



Mackrell International - Environmental Law Group

Hydraulic Fracturing & How Chemical Companies Could Be Brought Into Contamination Cases

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Presentation Outline

- Hydraulic fracturing and use of chemicals
- Summary of MTBE cases
- Potential product liability claims
- Key issues

Hydraulic Fracturing – Brief Primer

- What is hydraulic fracturing?
 - Process of releasing natural gas trapped in low-permeability formations
 - Typically conducted thousands of feet below ground level
 - Pressurized fluids injected into horizontal well to create fractures in rock
 - Natural gas in formation flows through fractures into wells

[insert pictures of conventional and unconventional gas wells]

Hydraulic Fracturing – Chemical Use

- Fracking Fluids
 - Overall Purpose
 - Create fractures at high pressures
 - Prop open fractures
 - Composition
 - 98% - water and sand (proppant)
 - 2% - chemicals
 - Examples of chemicals and their roles
 - Acids – dissolves minerals and helps create fractures
 - Corrosion inhibitors – prevents pipe corrosion
 - Biocides – kills bacteria in water
 - Scale inhibitors – prevents scale deposits
 - Surfactants – increases viscosity of fluid
 - Gelling agents – helps sand prop open fractures

Hydraulic Fracturing – Chemical Use

- [insert pie chart showing composition of fracking fluid]

Typical Hydraulic Fracturing Case

- What does a typical hydraulic fracturing lawsuit look like?
 - Targets gas company or operator (not the chemical company)
 - Defendants on site, drilling the wells, running surface operations, etc.
 - Allegations vary re environmental contamination
 - Methane in wells
 - Chemical contamination of soils and groundwater
 - Air contamination
 - Discharge to surface waters

- Do chemical companies face potential legal liabilities?
 - Range from large chemical manufacturers/blenders to small businesses
 - Typically not on site, not involved in day-to-day operations, etc.
 - Potential allegations re environmental contamination
 - Poor well casing
 - Surface spills
 - Leaking surface impoundments

MTBE Cases – The Template

- What is MTBE?
 - Gasoline additive
 - Groundwater contamination
 - Alleged health risks

- MTBE Cases
 - Plaintiffs – Private and public water providers
 - Defendants – Gasoline manufacturers and distributors
 - Allegations – Widespread contamination of groundwater/wells

- Causes of Action
 - Product liability (design defect and failure to warn)
 - Nuisance (public and private), trespass
 - Consumer protection laws
 - State spill acts

Product Liability – Design Defect

- Restatement (Third) Product Liability § 2
 - Design defect
 - Foreseeable risk of harm
 - Could have been reduced or avoided by alternative design
 - By seller, distributor, or predecessor in chain of distribution
 - Omission of alternative renders product not reasonably safe

- MTBE Cases
 - Court allowed design defect claims to proceed
 - Defendants knew of unreasonable dangers to groundwater
 - Safer chemical alternatives existed
 - Conspired to conceal alleged risks

- Key Points
 - Plaintiffs (water providers) were not actual consumers of gasoline
 - Defendants did not cause contamination (e.g., spill)

Product Liability – Failure to Warn

- Restatement (Third) Product Liability § 2
 - Failure to Warn
 - Foreseeable risk of harm
 - Could have been reduced or avoided by reasonable instructions/warnings
 - By seller, distributor, or predecessor in chain of distribution
 - Omission of instruction/warning makes product unreasonably safe

- MTBE Cases
 - Court allowed failure to warn claims to proceed
 - Defendants knew of unreasonable dangers to groundwater
 - Failed to warn agencies, the public, and downstream users

- Key Points
 - Court acknowledged defendants might not need to warn all plaintiffs
 - Focused on broader warnings as a signal to market not to use MTBE

Product Liability – Component Liability

- Restatement (Third) Product Liability § 5
 - Component integrated into finished product
 - Liability where component is defective in itself and causes harm or
 - Component manufacturer substantially participates in integration of component into design of product and integration causes harm

- Limitation on Liability
 - Component manufacturer warns finished product manufacturer of risks
 - No duty to warn ultimate consumer or third party
 - Must be reasonably sure finished product manufacturer knows of risk and is in position to warn downstream users

- MTBE Cases
 - Acknowledged rule but did not decide issue
 - Did not address appropriate content of warnings or to whom should be given

Key Issues

- Large Manufacturer/Blender vs. Small Business
 - Duties and potential liabilities more varied for larger entities

- Causation Proof Issues
 - “Dose makes the poison”
 - Most chemicals in fracking fluids used in relatively trace amounts

- Toxic Substances Control Act (“TSCA”) Proposed Reporting Rule
 - Standard of care in failure to warn cases?
 - Section 8(a) (environmental and health effects of chemical)
 - Section 8(d) (health and safety studies)

- How To Reduce Potential Liabilities?



Thank you

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