

**“IF YOU BREAK IT,
YOU OWN IT”
NO LONGER SEEMS TO
APPLY.
WHY NOT?**

**PROF. JIM O'REILLY
PUBLIC HEALTH FACULTY
COLLEGE OF MEDICINE
UNIVERSITY OF CINCINNATI**

EVERY PARENT WITH LITTLE KIDS HAS SEEN THIS SIGN IN A SHOP....

- ...BECAUSE KIDS ARE PRONE TO TOUCHING & DROPPING GIFTS
- ...BECAUSE THERE'S A PROBLEM IF KIDS ARE NOT SUPERVISED
- ...AND SO THIS RULE DETERS THE CARELESS PARENT
- ...BECAUSE YOUR WALLET GETS HIT
- ...AND IT'S UNDERSTOOD THAT THE STORE NEEDS TO BE PAID FOR THE DAMAGED GOODS

IS INDUSTRY PAYING FOR ITS SERIOUS ENVIRONMENTAL DAMAGE?

- **NOT TODAY**”FREEDOM TO BE FRACKED”
- ELECTION RESULTS TEACH THAT MONEY BUYS POLITICAL POWER
- TO FIGHT THAT POWER TAKES WELL INFORMED LOCAL VOLUNTEERS
- FORECAST IS FOR MUCH MORE EXPLOITATION OF OUR STATES
- VETS HAVE HEARD: “ALL GAVE SOME, SOME GAVE ALL”
- ALL PAY TAXES TO CLEAN UP; SOME BEAR HEALTH CONSEQUENCES
- IN GAS EXTRACTION, HARMFUL EFFECTS ARE COUNTY-WIDE LEGACY
- IN GAS TRANSPORT, PIPELINE EFFECTS ARE NARROW, BRUTAL & UGLY
- SO LET’S STUDY WHAT THREATS WE FACE AND SELECT A RESPONSE

WHAT IS NATURAL GAS “FRACKING”?

- Deep drilling vertically, which is followed by a turn in the drill pattern to move laterally away from the drill hole, like the letter “L”.
- Then the long sideways arm of this “L” pipe is exploded to shatter surrounding quantities of shale (“Fracturing” became “fracking”)
- Broken shale is then propped open with sand
- Heavy chemicals and water, under high pressure, form a lubricated “mud” drawing gas out of broken shale
- Gas bubbles are separated from the waste liquids
- Gas is purified and sold in interstate pipeline gateways

WHAT FLOWS FROM OHIO INTO KENTUCKY VIA MASSIVE PIPELINES?

- METHANE GAS – CLEANED ON SITE OR NEARBY AFTER GATHERING FROM MULTIPLE WELL SITES IN AN AREA
- GAS THEN DELIVERED TO INTERSTATE PIPELINE
- INTERCHANGEABLE COMMODITY FOR ASIA/EUROPE EXPORT AS LIQUIFIED NATURAL GAS OR DOMESTICALLY AS GAS FUEL
- CYNICS PROMOTE “AMERICA’S GAS” AS THEY RUSH TO EXPORT GAS
- “WET GAS” GOES INTO A DIFFERENT INTERSTATE PIPELINE
- WET = PETROLEUM, & BETX (BUTANE, ETHYLENE, TOLUENE, XYLENE)
- LAWS ONLY SHIELD PETROLEUM & GAS PIPELINES, NOT ALSO BTEX

What's Left At Site After Gas is Piped Away?

- RADIOACTIVE ROCK – CESIUM, RADIUM, STRONTIUM - VARIES
- PILES OF CRUSHED RADIOACTIVE & CHEMICAL-LACED ROCK
- CHEMICAL SLUDGE PONDS TO HOLD LIQUID WASTES AT WELL SITE
- LARGE POND OF WASTE WATER THAT CANNOT GO INTO RIVER/LAKE
- DIESEL EXHAUST & SMOKE PARTICLES DEPOSIT ON AG LANDS
- SPILLS PERMANENTLY POISONING LAND AROUND THE WELL SITE
- CONCRETE GROUND PAD WITH PIPING & EQUIPMENT
- DAMAGED ROADS WERE PUSHED THROUGH WOODS OR FARM
- SEVERE ROAD & BRIDGE EFFECTS PAID BY LOCAL TAXES

FRACKERS DON'T HAVE TO PAY CLEANUP, SO TAXPAYERS MUST

- DRILLER “CIRCUS LEAVES TOWN” AS SOON AS –
- ECONOMIC GAIN FROM RE-“STIMULATION” (PRICE OF GAS UNIT TIMES RECOVERY RATE OF GAS REMAINING IN THIS SHALE SITE)
- IS LESS THAN
- COSTS OF LABOR, EQUIPMENT, CHEMICALS, SAND ETC.
- SO AFTER 3-4 FRACK CYCLES, NOT WORTH RE-ATTACKING THIS SHALE
- SITES FOR DRILLING ARE THINLY CAPITALIZED LLC’S
- MAKING IT EASIER TO ABANDON SITE

SO WHO GETS STUCK?

- **NOT** THE DRILLER – NOW AN INACTIVE DELAWARE LTD LIABILITY CO
- NOT THE EXXONS ETC. WHO HAD BOUGHT THE GAS
- NOT THE CHEMICAL COMPANY THAT HAD SOLD TRUCKLOADS
- NOT THE SAND COMPANY THAT HAD SOLD RAIL TRAINLOADS
- BUT **SOMEBODY** IS LEFT HOLDING THE BAG
- IT IS THE FARMER WHO LEASED THE MINERAL RIGHTS
- AND DIDN'T UNDERSTAND THE FINE-PRINT LIABILITIES
- AND IS STUCK WITH THE 70-PAGE LEASE FOR 10 YEARS OR MORE
- AND IT IS THE TAXPAYERS WHO NEED TO REPAIR/REPLACE ROADS
- AND THE MEDICAL CLINICS THAT WILL TREAT LONG TERM HARMS

GAS LOBBYISTS & LAWYERS

- ...STAND AGAINST YOU AND CLAIM YOU ARE **TOO RADICAL!**
- SOME OF US ARE GRANDPARENTS, SOME VETERANS LIKE ME
- SO MODERATION, FACT-BASED ADVOCACY IS KEY TO OUR SUCCESS
- EXCESSIVE DEMANDS UNDERCUT OUR SIDE'S CREDIBILITY
- "MAKE FRACKING A CRIME" OR "BAN ALL DRILLING" WILL NOT WORK
- APPEALS TO LEGACY & SAFETY ARE MOST APPROPRIATE
- WORK TO GATHER MODERATE LEGISLATORS' VOTES FOR CLEANUP
- TIMING MATTERS: CAPTURING A BOND FEE EARLY FROM DRILLING COMPANY MAKES SENSE LATER SINCE THEY WILL VANISH LATER

CLEANUP FUND IS LIKE TRUCKER LIABILITY: EACH STATE MAKES ITS OWN RULES

- KEY POINT: PERMIT TO DRILL GAS WELL OR SITE PIPELINE SHOULD REQUIRE A BOND TO COMPENSATE LOCALS IF FRACK SITE OR PIPELINE CAUSES LONG TERM ENVIRONMENTAL OR HEALTH DAMAGE
- “TOO RADICAL”? TRY DRIVING A TRUCK WITH NO LIABILITY INSURANCE TO COMPENSATE OTHERS IN EVENT OF A CRASH – DRIVER CAN GO AWAY BUT HIS INSURANCE WILL HAVE TO COMPENSATE VICTIMS – NOT “RADICAL” BUT WELL ACCEPTED NORM
- WHY AT THE STATE LEVEL? GAS INDUSTRY LOBBY WON EXCLUSION IN THE 1980 SUPERFUND LAW FROM HAVING TO FUND CLEANUPS & “TEAM MITCH” WILL BLOCK ANY NATIONWIDE CHANGE

WHAT IS THE FRACKING SOLUTION?

TELL DRILLERS: **“YOU PILE IT, YOU POND IT, YOU PAY FOR IT!”**

ORDER A CASH **“*PERFORMANCE BOND*”** BY THE DRILLER FOR COST OF CLEANUP OF SITE & SURROUNDINGS FOR 10 YRS AFTER WELL SHUTS

TAXPAYERS SHOULD NOT HAVE TO PAY TO FIX AFTER LLC VANISHES

SET RESTORATION STANDARDS FOR REMOVALS & WATER SYSTEMS

ALLOW STATE-LAW NUISANCE CLAIMS BY NEIGHBORS ON THE BOND

IDEAL: BOND ACTS LIKE AN INSURANCE FUND PER UNIT, MANAGED BY STATE TREASURER TO REDUCE TEMPTATION TO SIPHON AWAY FUNDS

WHAT ABOUT N.G.L. PIPELINES?

- “TEAM MITCH” WILL FORBID ANY FEDERAL PIPELINE CLEANUP BOND
- SO STATE LEVEL REMEDY IS LIMITED TO CONTROLLING A “BTEX BUY-WAY”
- BTEX IS A BYPRODUCT OF GAS FRACKING, “NATURAL GAS LIQUIDS”
- USED FOR MAKING PLASTICS & CHEMICALS
- UNLIKE NATURAL GAS & PETROLEUM, NO GENERAL PUBLIC NEED FOR THE PUBLIC BENEFIT OF FUELS, SO NO EMINENT DOMAIN TO FORCE ACCESS
- BTEX IS BOUGHT BY CHEMICAL COMPANIES, NOT BY CONSUMERS
- SO STATES CAN & DO REGULATE THE BTEX BUY-WAYS
- STATES SHOULD ASK FOR A BOND TO CLEANUP MESSSES RELATED TO BTEX

STEP 1

- STUDY THE GLARING MODEL OF ***FAILURE***: CLEANUP OF PAST COAL SITES
- EXAMINE SITES WHERE FRACKERS & PIPELINES WOULD LIKELY GO
- BE WELL-INFORMED PROPHETS OF THOSE SITES' FUTURE DEVASTATION
- STUDY UP ON PROFIT FORECASTS OF THE GAS COMPANIES
- ORGANIZE VISITS TO AREA LEGISLATORS: “PROPHETS OVER PROFITS”
- DO HOMEWORK ON PAST IMPACTS OF THE GAS FRACKERS ELSEWHERE
- EXTRAPOLATE WHAT CLEANUP AMOUNT WILL BE NEEDED IN YOUR AREA
- HAVE A SPECIFIC BILL DRAFTED ALLOCATING COSTS & BONDS
- PRESENT CALMLY HOW BOND-PAID CLEANUP WOULD BENEFIT TAXPAYERS
- PRESENT WHY YOUR COUNTY'S ***LEGACY*** MATTERS TO AG & TOURISM

STEP 2

- **SET RESTORATION STANDARDS** FOR FOREST & FARM LANDS
- GET REALISTIC COST FIGURES FROM OTHER SITES
- COST TO SCRAP OR REMOVE EQUIPMENT & PIPES
- COST TO REMOVE CONCRETE PADS
- COST TO SAFELY DRAIN WASTE PONDS
- COST TO TRUCK THE HAZARDOUS WASTE TO DISTANT LICENSED SITE
- FRACKERS' GAME ASSUMES IGNORANCE OF LANDOWNER & SILENCE OF NEIGHBORING RESIDENTS
- AWAKEN NEIGHBORS TO THESE COSTS TO REMEDIATE FRACK SCARS

STEP 3

- EXPLAIN WHAT IF A LOCAL REMEDIATION FUND WERE NOT DONE
- AND THEN CONTAMINATION WITH RAD WASTE CLOSES LANDFILL
- AND CRACKS IN POND NO LONGER HOLD BACK RADWASTE SLUDGES
- **HOW WILL THE FUTURE OF THIS COUNTY BE WORSE OFF?**
- WHAT DOES THE ABANDONED SITE DO TO LOCAL ENVIRONMENT?
- DOES PRESENCE OF ABANDONED SITES DIMINISH AG REPUTATION?
- “OUR CHICKENS JUST GLOW, FROM THE RADIUM IN THEIR WATER”
- SO LOCALS CAN JUSTIFY REQUIRING THE FUNDING OF A CLAIM FUND
- FUNDING MUST BE PAID FOR NOW AS DRILLING OR PIPELINE STARTS
- BECAUSE GAS DRILLERS INTEND A SITE’S LLC TO VANISH WHEN FRACK DRILLING STOPS -- MUST GET FUNDING EARLY

STEP 4

- ENLIST STATE TREASURER'S HELP TO HOLD BOND AS RESERVE POOL
- **STATUTORY REQUIREMENT: NO BOND, NO DRILL PERMIT**
- “PAYDAY’S THE BEST DAY TO ASK FOR CONTRIBUTIONS”: GET THE MONEY UP FRONT AS THE DRILLING PERMITS ARE ISSUED
- DETERMINE FORMULA TO DECIDE THIS SITE PAYS \$X AS ITS BOND
- DECIDE WHAT FUTURE COSTS WILL BE ELIGIBLE FOR CLAIMS
- DECIDE HOW LONG BONDING CLAIMS PERIOD WILL LAST, E.G. 5 YRS
- DETERMINE WHEN THE DRILL SITE BOND REFUNDS WILL BE GIVEN & TO WHOM, SINCE THE DRILLER LLC’S VANISH QUICKLY

STEP 5

- WILL SIMILAR BOND FUND HELP BEYOND THE SHALE “PLAY” IN OHIO
- KY & OHIO ARE SITTING DUCKS FOR THE PIPELINE LOBBY
- LOBBYISTS FLOURISH WHERE IGNORANT PUBLIC SITS BY SILENTLY
- FACE IT: YOUR COMMUNITIES HAVE BEEN TOO SILENT, TOO LONG
- WHICH SPECIFIC COUNTIES WILL PIPELINES CROSS? GAS, OIL, NGL?
- WHO ARE THEIR STATE ASSEMBLY & SENATE MEMBERS?
- WERE THEY ONCE LOCAL OFFICIALS?
- **CAN THEY RELATE TO CLEANUP COSTS FROM PAST ACCIDENTS?**
- WHY NOT HAVE THEM SUPPORT A BOND SYSTEM FOR PUBLIC RISKS?

STEP 6

- WHY NOT RECOGNIZE **LOCAL FIRST RESPONDERS' NEEDS?**
- THOSE WHO FAIL TO LEARN HISTORY ARE CONDEMNED TO REPEAT IT
- 1780'S: ALL OF OHIO RIVER UP TO NORTH BANK BELONGS TO KY
- 1880'S: FIRST DEVELOPING OIL WELLS POLLUTE PENNA & OHIO
- 1980'S: HALLIBURTON WORKING ON PATENTED FRACKING SYSTEM
- 2013: COAST GUARD REVEALS INDUSTRY PLAN TO MOVE FRACK WASTE LIQUIDS DOWN OHIO RIVER IN 4,100,000-GALLON BARGES
- 2014: AWAITING DECISION ON BARGES & "GREEN HUNTER" LOADING SITE >>> AIMING RIVER DISASTER AT UN-PREPARED KENTUCKIANS

THANK YOU, TOM FITZGERALD

- LEVERAGING MULTI-STATE OHIO RIVER SANITATION COMMISSION SEAT FOR KENTUCKY'S VETERAN ENVIRONMENTAL LEADER TOM FITZGERALD
- GREAT HOPE THAT KENTUCKY WILL ACTIVELY PREPARE FOR FIRE, EXPLOSION, EVACUATION AND RIVERBOTTOM CLEANING ONCE THE WASTE BARGES ARE RELEASED CARRYING RADIOACTIVE SLUDGE ON RIVER
- REAL OPPORTUNITY FOR TRAINING FIRE CHIEFS IN KENTUCKY COMMUNITIES ALONG THE RIVER >> DID YOU KNOW YOU "OWN" EVERY SPILL, GROUNDING, LEAK, FIRE & EXPLOSION OF THESE WASTE BARGES?
- US EPA REGION V SEEMS PARALYZED BY OHIO OIL & GAS ASSN'S POWER
- BUT KY CAN MOBILIZE US EPA REGION IV TO HELP COAST GUARD SEE A PROTECTIVE & COOPERATIVE ROLE IN FRACKWASTE FLOTILLA CONTROLS

“END ON A HAPPY NOTE” ??

- I AM ALWAYS HAPPY TO SEE MY GRANDSON IN LEXINGTON
- I AM VERY HAPPY TO SEE YOUNG PEOPLE IN OUR GROUP TODAY
- I AM HAPPY THAT SOME VOTERS IN SOME STATES REJECTED A FLOOD OF SUPER PAC MONEY SERVING THE GAS LOBBY, AND VOTED FOR CANDIDATES WITH MORE BALANCED VIEW OF OUR NEEDS FOR THE FUTURE
- I AM CONFIDENT THAT MY PUBLIC HEALTH STUDENTS WHO GET AN MD/MPH DEGREE WILL BE SAVVY ENOUGH TO RESIST THE POWER OF THE GROUPS THAT EXPLOIT OUR NATURAL ENVIRONMENT
- I AM HOPEFUL THAT MY BABY BOOM GENERATION WILL NOT HAVE SPOILED THE GREEN LEGACY OF THE MILENNIALS AND THOSE TO FOLLOW.
- ***THANK YOU!***