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Introduced By:

98-353sub

Proposed No.:

98-353

ORDINANCE NO. **13319**

AN ORDINANCE relating to coal mine hazard areas;  
amending the definition of coal mine hazard areas; adding  
definitions to K.C.C. 21A.06; amending Ordinance 10870,  
Sections 80, 452 and 468, each as amended and K.C.C.  
21A.06.200, 21A.24.050, and 21A.24.210.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Ordinance 10870, Section 80, and K.C.C.21A.06.200 are each hereby  
amended to read as follows:

Coal mine hazard areas. Coal mine hazard areas: those areas in King County  
~~((directly))~~ underlain or directly affected by operative or abandoned subsurface coal mine  
workings (~~((such as adits, tunnels, drifts or air shafts))~~). Based upon a coal mine hazard  
assessment report prepared pursuant to K.C.C. 21A.24.210, coal mine hazard areas are to be  
categorized as declassified, moderate, or severe:

A. “Declassified” coal mine areas are those for which a risk of catastrophic collapse  
is not significant and which the hazard assessment report has determined require no special  
engineering or architectural recommendations to prevent significant risks of property  
damage. Declassified coal mine areas may typically include, but are not limited to, areas  
underlain or directly affected by coal mines at depths greater than three hundred feet as

1 measured from the surface but may often include areas underlain or directly affected by coal  
2 mines at depths less than three hundred feet.

3 B. "Moderate" coal mine hazard areas are those areas that pose significant risks of  
4 property damage which can be mitigated by special engineering or architectural  
5 recommendations. Moderate coal mine hazard areas may typically include, but are not be  
6 limited to, areas underlain or directly affected by abandoned coal mine workings from a  
7 depth of zero (i.e. the surface of the land) to three hundred feet or with overburden-cover-to-  
8 seam thickness ratios of less than ten to one dependent on the inclination of the seam.

9 C. "Severe" coal mine hazard area are those areas that pose a significant risk of  
10 catastrophic ground surface collapse. Severe coal mine hazard areas may typically include,  
11 but are not be limited to, areas characterized by unmitigated openings such as entries,  
12 portals, adits, mine shafts, air shafts, timber shafts, sinkholes, improperly filled sink holes,  
13 and other areas of past or significant probability for catastrophic ground surface collapse.  
14 Severe coal mine hazard areas typically include, but are not limited to, over land surfaces  
15 underlain or directly affected by abandoned coal mine workings from a depth of zero (i.e.  
16 surface of the land) to one hundred fifty feet.

17 NEW SECTION. SECTION 2. There is added to K.C.C. 21A.06 a new section to  
18 read as follows:

19 Catastrophic collapse. Catastrophic collapse: the collapse of the ground surface by  
20 overburden caving into underground voids created by mining. Catastrophic collapse does  
21 not include the effects from trough subsidence.

22 NEW SECTION. SECTION 3. There is added to K.C.C. 21A.06 a new section to  
23 read as follows:

1 Coal mine by-products stockpiles. Coal mine by-products stockpiles: an  
2 accumulation, greater than five hundred cubic yards and five feet of vertical depth, of  
3 undisturbed waste and/or byproduct materials having greater than fifty percent, as measured  
4 by weight, of mineral coal or coal shale as a component and which resulted from historic  
5 coal mining.

6 NEW SECTION. SECTION 4. There is added to K.C.C. 21A.06 a new section to  
7 read as follows:

8 Overburden-cover-to-seam-thickness ratio. Overburden-cover-to-seam-thickness  
9 ratio: the thickness as measured from the ground surface to the top of the abandoned mine  
10 working divided by the extracted thickness of the coal seam, expressed as a ratio. A ten foot  
11 extracted coal seam will have a 10:1 overburden-cover-to-seam-thickness ratio at a depth of  
12 one hundred feet and a 15:1 overburden-cover-to-seam-thickness ratio at a depth of one  
13 hundred fifty feet.

14 NEW SECTION. SECTION 5. There is added to K.C.C. 21A.06 a new section to  
15 read as follows:

16 Trough subsidence. Trough subsidence: a readily predictable or historically  
17 observed surface depression phenomena caused by coal extraction which is generally  
18 characterized by a gentle and continuous dish shape which may extend beyond the  
19 subsurface area in which coal mining has occurred.

20 SECTION 6. Ordinance 10870, Section 452, as amended, and K.C.C. 21A.24.050  
21 are each hereby amended to read as follows:

22 Complete exemptions. The following are exempt from the provisions of this chapter  
23 and any administrative rules promulgated thereunder:

1 A. Alterations in response to emergencies which threaten the public health, safety and  
2 welfare or which pose an imminent risk of damage to private property as long as any alteration  
3 undertaken pursuant to this subsection is reported to the department immediately. The director  
4 shall confirm that an emergency exists and determine what, if any, mitigation shall be  
5 required to protect the health, safety, welfare and environment and to repair any resource  
6 damage;

7 B. Agricultural activities as described below, in existence before November 27, 1990,  
8 and performed not less often than once every five years thereafter:

9 1. Mowing of hay, grass or grain crops;

10 2. Tilling, discing, planting, seeding, harvesting, soil preparation, crop rotation and  
11 related activities for pasture, food crops, grass seed or sod if such activities do not take place  
12 on steep slopes;

13 3. Normal and routine maintenance of existing irrigation and drainage ditches not  
14 used by salmonids;

15 4. Normal and routine maintenance of farm ponds, fish ponds, manure lagoons and  
16 livestock watering ponds; and

17 5. grazing by livestock.

18 C. Public water, electric and natural gas distribution, public sewer collection, cable  
19 communications, telephone utility and related activities undertaken pursuant to county-  
20 approved best management practices, as follows:

21 1. Normal and routine maintenance or repair of existing utility structures or rights-of-  
22 way;

1           2. Relocation of electric facilities, lines, equipment or appurtenances, not including  
2 substations, with an associated voltage of ~~((55,000))~~ fifty-five thousand volts or less, only  
3 when required by a local governmental agency which approves the new location of the  
4 facilities;

5           3. Replacement, operation, repair, modification, ~~((or))~~ installation or construction in  
6 existing~~((,))~~ developed utility corridors, an improved county road right-of-way or county  
7 authorized private roadway of all electric facilities, lines, equipment or appurtenances, not  
8 including substations;

9           4. Relocation of public sewer local collection, public water local distribution, natural  
10 gas, cable communication or telephone facilities, lines, pipes, mains, equipment or  
11 appurtenances, only when required by a local governmental agency which approves the new  
12 location of the facilities;

13           5. Replacement, operation, repair, modification, installation or construction of public  
14 sewer local collection, public water local distribution, natural gas, cable communication or  
15 telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are  
16 located within an improved public right-of-way or county authorized private roadway;

17           D. Maintenance, operation, repair, modification or replacement of publicly improved  
18 roadways as long as any such alteration does not involve the expansion of roadways or related  
19 improvements into previously unimproved rights-of-way or portions of rights-of-way;

20           E. Maintenance, operation or repair of publicly improved recreation areas as long as  
21 any such alteration does not involve the expansion of improvements into previously  
22 unimproved recreation areas;

1 F. Public agency development proposals only to the extent of any construction  
 2 contract awarded before November 27, 1990, provided that any law or regulation in effect at the  
 3 time of such award shall apply to the proposal;

4 G. All clearing and grading activities which are exempt from the requirement for  
 5 a clearing and grading permit as specified in K.C.C. 16.82.050, unless these activities require  
 6 other permits or authorizations as specified in K.C.C. 21A.24.020.

7 H. The following exempt activities are permitted in coal mine hazard areas, provided  
 8 that the applicable landowner, operator or utility is made aware of potential hazards:

9 1. Forest practices;

10 2. Agricultural activities;

11 3. Mining activities;

12 4. Power, telephone, and cable television utility lines;

13 5. Grading, filling, stockpile removal, and reclamation activities performed in  
 14 conjunction with or by the Department of Interior's Office of Surface Mining, Reclamation  
 15 and Enforcement with the intent of eliminating or mitigating threats to human health, public  
 16 safety, environmental restoration or protection of property; and

17 6. Land uses and activities that existed prior to the effective date of this ordinance.

18 SECTION 7. Ordinance 10870, Section 468, as amended, and K.C.C. 21A.24.210 are  
 19 each hereby amended to read as follows:

20 Coal mine hazard areas: (~~Development standards and permitted alterations.~~

21 ~~A. Alterations to coal mine hazard areas are allowed unless proposed activities pose a~~  
 22 ~~significant risk of property damage or injury resulting from abandoned mine workings.~~

23 ~~1. The department shall determine by administrative rule;~~

1 a. ~~Which development proposal activities pose a significant risk of property damage or~~  
2 ~~personal injury resulting from abandoned mine workings.~~

3 b. ~~The standards and format for submitting studies and reports from professional~~  
4 ~~engineers or geologists.~~

5 c. ~~The standards for de-classifying those coal mine hazard lands which do not pose~~  
6 ~~significant risks of property damage or injury when developed in accordance with applicable~~  
7 ~~building codes and development standards.~~

8 ~~These rules shall be delivered for review by the King County council by December 31,~~  
9 ~~1995.~~

10 2. ~~King County may require mitigation to eliminate or minimize significant risks of~~  
11 ~~property damage and shall require mitigation to eliminate or minimize significant risks of~~  
12 ~~personal injury, including but not limited to incorporation of building setbacks and design and~~  
13 ~~performance tolerances for structures and infrastructure improvements. In order to evaluate the~~  
14 ~~extent of risk or level of mitigation associated with a proposed alteration, King County may~~  
15 ~~require:~~

16 a. ~~site plans or plat maps showing the location of coal mine hazard features; and~~  
17 ~~b. studies and reports with recommendations from qualified professional engineers or~~  
18 ~~geologists.~~

19 B. ~~The following alterations are exempt from the provision of this section:~~

20 1. ~~Alterations which are not development proposals;~~

21 2. ~~Buildings with less than 2500 square feet of floor area or roof area (whichever is~~  
22 ~~greater) that contain no living quarters and that are not used as places of employment or public~~

23 ~~assembly, provided that King County staff finds no site specific evidence indicating the~~

1 presence of mine workings at a depth of less than 200 feet within a horizontal distance of 200  
2 feet of the proposed structure.

3 ~~3. Mobile homes which replace pre-existing mobile homes at the same location,~~  
4 ~~provided that, based on a field visit and review of existing information, King County finds no~~  
5 ~~site specific evidence indicating the presence of mine workings at a depth of less than 200 feet~~  
6 ~~within a horizontal distance of 200 feet of the proposed structure.~~

7 ~~4. Alteration or reclamation of coal mine hazards performed by or in conjunction with~~  
8 ~~the Department of Interior's Office of Surface Mining, Reclamation, and Enforcement with the~~  
9 ~~intent of eliminating or mitigating threats to human health, public safety, environmental~~  
10 ~~restoration or protection of property.~~

11 ~~5. Alterations associated with the reclamation, removal, reuse or stabilization of coal~~  
12 ~~refuse stockpiles, provided that a review of potential hazards and necessary mitigations is~~  
13 ~~incorporated into the grading or other permit approval.))~~

14 Development standards and permitted alterations.

15 A. Alterations within coal mine hazard areas shall not be permitted without prior  
16 acceptance of a coal mine hazard assessment report and provided that:

17 1. Based upon recommendations contained within the report, a studied site shall be  
18 classified as one or a combination of the following:

- 19 a. declassified coal mine areas;
- 20 b. moderate coal mine hazard areas; or
- 21 c. severe coal mine hazard areas.

22 2. The coal mine hazard assessment report shall be prepared by a professional  
23 engineer using methodology and assumptions consistent with standards or professional



1 engineering guidelines adopted by the department. The report may contain the following as  
2 determined by the department to be necessary for the review of the proposed use:

3 a. a statement of the professional engineer's qualifications and licensing  
4 information, together with a signature and stamped seal;

5 b. a list of references utilized in preparation of the report;

6 c. a description of the analytical tools and processes that have been used in the  
7 report;

8 d. surface exploration data such as borings, drill holes, test pits, wells, geologic  
9 reports, and other relevant reports or site investigations that may be useful in making  
10 conclusions or recommendations about the site under investigation;

11 e. a description of historical data and information used in the evaluation,  
12 together with sources. Such data and information shall include:

13 (1) topographic maps at a scale and contour interval of sufficient detail to  
14 assess the site. The site boundaries and proposed site development shall be overlain with the  
15 mine plan view map, as appropriate;

16 (2) copies of illustrative coal mine maps showing remnant mine conditions, if  
17 available;

18 (3) aerial photography, as appropriate;

19 (4) geological data including geologic cross sections and other illustrative data  
20 as appropriate; and

21 (5) available historic mine records indicating the dates of operation, the date  
22 of cessation of active mining, the number of years since abandonment, mining methods,  
23 shoring and timbering information, the strength of the overlying rock strata, the extracted

1 seam thickness, the dip or inclination of the strata, workings and surface, the projected  
2 surface location of the seam outcrop or subcrop, the estimated depth of the seam outcrop or  
3 subcrop, if covered by glacial outwash, glacial till, or other materials at depth, total coal  
4 tonnage produced, estimated coal mine by-product material produced, and the estimated  
5 extraction ratio.

6 f. a mine plan view map, reproduced at the same scale as the topographic map,  
7 showing the location of the mine, the extent of mining, the proposed site development, if  
8 applicable, and any remnant abandoned mine surface features. The following shall be  
9 included:

10 (1) the layout of the underground mine;

11 (2) the location of any mine entries, portals, adits, mine shafts, air shafts,  
12 timber shafts, and other significant mine features;

13 (3) the location of any known sinkholes, significant surface depressions,  
14 trough subsidence features, coal mine spoil piles and other mine-related surface features;

15 (4) the location of any prior site improvements that have been carried out to  
16 mitigate abandoned coal mine features; and

17 (5) zones showing varying overburden-cover-to-seam-thickness ratios, when  
18 appropriate.

19 g. a statement as to the relative degree of accuracy and completeness of the maps  
20 and information reviewed, especially regarding historic mine map accuracy, and reasons why  
21 such sources are considered reliable for the purpose of the hazard assessment report;

22 h. a mitigation plan containing recommendations for mitigation, as appropriate,  
23 for the specific proposed alteration;



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number] at the direction of [insert name of property owner], and reviewed by the King County department of development and environmental services [and, if necessary, include name of peer reviewing professional engineer with license number]. A review of the report is advised prior to undertaking unregulated or exempt land use activities and is required prior to undertaking regulated land use activities."

B. Permitted alterations within a coal mine hazard area are allowed as follows, subject to other King County Code permit requirements:

1. Within declassified coal mine areas all alterations are permitted.

2. Within moderate coal mine hazard areas and coal mine by-product stockpiles, all alterations are permitted subject to a mitigation plan to minimize risk of structural damage using appropriate criteria to evaluate the proposed use.

If required or recommended by the hazard assessment report, the mitigation plan to address potential trough subsidence must be prepared by a professional engineer and may be included in the coal mine hazard assessment report or may be an additional study or report, as appropriate.

3. Within severe coal mine hazard areas the following alterations are permitted:

a. all grading, filling, stockpile removal, and reclamation activities undertaken pursuant to a coal mine hazard assessment report with the intent of eliminating or mitigating threats to human health, public safety, environmental restoration or protection of property, provided that:

(1) signed and stamped plans have been prepared by a professional engineer;

(2) as built drawings are prepared following reclamation activities; and

1 (3) the plans and as built drawings shall be submitted to the department for  
2 inclusion with the coal mine hazard assessment report prepared for the property.

3 b. private road construction and maintenance activities, provided that mitigation  
4 to eliminate or minimize significant risk of personal injury are incorporated into road  
5 construction or maintenance plans.

6 c. buildings with less than four thousand square feet of floor area that contain  
7 no living quarters and that are not used as places of employment or public assembly,  
8 provided that mitigation to eliminate or minimize significant risk of personal injury are  
9 incorporated into site, building, and/or landscaping plans.

10 d. additional land use activities provided that they are consistent with  
11 recommendations contained within any mitigation plan required by the hazard assessment  
12 report.

13 SECTION 8. Administrative guidelines intended to implement this ordinance shall  
14 be developed in accordance with a stakeholder review process. The proposed guidelines  
15 shall be used to advise the department in the acceptability of the coal mine hazard assessment  
16 report and shall contain sufficient flexibility to allow utilization of acceptable alternative  
17 engineering methodology to achieve the desired levels of protection. The proposed  
18 guidelines shall be forwarded within ninety days of the effective date of this ordinance for  
19 council review. If any, council concerns or recommended revisions shall be provided by a  
20 motion. The concerns or recommended revisions shall be considered by the executive in the  
21 development of the final guidelines.

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SECTION 9. The department of development and environmental services shall produce a revised coal mine hazard area map based upon studies performed by or for the executive, within ninety days of the effective date of this ordinance.

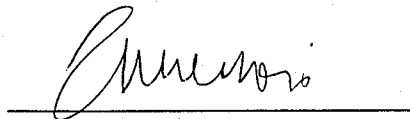
INTRODUCED AND READ for the first time this 1st day of June, 1998.

PASSED by a vote of 12 to 1 this 9<sup>th</sup> day of November,  
1998.

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

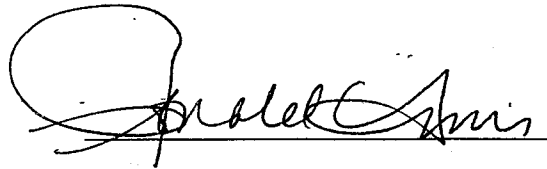
  
Chair

ATTEST:



Clerk of the Council

APPROVED this 20 day of November, 1998



King County Executive

Attachments: