

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Office of Oil and Gas Resource Management One Natural Resources Way Springfield, Illinois 62702-1271



HIGH VOLUME HORIZONTAL HYDRAULIC FRACTURING PERMIT APPLICATION HVHHF-10

References to "1-xx" or "§1-xx" are to the Hydraulic Fracturing Regulatory Act., 225 ILCS 732/1-1 et seq. References to "240.xxx" and "245.xxx" are to 62 Ill. Admin. Code 240 and 245, respectively.

Attachment: ChemicalDisclosureReport

Please save attachment and use the file name above.

Chemical Disclosure Report §1-35(b)(8); 245.210(a)(8), 245.700, 245.720.

- (a) Do you have on file with the Department a master list of chemicals, as required in §1-77 of the Act? ____ YES ____ NO If "NO" please attach a master list as "Attachment C(6)(a)." If you are claiming any trade secret under §§245.700, 245.720, you must attach redacted and un-redacted copies of the documents identifying the specific information on the master list of chemicals claimed to be protected as trade secrets. Also, if making a claim of trade secret please provide the Department with a telephone number and e-mail where the trade secret holder may be reached at any time (24 hours/day, 7 days/week).
- (b) Please list each chemical and proppant anticipated to be used in hydraulic fracturing fluid for each stage of the high volume horizontal hydraulic fracturing operation:
- (c) If using water in the high volume horizontal hydraulic fracturing treatment of the well, state the total volume of water anticipated to be used for each stage of the fracturing treatment. If using something other than water, state the type and total volume of base fluid anticipated to be used in the treatment. If the total volume is currently unknown, estimate the maximum volume anticipated to be used.
- (d) Please identify each hydraulic fracturing additive you anticipate using, including:
 - 1. Trade name
 - 2. Vendor
 - 3. Brief descriptor of the planned use or function of each additive
 - 4. Attach a copy of the Material Safety Data Sheet (MSDS) if applicable. NOTE: if this information is unavailable, then list the chemical family and chemical effects of each. If the additives have not been determined at time of application, submit all possible additives that might be used. You may use the table below or provide your own.

TRADE NAME	VENDOR	PLANNED USE/FUNCTION

(e) Please identify each chemical anticipated to be intentionally added to the base fluid, the anticipated concentration in the base fluid (in percent by mass) of each chemical, and the Chemical Abstracts Service number. If CAS is not available, then list the chemical family and effects of each chemical. If the chemicals to be used have not been determined at the time of filing of this application, identify all possible chemicals that may be used. You may use the table below or provide your own.

CHEMICAL NAME	CONCENTRATION	CHEMICAL ABSTRACTS SERVICE NUMBER (or chemical family and effects)

NOTE: if the contents of the fluid are adjusted or altered during the treatment process, the Department MUST be notified within 24 hours of departure from the initial treatment design and include an explanation detailing the reason for the departure from the original formulation. NOTE: no less than 21 days before performing the FIRST stimulation treatment, maintain and disclose to the Department separate and up-to-date master lists of:

- 1) the base fluid to be used during any high volume horizontal hydraulic fracturing operations,
- 2) all hydraulic fracturing additives to be used during any high volume horizontal hydraulic fracturing operations, and
- 3) all chemicals and associated Chemical Abstract Service numbers to be used in any high volume horizontal hydraulic fracturing operations.

(f) Please provide the name, telephone number and address of an employee, agent or contractor of the permittee having knowledge of the specific chemicals being used in the HVHHF operation at any given time.