in related fields such as land surveying and landscape architecture, except that maps, plans, and cross sections for:

(A) siltation structures may only be prepared by a registered professional engineer; and

(B) spoil disposal facilities may only be prepared by a registered professional engineer.

(4) All monitoring locations used to demonstrate compliance with 312 IAC 25-6-12.5.

(Natural Resources Commission; 312 IAC 25-4-43; filed Jun 21, 2001, 2:53 p.m.; 24 IR 3454, eff Dec 1, 2001)

SECTION 4. 312 IAC 25-4-47 IS AMENDED TO READ AS FOLLOWS:

312 IAC 25-4-47 Surface mining permit applications; reclamation and operations plan; reclamation plan; protection of hydrologic balance

Authority: IC 14-34-2-1

Affected: IC 14-34

Sec. 47. (a) Each reclamation plan shall contain a detailed description, including maps and drawings of the measures to be taken during the mining and reclamation process, through bond release, to assure the protection of the following:

(1) The quality of surface and ground water systems, within the permit area and adjacent area, from adverse effects of the mining and reclamation process.

(2) The rights of present users of that water.

(3) The quantity of surface and ground water systems, within the permit area and adjacent area, from adverse effects of the mining and reclamation process or to provide alternative sources of water under section 33 of this rule and 312 IAC 25-6-25 where the protection of quantity cannot be assured.

(4) The prevention of material damage outside the permit area.

(5) Compliance with applicable federal and state water quality laws and regulations.

(6) The hydrologic balance within the permit and adjacent areas.

(b) The description in subsection (a) shall include the following:

(1) A plan for the control of drainage under 312 IAC 25-6-5 through 312 IAC 25-6-69, of surface and ground water drainage into, through, and out of the proposed permit area.

(2) A plan for the treatment, where required under 312 IAC 25-6-5 through 312 IAC 25-6-69, of surface and ground

water drainage from the area to be affected by the proposed activities and proposed quantitative limits on pollutants in discharges subject to 312 IAC 25-6-13, according to the more stringent of:

- (A) 312 IAC 25-6-5 through 312 IAC 25-6-69; or
 - (B) other applicable state or federal laws.
- (3) A plan for the restoration of the approximate recharge capacity of the permit area under 312 IAC 25-6-22 and as required by section 45 of this rule.
 - (4) A plan for the collection, recording, and reporting of ground and surface water quality and water quantity data under 312 IAC 25-6-23.
 - (5) A plan to avoid acid or toxic drainage.
 - (6) A plan to prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to stream flow.
 - (7) A plan to provide water treatment facilities when needed.
 - (8) A plan to control drainage.
 - (9) A plan to demonstrate compliance with 312 IAC 25-6-12.5.**

(c) The description in subsection (a) shall include a determination of the probable hydrologic consequences (PHC) of the mining and reclamation operations proposed, in the permit and adjacent areas, with respect to the quantity and quality of surface and ground water systems under all seasonal conditions, including the contents of dissolved and total suspended solids, total iron, pH, total manganese, and other parameters required by the director. Information shall be provided as follows:

- (1) The PHC determination shall be based on baseline hydrologic, geologic, and other information collected for the permit application and may include data statistically representative of the site.
- (2) The PHC determination shall include findings on the following:
 - (A) Whether adverse impacts may occur to the hydrologic balance.
 - (B) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground water supplies.
 - (C) Whether the proposed operation may proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas that is used for domestic, agricultural, industrial, or other legitimate purpose.
 - (D) What impact the proposed operation will have on the following:
 - (i) Sediment yields from the disturbed area.
 - (ii) Acidity, total suspended and dissolved solids, and other important water quality parameters of local impact.
 - (iii) Flooding or stream flow alteration.
 - (iv) Ground water and surface water availability.
 - (v) Other characteristics as required by the director.
- (3) Sampling and analysis shall be conducted under section 28(d) of this rule.
- (4) An application for a permit revision shall be reviewed by the director to determine whether a new or updated PHC determination shall be required.

(d) The description in subsection (a) shall include a plan specifically addressing any potentially adverse hydrologic consequences identified in the PHC determination prepared under subsection (c) and shall include preventative and remedial measures. (*Natural Resources Commission; 312 IAC 25-4-47; filed Jun 21, 2001, 2:53 p.m.: 24 IR 3456, eff Dec 1, 2001*)

SECTION 5. 312 IAC 25-4-85 IS AMENDED TO READ AS FOLLOWS:

312 IAC 25-4-85 Underground mining permit applications; reclamation plan; protection of hydrologic balance

Authority: IC 14-34-2-1

Affected: IC 14-34; 30 CFR 784.14

Sec. 85. (a) Each reclamation plan shall contain a detailed description, with appropriate maps and cross section drawings, of the measures to be taken during and after the proposed underground mining activities, through bond release, under 312 IAC 25-6-70 through 312 IAC 25-6-132, to ensure the protection of the following:

- (1) The quality of surface and ground water in the proposed permit area and adjacent area from adverse effects of the proposed underground mining activities.
- (2) The rights of present users to that surface and ground water.
- (3) The quantity of surface and ground water in the proposed permit area and adjacent area from adverse effects of the proposed underground mining activities, or to provide alternative sources of water, under section 74 of this rule and 312 IAC 25-6-88, where the protection of quantity cannot be ensured.
- (4) Water quality by locating openings for mines under 312 IAC 25-6-85.
- (5) The prevention of material damage outside the permit area.
- (6) Compliance with applicable federal and state water quality laws and regulations.
- (7) The hydrologic balance within the permit and adjacent areas.

(b) The description in subsection (a) shall include the following:

- (1) A plan for the control, under 312 IAC 25-6-70 through 312 IAC 25-6-132, of surface and ground water drainage into, through, and out of the proposed permit area.
- (2) A plan for the treatment, where required under 312 IAC 25-6-70 through 312 IAC 25-6-132, of surface and ground water drainage from the area to be affected by the proposed activities, and proposed quantitative limits on pollutants in discharges subject to 312 IAC 25-6-77, according to the more stringent of the following:
 - (A) 312 IAC 25-6-70 through 312 IAC 25-6-132.
 - (B) Other applicable state and federal laws.
- (3) A plan for the collection, recording, and reporting of ground and surface water quality and water quantity data under 312 IAC 25-6-86.
- (4) A plan to avoid acid or toxic drainage.
- (5) A plan to prevent, to the extent possible using the best technology currently available, adding contributions of suspended solids to stream flow.
- (6) A plan to provide water treatment facilities when needed.
- (7) A plan to control drainage.

(8) A plan to demonstrate compliance with 312 IAC 25-6-76.5.

(c) The description in subsection (a) shall include the following:

- (1) A determination of the probable hydrologic consequences (PHC) of the proposed underground mining activities, on the proposed permit area and adjacent area, with respect to the hydrologic regime and the quantity and quality of water in surface and ground water systems under all seasonal conditions, including the following:
 - (A) The contents of dissolved and total suspended solids.
 - (B) Total iron.
 - (C) pH.
 - (D) Total manganese.
 - (E) Other parameters required by the director.
- (2) Whether the underground mining activities may result in contamination, diminution, or interruption of a well or spring in existence at the time the permit application is submitted and used for domestic, drinking, or residential purposes within the permit or adjacent areas.

(d) Sampling and analysis shall be conducted under 312 IAC 25-6-86. Information shall be provided as follows:

- (1) The PHC determination shall be based on baseline hydrologic, geologic, and other information collected for the permit application and may include data statistically representative of the site.
- (2) The PHC determination shall include findings on the following:
 - (A) Whether adverse impacts may occur to the hydrologic balance.
 - (B) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground water supplies.
 - (C) What impact the proposed operation will have on the following:
 - (i) Sediment yields from the disturbed area.
 - (ii) Acidity, total suspended and dissolved solids, and other important water quality parameters of local impact.
 - (iii) Flooding or stream flow alteration.
 - (iv) Ground water and surface water availability.
 - (v) Other characteristics as required by the director.

(3) Any application for a permit revision shall be reviewed by the director to determine whether a new or updated PHC determination shall be required.

(e) Each plan shall contain a detailed description, with appropriate drawings, of permanent entry seals and down slope barriers, designed to ensure stability under anticipated hydraulic heads developed while promoting mine inundation after mine closure for the proposed permit area.

(f) The plan shall specifically address any potential adverse hydrologic consequences identified in the PHC determination prepared under subsection (c) and shall include preventive and remedial measures. (*Natural Resources Commission; 312 IAC 25-4-85; filed Jun 21, 2001, 2:53 p.m.: 24 IR 3472, eff Dec 1, 2001*)

SECTION 6. 312 IAC 25-4-93 IS AMENDED TO READ AS FOLLOWS:

312 IAC 25-4-93 Underground mining permit applications; reclamation plan; maps

Authority: IC 14-34-2-1

Affected: IC 14-34

Sec. 93. Each application shall contain maps, plans, and cross sections of the proposed permit and adjacent areas as follows:

(1) The maps, plans, and cross sections shall show the underground mining activities to be conducted, the land to be affected throughout the operations, and any change in a facility or feature to be caused by the proposed operations if the facility or feature was shown under sections 78 and 79 of this rule.

(2) The following shall be shown for the proposed permit area:

(A) Buildings, utility corridors, and facilities to be used.

(B) The area of land to be affected within the proposed permit area according to the sequence of mining and reclamation.

(C) Each area of land for which a performance bond will be posted under 312 IAC 25-5.

(D) Each coal storage, cleaning, and loading area.

(E) Each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area.

(F) Each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used.

(G) Each source of waste and each waste disposal facility relating to coal processing or pollution control.

(H) Each facility to be used to protect and enhance fish and wildlife related environmental values.

(I) Each explosive storage and handling facility.

(J) Location of each:

(i) siltation structure;

(ii) permanent water impoundment;

(iii) coal processing waste bank; and

(iv) coal processing waste dam and embankment;

in accordance with section 87 of this rule and disposal areas for underground development waste and excess spoil in accordance with section 90 of this rule.

(K) Each profile, at cross sections specified by the director, of the anticipated final surface configuration to be achieved for the affected areas.

(L) Location of each water and subsidence monitoring point.

(M) Location of each facility that will remain on the proposed permit area as a permanent feature after the completion of underground mining activities.

(3) Maps, plans, and cross sections required under subdivision (2)(D) through (2)(F) and (2)(I) through (2)(K) shall be prepared by, or under the direction of, and certified by a professional engineer or professional geologist, with necessary assistance from experts in related fields such as land surveying and landscape architecture, except that maps, plans, and cross sections of:

(A) siltation structures may only be prepared by a registered engineer; and

(B) excess spoil and underground development waste facilities may only be prepared by a registered professional engineer.

(4) All monitoring locations used to demonstrate compliance with 312 IAC 25-6-76.5.

(*Natural Resources Commission; 312 IAC 25-4-93; filed Jun 21, 2001, 2:53 p.m.: 24 IR 3476, eff Dec 1, 2001*)

SECTION 7. 312 IAC 25-6-12.5 IS ADDED TO READ AS FOLLOWS:

312 IAC 25-6-12.5 Hydrologic balance; application of ground water quality standards

Authority: IC 14-34-2-1

Affected: IC 14-34

Sec. 12.5. (a) Ground water is classified under 327 IAC 2-11 to determine appropriate criteria that shall be applied to ground water.

(b) Surface coal mining and reclamation operations must be planned and conducted to prevent violations of ground water quality standards under 327 IAC 2-11.

(c) The ground water management zone described in 327 IAC 2-11-9 must be established as follows:

(1) At each drinking water well that is within three hundred (300) feet from the edge of:

(A) the coal extraction area;

(B) the coal mine processing waste disposal site if not within a coal extraction area;

(C) the area where coal is extracted by auger mining methods;

(D) the location at which coal is crushed, washed, screened, stored, and loaded at or near the mine site unless the location is within the coal extraction area; or

(E) the spoil deposition area.

(2) Within three hundred (300) feet from the edge of an area or site described in subdivision (1) where there is no drinking water well that is within three hundred (300) feet from the edge of an area or site described in subdivision (1).

(d) The criteria established in subsection (a) must be met at and beyond the boundary of the ground water management zone. *(Natural Resources Commission; 312 IAC 25-6-12.5)*

SECTION 8. 312 IAC 25-6-76.5 IS ADDED TO READ AS FOLLOWS:

312 IAC 25-6-76.5 Underground mining; hydrologic balance; application of ground water quality standards

Authority: IC 14-34-2-1

Affected: IC 14-34

Sec. 76.5. (a) Ground water is classified under 327 IAC 2-11 to determine appropriate criteria that shall be applied to ground water.

(b) Underground coal mining and reclamation operations must be planned and conducted to prevent violations of ground water quality standards under 327 IAC 2-11.

(c) The ground water management zone described in 327 IAC 2-11-9 must be established as follows:

(1) At each drinking water well that is within three hundred (300) feet from the edge of:

(A) the coal mine processing waste disposal site;

(B) the location at which coal is crushed, washed, screened, stored and loaded at or near a mine site; or

(C) the underground waste and spoil deposition area.

(2) Within three hundred (300) feet from the edge of an area or site described in subdivision (1) where there is no drinking water well that is within three hundred (300) feet from the edge of an area or site described in subdivision (1).

(d) The criteria established in subsection (a) must be met at and beyond the boundary of the ground water management zone. *(Natural Resources Commission; 312 IAC 25-6-76.5)*

SECTION 9. SECTIONS 1 through 8 of this document take effect upon the department of natural resources receiving notice of approval from the Office of Surface Mining and Reclamation of the U.S. Department of Interior and notice of that approval being published in the Indiana Register.

Notice of Public Hearing

Under IC 4-22-2-24, notice is hereby given that on September 30, 2002 at 6:00 p.m., at the Department of Natural Resources Field Office, R.R. 2, Box 129, (S.R. 48 west of) Jasonville, Indiana the Natural Resources Commission will hold a public hearing on proposed amendments to add new definitions, to make changes with respect to performance standards for the protection of ground water quality, and to establish application procedures and performance standards consistent with 327 IAC 2-11 as regulated under IC 14-34. Copies of these rules are now on file at the Indiana Government Center-South, 402 West Washington Street, Room W272 and Legislative Services Agency, One North Capitol, Suite 325, Indianapolis, Indiana and are open for public inspection.

Michael Kiley
Chairman
Natural Resources Commission