1	Senate Bill No. 513
2	(By Senator D. Hall)
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4	[Introduced February 18, 2015; referred to the Committee on Energy, Industry and Mining; and
5	then to the Committee on the Judiciary.]
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10	A BILL to amend the Code of West Virginia, 1931, as amended, by adding thereto a new section,
11	designated §22-6-42, relating to establishing minimum standards for unconventional well
12	sites; and defining terms.
13	Be it enacted by the Legislature of West Virginia:
14	That the Code of West Virginia, 1931, as amended, be amended by adding thereto a new
15	section, designated §22-6-42, to read as follows:
16	ARTICLE 6. OFFICE OF OIL AND GAS; OIL AND GAS WELLS; ADMINISTRATION;
17	ENFORCEMENT.
18	§22-6-42. Containment systems and practices at unconventional well sites; definitions.
19	(a) This section applies to unconventional well sites.
20	(b) For the purposes of this section:
21	(1) "Unconventional formation" means the geological shale formation existing below the
22	base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally

- 1 cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal
- 2 well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other
- 3 techniques to expose more of the formation to the well bore.
- 4 (2) "Unconventional well" means a bore hole drilled or being drilled for the purpose of or to
- 5 be used for the production of natural gas from an unconventional formation.
- 6 (c) An unconventional well site shall be designed and constructed using containment systems
- 7 and practices that prevent spills of regulated substances to the ground surface and to prevent spills
- 8 from leaving the well site.
- 9 (d) All regulated substances, including solid wastes and other regulated substances in
- 10 equipment or vehicles, shall be managed within a containment system. This subsection does not
- 11 apply to fuel stored in equipment or vehicle fuel tanks unless the equipment or vehicle is being
- 12 refueled at the unconventional well site.
- (e) Pits and centralized impoundments that comply with other requirements of this code are
- 14 deemed to meet the requirements of this section.
- 15 (f) Containment systems at unconventional well sites shall meet all of the following:
- 16 (1) Be used on the well site when any equipment that will be used for any phase of drilling,
- 17 casing, cementing, hydraulic fracturing or flow back operations is brought onto a well site and when
- 18 regulated substances including drilling mud, drilling mud additives, hydraulic oil, diesel fuel,
- 19 hydraulic fracturing additives or flow back are brought onto or generated at the well site.
- 20 (2) Have a coefficient of permeability no greater than 1 x 10-10 cm/sec. as measured by
- 21 ASTM Standard D4491. The thickness of the barrier liner shall have a minimum thickness of 24
- 22 mils, not including any attached or laminated geotextiles and the barrier liner shall have a minimum

1 puncture resistance of one hundred fifty pounds as measured by ASTM standard D4883.

- 2 (3) The physical and chemical characteristics of all liners, coatings or other materials used
- 3 as part of the system, that could potentially come into direct contact with regulated substances being
- 4 stored, shall be compatible with the regulated substance and be resistant to physical, chemical and
- 5 other failure during handling, installation and use. Liner compatibility shall satisfy ASTM Method
- 6 D5747, Compatibility Test for Wastes and Membrane Liners or other standards as approved by the
- 7 department.
- 8 (4) There may be no more than thirty percent of the total number of welds of the liner panels
- 9 done in the field. At least seventy percent should be completed in a controlled environment.
- 10 (g) Secondary containment -- An operator shall utilize secondary containment when storing
 - 1 additives, chemicals, oils or fuels. The secondary containment shall have sufficient containment
- 12 capacity to hold the volume of the largest container within the secondary containment area plus ten
- 13 percent to allow for precipitation, unless the container is equipped with individual secondary
- 14 containment such as a double walled tank. Tanks that are manifolded together shall be designed in
- 15 a manner to prevent the uncontrolled discharge of multiple manifolded tanks. A well site liner that
- 16 is not used in conjunction with other containment systems does not constitute secondary
- 17 containment.

NOTE: The purpose of this bill is to establish minimum standards for unconventional well sites. The bill defines terms.

This section is new; therefore, strike-throughs and underscoring have been omitted.