DISCUSSION TOPICS

• Who/What is Middletown Coalition for Community Safety (MCCS)?

• What is the Mariner East 2 Pipelines Project?

• Pipeline Route: Impacted Communities & Schools

• Not Like Other Pipelines: Properties of “NGLs”

• Consequences and Likelihood of Risk

• Vulnerable Populations

• Conclusions

• Current Actions and Next Steps: Community Engagement, Legal Action, Non Violent Resistance
WHAT IS MIDDLETOWN COALITION FOR COMMUNITY SAFETY?

Who we are:

• Grassroots
• Non-Partisan
• Local parents & residents
• Formed in August 2016 in response to proposal to sell easement next to Glenwood Elementary for ME2 pipeline project

Goals include:

• Research, Discussion, Community Education
• Educating Elected Officials
• Highlighting and challenging the safety risks of the proposed pipeline project
• Advocating for change

Accomplishments include:

• 1500+ member coalition
• 8 Resolutions of Concern including RTMSD
• Testified in Harrisburg, Commissioned Watershed Study, Met with DEP Secretary & other elected officials, Formed Pipeline Safety Advisory Committee to Middletown Township, Supported Middletown QRA, Commissioned Independent Hazards Analysis/ Glenwood School, Currently Raising funds for Legal Action
WHAT IS SUNOCO’S MARINER EAST 2/2X PIPELINE PROJECT?

- Two large diameter (20” & 16”), classified as “hazardous highly volatile liquids” (HVL) pipelines

- 350 Miles from Marcellus Shale to Marcus Hook
  - 11.4 miles of Delaware County
  - 5.5 miles of Middletown Township

- 700,000 barrels / day of “Natural Gas Liquids” (NGLs) through our community

- Pipeline Path will traverse:
  - Farmland and woodland
  - Exceptional Value Wetlands
  - Densely populated “High Consequence Areas”
  - Will run within the blast zone of 40 public and private schools in Pennsylvania
Mariner East Pipeline Project

PIPELINE ROUTE/STATE
PIPELINE ROUTE/COUNTY
NOT LIKE OTHER PIPELINES: PROPERTIES OF “NGLs”?  

• Ethane, Propane, Butane  
  • “Natural Gas Liquids”, or “NGLs”  
  • Not an official classification, but an industry term of art  
  • Official classification is Highly Volatile Liquids (HVL)- but contents only liquid under high pressure in the pipe

• If leaked, pipeline contents:  
  • Convert back to a gas  
  • Expand into a large odorless, colorless, invisible, asphyxiating, and highly explosive gas cloud  
  • Remains low to the ground, migrates into basements and into low lying areas, and can travel for some distance before igniting

• Gas travels 1800 feet in 3 minutes

• Blast zone (if leak ignites immediately) is 1100-foot radius

• Evacuation zone is 3 to 5 miles

Take Away: NGLs SIGNIFICANTLY MORE DANGEROUS than “Natural Gas”
HALF MILE IMPACT CORRIDOR
AND 3 MILE EVACUATION RADIUS

3 MILE EVACUATION RADIUS = 28 SQUARE MILES
> 84,000 PEOPLE (ASSUMES 3,000 PEOPLE PER SQMI.)

MILE-WIDE CORRIDOR
MARIENER EAST 2 ROUTE
HIGH CONSEQUENCE

Delaware County is a “high consequence area”
• Densely populated
• Large Leak consequences- injuries and fatalities- would be high.

No Plan
• Sunoco’s generic plan in the event of a leak it to self-evacuate on foot, up wind, to a distance of no less than ½ a mile, and avoid the use of vehicles, cell phones, or other potential ignition sources.

Many vulnerable populations within ½ mile unable to self-evacuate
• School children
• Elder care facilities
• Elwyn

Rose Tree Media School District
• Glenwood (blast zone)
• Indian Lane, Media Elementary, and Penncrest (3 mile evacuation zone)
• Springton Lake and Rose Tree Elementary (5 mile evacuation zone)
### HIGH PROBABILITY OF RISK

#### PHMSA Pipeline data past 10 years:
- 11,461 accidents
- 324 fatalities
- 1,331 injuries
- $7,044,145,689 in property damage.

#### Sunoco Leak Rate
- 10x higher than Industry
- Average 2 leaks per month, every month, for the past ten years.

#### Recent Sunoco leaks in PA
- 55,000 gallons of gasoline into the Susquehanna River.
- Contaminated wells in Edgmont Township.
- Multiple leaks in Aston, one of which migrated towards Sun Valley High School.

#### HOW OFTEN CAN WE EXPECT A LEAK?

<table>
<thead>
<tr>
<th></th>
<th>Delaware County</th>
<th>Delaware AND Chester Counties</th>
<th>Entire ME2 Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect an ME2 Leak</td>
<td>16 years</td>
<td>7 years</td>
<td>6 months</td>
</tr>
<tr>
<td>Expect an ME2 OR ME2X Leak</td>
<td>8 years</td>
<td>3.5 years</td>
<td>4 months</td>
</tr>
<tr>
<td>Expect an ME1 OR ME2 OR ME2X Leak</td>
<td>5 years</td>
<td>2.5 years</td>
<td>2 months</td>
</tr>
</tbody>
</table>
EFFECTIVENESS OF EMERGENCY RESPONSE

San Bruno, California
Natural Gas Explosion
- September 9, 2010
- Suburban San Francisco
- 30” Methane Pipeline, 400 PSI
- Explosion killed 8 people, injured 66 and destroyed 38 homes

Demonstrates Limits to Urban Fire Departments
- High trained first responders
- State of the art municipal fire fighting equipment
- Waterbombers designed for fighting large forest fires
- Unable to save those in the “immediate impact zone”

TAKE AWAY: EMERGENCY RESPONSE EFFECT IS LIMITED, EVEN IN IDEAL CIRCUMSTANCES. SETBACKS REPRESENT ONLY REAL RISK MITIGATION
EXAMPLE OF “NGL” LEAK AND EXPLOSION

- January 26, 2015
- 20” ATEX Ethane Pipeline
- Exploded 13 months after installation.
- Structural failure at girth weld
- Released of over one million gallons of liquid ethane into a wooded area
- Explosion and resulting fire burned approximately five acres of woodlands.
- Took 24 hrs to extinguish
- A house 2,000 feet away suffered thermal damage.

TAKE AWAY: NGL PIPELINES HAVE ONLY EVER EXPLODED IN RURAL AREAS. AN NGL PIPELINE HAS NO PLACE IN DENSELY POPULATED DELAWARE COUNTY

Follansbee, West Virginia
SPECIAL CONSIDERATIONS FOR VULNERABLE POPULATIONS

• First Responders will set a safety perimeter such as ½ mile from the site of the leak, so
• 1st responders, ambulances, helicopters are trained NOT enter this perimeter
• Those within the “immediate impact zone” must self evacuate on foot at least ½ mile, while avoiding ignition sources.
• Those within impact zone may be injured from burns, trauma (within 2000 feet), or asphyxiation (within 250 ft).
• Challenge to self evacuate large number of people in a short amount of time.
• Consider children, elderly, disabled, anyone unable to run, children with anxiety, asthma, and special needs
• Limited pediatric sized equipment and training among first responders.
• Riddle Hospital within 3 mile evacuation zone.

TAKE AWAY: EVEN THE BEST EMERGENCY RESPONSE PLANS ARE INSUFFICIENT TO PROTECT THOSE IN THE IMMEDIATE IMPACT/SELF EVACUATION ZONE
HOW DID THIS HAPPEN?

Misclassification as “intrastate” - no federal oversight
• No federal agency has SITING AUTHORITY over the route

Misclassification as “liquids” line
• No state agency has SITING AUTHORITY, no oversight of the route with regard to Public Safety
• Allowed Sunoco to repurpose ME1 as an NGL line in 2014
• No setbacks, such as those for a gas line

Misclassification of ME2 as a “public utility”
• Allowed Sunoco the use of Eminent Domain

Support from business leaders and elected officials
• Use of buzzwords: “economic bonanza” & “jobs growth” for PA
• Project pushed ahead for 5 years WITHOUT ANY Risk Assessment to determine if the project is safe for the public

TAKE AWAY: NO ONE HAS QUANTIFIED PUBLIC SAFETY RISK
CONCLUSIONS

• **Not Like Other Pipelines:** Size, pressure, and contents make ME2/ ME2X more dangerous than other pipelines in our area.

• **“NGL” Pipelines** have no place in densely populated Delaware County. There is no way to do it safely.

• **No Agency has Siting Authority** with regard to public safety, and no risk assessments were performed when establishing the pipeline route.

• **Emergency Response** does NOT eliminate risk for those in the immediate impact zone. The only way to mitigate risk for those within impact zone is proper setbacks from homes, schools, parks, businesses, etc.

**ME2/ 2X is not a done deal!!**
CURRENT ACTIONS

Community Outreach and Education
- PTG meetings, forums, and Town Halls

MCCS Supported Legal Action:
- Enforcing Municipal Ordinance Violations in Thornbury, West Goshen, and other townships
- Fundraising to support Legal Action

Non-Violent Resistance
- Rallies and marches to garner national media attention
- Parents, grandparents, teachers, residents
- Focus on Public Safety

ME2/ ME2X IS NOT A DONE DEAL
WHAT YOU CAN DO!

• Visit the MCCS Website  www.middletowncoalition.org
• Sign up for updates
• Take the Pledge to participate in non-violent resistance!
• Join Our Facebook Group, Follow our FB Page
• Attend upcoming fundraising events (March 28 Chick-Fil-A)
• Bring friends and neighbors to upcoming community outreach events (March 25- Middletown Library)
• Contribute to our gofundme and share the link on social media.
• Display signs and other symbols of opposition
• Stay informed and stay involved!

IT IS NOT TOO LATE
SPEAK UP AND LET YOUR VOICES BE HEARD
“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.”

—Margaret Mead