

# ENBRIDGE PIPELINE OIL SPILL IN MARSHALL, MICHIGAN

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(111-134)

HEARING  
BEFORE THE  
COMMITTEE ON  
TRANSPORTATION AND  
INFRASTRUCTURE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED ELEVENTH CONGRESS  
SECOND SESSION

September 15, 2010

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**U.S. House of Representatives**  
**Committee on Transportation and Infrastructure**

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Washington, DC 20515

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September 14, 2010

**SUMMARY OF SUBJECT MATTER**

**TO:** Members of the Committee on Transportation and Infrastructure  
**FROM:** Committee on Transportation and Infrastructure Staff  
**SUBJECT:** Hearing on "Enbridge Pipeline Oil Spill in Marshall, Michigan"

**PURPOSE OF HEARING**

The Committee on Transportation and Infrastructure (Committee) is scheduled to meet on Wednesday, September 15, 2010, at 10:00 a.m., in room 2167 of the Rayburn House Office Building to receive testimony on the recent Enbridge pipeline failure in Marshall, Michigan. The failure resulted in the release of an estimated one million gallons of crude oil into Talmadge Creek and the Kalamazoo River.<sup>1</sup> The Kalamazoo River flows into Lake Michigan. This hearing is being conducted as one of several hearings that meet the oversight requirements under clauses 2(n), (o), and (p) of Rule XI of the House of Representatives.

Although the hearing is focused on the Enbridge rupture in Michigan, Members are advised that the National Transportation Safety Board (NTSB) and the U.S. Department of Transportation (DOT) will be able to answer questions at the hearing related to the September 9, 2010 Enbridge release of crude oil on Line 6A in Romeoville, Illinois, and the deadly September 9, 2010 Pacific Gas & Electric natural gas explosion in San Bruno, California, as well as Federal oversight of gas and hazardous liquid pipeline safety.

**BACKGROUND**

On July 26, 2010, Enbridge reported to the National Response Center (NRC) that a 30-inch diameter pipeline, known as Line 6B, was transporting crude oil when it ruptured in a rural area

<sup>1</sup> "EPA Raises Oil Spill Estimate in Michigan River", *CBS News* (July 29, 2010).

about one mile south of Marshall, Michigan.<sup>2</sup> Enbridge reported that about 19,500 barrels (819,000 gallons) of crude oil were released. The Environmental Protection Agency (EPA) later estimated the spill to be more than one million gallons of oil.<sup>3</sup> The oil flowed into a culvert, which led to Talmadge Creek, and then flowed from the Creek about 30 to 35 miles down the Kalamazoo River toward a Superfund site. The Kalamazoo River is a tributary to Lake Michigan. Portions of Line 6B are located in High Consequence Areas (HCAs).<sup>4</sup> Talmadge Creek and the Kalamazoo River are bordered by marshland and developed properties. The river experienced flooding before and after the spill. The river levels later fell and stranded oil on some islands and in some backwaters, wetlands, and floodplains. On August 25, 2010, Enbridge estimated that the total cost of damages to the operator will be between \$300 and \$400 million. These charges include emergency response, environmental remediation and cleanup activities associated with the crude oil release, costs to repair the pipeline and related inspection costs, potential claims by third parties, and lost revenue.<sup>5</sup>

Line 6B originates in Griffith, Indiana, and runs eastward to Sarnia, Ontario. The pipeline is a 30-inch, carbon steel pipeline that was constructed in 1969 using Normal Pipe Size 30, grade X52, 0.250-inch nominal wall thickness pipe. About one-third of the pipe was manufactured using a Flash Weld process, while the other two-thirds used a Double Submerged Arc Weld (DSAW) process. The pipe at the location of the failure was DSAW and was manufactured by Italsider/Siderius in Italy. The pipe was coated in the field using then-commonly used polyethylene tape as a corrosion barrier.

Line 6B transports up to 190,000 barrels of light synthetic, medium, and heavy crude oil per day from Griffith, Indiana, to Sarnia, Ontario. It is part of Enbridge's 1,900-mile Lakehead System, the world's longest petroleum pipeline, which spans from the international border near Neche, North Dakota, to the international border near Marysville, Michigan, with an extension across the Niagara River into the Buffalo, New York area. Line 6A which ruptured in Romeoville, Illinois, on September 9 is also part of the Lakehead System.

At the time of the rupture, Enbridge was transporting a cold lake blend with an American Petroleum Institute (API) gravity rating of 11. API gravity is a measure of how heavy or light petroleum liquid is compared to water. If the liquid's API gravity is greater than 10, it is lighter and floats on water; if it is less than 10, it is heavier and sinks. Crude oil is classified as light, medium, or heavy according to its measured API gravity. Light crude oil is defined as having an API gravity higher than 31.1. Medium oil is defined as having an API gravity between 22.3 and 31.1. Heavy oil is defined as having an API gravity below 22.3, and extra heavy oil is defined with API gravity below 10. Bitumen derived from the oil sands deposits in the Cold Lake region has an API gravity of around 8. The Enbridge blend is therefore considered heavy oil, not a bitumen, and includes light

<sup>2</sup> The NRC is part of the Federally-established National Response System and is the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. The NRC is under the command of the U.S. Coast Guard.

<sup>3</sup> *Id* at 1.

<sup>4</sup> HCAs include unusually sensitive environmental areas (defined in 49 C.F.R. § 195.6), urbanized areas, and other populated places as delineated by the United States Census Bureau, and commercially navigable waterways. According to PHMSA, HCAs represent 44 percent of the total hazardous liquid pipeline mileage.

<sup>5</sup> Enbridge, *Accident Report – Hazardous Liquid Pipeline Systems*, Submitted to DOT's PHMSA (August 25, 2010), Report number 20100181-15259.

diluents (naphthalene), which enable the thicker heavy oil to flow through the pipeline. It is produced using the same technique used for oil sands recovery: Steam Assisted Gravity Drainage (SAGD), a process that injects steam to loosen up crude oil and pump it to the surface.

#### PRELIMINARY TIMELINE

At a date and time yet to be determined by the NTSB, Enbridge's 30-inch-diameter hazardous liquid pipeline, known as Line 6B, ruptured about one mile south of Marshall, Michigan, near the Marshall Pump Station. The attached map shows the route of Line 6B – from Griffith, Indiana, to Sarnia, Ontario. The U.S. portion of the line is about 286 miles in length. *See attached map.*

According to the NTSB, at 5:58 p.m. eastern daylight time on July 25, 2010, Enbridge experienced an abrupt pressure drop at the Marshall Pump Station. The abrupt pressure drop triggered a low suction pressure alarm received by the pipeline controller in Enbridge's control room, which is located in Edmonton, Alberta. The loss of suction pressure initiated a local shutdown of the pump station.<sup>6</sup>

At 6:03 p.m., the pipeline controller received a five-minute volume balance alarm between the Griffith and Marshall stations. This indicates a discrepancy in flows between the two points. According to the NTSB, the pipeline controller called the Mass Balance System (MBS) analyst to investigate the five-minute alarm. The MBS analyst diagnosed the alarm as column separation, or a separation in the flow of oil, and advised the pipeline controller that the condition would be present until the line is restarted at 4:00 a.m. the next morning – about 10 hours later.<sup>7</sup>

Two minutes later, at 6:07 p.m., the five-minute volume balance alarm cleared itself, indicating that the flow imbalance was no longer below its alarm threshold.<sup>8</sup>

At 9:25 p.m., the first 911 call was received at the Calhoun County Dispatch Center, located in Marshall City. The caller reported a "bad" odor, possibly natural gas. [Note: Michigan Gas Utilities had a facility in Marshall.] The Marshall City Fire Department responded.<sup>9 10</sup>

At 9:49 p.m., another 911 call comes in regarding an odor. Marshall Township Fire Department responded.<sup>11</sup>

At 4:04 a.m. on Monday, July 26, 2010, the pipeline controller in Enbridge's control room began the scheduled Line 6B start, which was planned from the 10-hour shutdown the previous day. The line valves were commanded open and the Griffith Pump Station started. Eight minutes later,

<sup>6</sup> The information supplied in this timeline was provided by the NTSB in its docket regarding the Marshall rupture. It is considered preliminary by the NTSB and is subject to change throughout the course of the NTSB's investigation. NTSB Docket.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> Timeline of incidents, Computer Aided Dispatch, Calhoun County Consolidated Dispatch Authority (July 25, 2010).

<sup>11</sup> *Id.*

at 4:12 a.m., the pipeline controller received a five-minute volume balance alarm indicating there was a flow imbalance between the Griffith and Marshall Pump Stations.<sup>12</sup>

At 4:17 a.m., the pipeline controller received a 20-minute volume balance alarm between the Griffith and Marshall stations. This indicated that the flow between the two pump stations was off balance for 20 minutes, or essentially since the scheduled start.<sup>13</sup>

At 4:22 a.m., the pipeline controller received a second five-minute volume balance alarm between the Griffith and Marshall stations. This was to alert the controller that the alarm has remained in an active state for more than 10 minutes. Two minutes later, the pipeline controller called the MBS analyst about the five-minute volume balance alarms. During the conversation, a slight pressure increase was observed leading them to believe that they may be overcoming a column separation. The decision was made to wait. There was some discussion of adding a pump at the Mendon station.<sup>14</sup>

Between 4:36 a.m. and 4:57 a.m., several more volume balance alarms were generated, including a five-minute volume balance alarm, a 20-minute volume balance alarm, and a two hour volume balance alarm.<sup>15</sup>

At 5:03 a.m., discussions took place in the control center regarding the lack of pressure building downstream of the Mendon station. The line was then shut down because Enbridge personnel were unable to resolve the column separation and pressure issues.<sup>16</sup>

At 6:34 a.m., further discussions between the control center shift lead and pipeline controller, as well as the MBS analyst, involved column separation and lack of pressure in the line. They noted that it was taking longer than usual to reverse the column separation and attributed this to the Niles pump station being bypassed for an in-line inspection tool running in the line.<sup>17</sup> During this conversation, Enbridge personnel reviewed the operating procedures for multiple volume balance alarms, and the decision was made to restart the line. At 7:10 a.m., the line was restarted from the control center.<sup>18</sup>

At 7:12 a.m., the pipeline controller received a two-hour volume balance alarm between the Griffith and Marshall Pump Stations. At 7:35 a.m., the controller received five-minute and 20 minute volume balance alarms between the Marshall and RW (end of the line) stations. Between 7:37 a.m. and 7:42 a.m., the pipeline controller received five-minute and 20-minute volume balance alarms between the Griffith and Marshall Pump Stations.<sup>19</sup>

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<sup>12</sup> *NTSB Docket, supra note 5.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> At the time of the incident there was a cleaning pig in the line about 65 miles upstream of the rupture and an in-line inspection tool designed to detect cracks in the pipeline about 68 miles upstream of the rupture.

<sup>18</sup> *NTSB Docket, supra note 5.*

<sup>19</sup> *Id.*



Between 7:46 a.m. and 7:55 a.m., a discussion between the pipeline controller and the MBS analyst suggested that a lack of pressure may be due to bypassing the Niles Pump Station for the in-line inspection. They decided that overcoming the column separation will require more power (pumps). Their review of existing stations showed insufficient pressure available to bring the column back together. The line is shutdown again and the block valve at Mile Post 650.64 (downstream of Marshall) is commanded closed. For the next several hours, the control center continues to try and troubleshoot Line 6B.<sup>20</sup>

At 9:49 a.m., a Marshall technician is called by the control center to visit the pump station to look for leaks in the general vicinity. The technician verified to the control center low suction and discharge pressures.<sup>21</sup> According to the NTSB, the technician walked the perimeter of the pump station and found no leaks. The pump station, however, is located about three-quarters of a mile from the rupture. Numerous residents that live within the immediate vicinity of the pump station reported to Committee staff that they began smelling a strong odor on Sunday, July 25. Two of the residents stated that they smelled the odor on the evening of Saturday, July 24, one of which stated that it “hit [him] in the chest like a ton of bricks.” Another resident collected samples of the thick crude oil/water mixture from the creek in the vicinity of the pump station at 7:00 a.m. on Monday, July 26, which was shown to Committee staff. Other residents ranging from two to nine miles away reported smelling the odors on their way to work between 6:30 a.m. and 8:00 a.m. on Monday, July 26. The Family Health Center in Battle Creek reported to Committee staff that it shut its ventilation system down early on the morning of the 26<sup>th</sup> due to the strong odor. The health center is located about eight to nine miles from the rupture.

At 10:16 a.m., the control center contacted the regional manager to discuss issues related to fixing the column separation. The control center asked about population density in the area of Marshall in order to determine if they should have received calls about odors or leaks. The control center asked to have the Marshall technician check the instrumentation at the pump station.<sup>22</sup>

At 11:11 a.m., another 911 caller reports an odor to the Calhoun County Consolidated Dispatch Center, stating that “the entire downtown smells like natural gas.” The Marshall City Fire Department is dispatched.<sup>23</sup>

At 11:18 a.m., an outside call was received at the Enbridge control center from Consumers Energy, a local gas utility, reporting oil in Talmadge Creek. The utility was onsite responding to as many as 48 customer complaints of natural gas odors.<sup>24</sup>

At 11:20 a.m., the control center called the regional manager to discuss the gas utility call and confirmation of a leak. The pipeline controller began to isolate the line by closing block valves upstream and downstream of Marshall. Ten minutes later, the Enbridge Regional Manager contacted the Enbridge Marshall Maintenance Shop and instructed a technician to investigate the

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Timeline of incidents, supra note 9.*

<sup>24</sup> *NTSB Docket, supra note 5.*

area of the reported leak. The leak was confirmed by Enbridge personnel at 11:41 a.m., at which time booms were being deployed on the river.<sup>25</sup>

At 11:39 a.m., personnel from Consumers Energy called 9-1-1 and stated that there was “a crude oil leak and it has filled the creek.” Fredonia Township Fire responded.<sup>26</sup>

At 1:29 p.m., Enbridge reported the spill to the NRC. According to the NRC, Enbridge made two calls to the NRC related to the spill prior to the 1:29 p.m. report. The first call was received by NRC at 1:01 p.m. and the person calling hung up the phone after 10 seconds. The second call was received at 1:22 p.m. and the person hung up the phone after being in the call queue for 6 minutes and 17 seconds. The NRC spoke to Enbridge personnel reporting the incident for 15 minutes and 25 seconds.<sup>27</sup> Under existing regulations, pipeline operators are required to report incidents at the earliest practicable moment following discovery of a release of hazardous liquid.<sup>28</sup> On September 6, 2002, the Research and Special Programs Administration (RSPA), the predecessor to PHMSA, issued an advisory to owners and operators of gas distribution, gas transmission, and hazardous liquid pipeline systems, and liquefied natural gas facilities. Although the advisory does not set a specific timeframe to call the NRC following discovery of a release, RSPA infers that “earliest practicable moment” is defined as one to two hours following discovery. The advisory stated: “Owners and operators should ensure that telephonic reports of incidents to the [NRC] are both prompt and accurate and fully communicate the estimated extent of the damages.”<sup>29</sup> Enbridge documents, including their response plans, obtained by Committee staff pursuant to the oversight investigation, stated that reporting of a release must be within two hours of discovery.

In June, 2010, PHMSA asked all pipeline operators to review their existing response plans, amend them as appropriate to resolve any deficiencies, and certify to PHMSA that such plans have been reviewed and are appropriate to respond to an incident. On July 21, 2010, just a few days prior to the rupture, Enbridge sent a letter to PHMSA stating that the response plans were adequate to address an incident.

### EMERGENCY RESPONSE<sup>30</sup>

#### Environmental Protection Agency

Once Enbridge reported the spill to the NRC, the NRC notified the appropriate Federal agencies. Within hours, the NTSB, DOT’s PHMSA, the EPA, the U.S. Fish and Wildlife Service (FWS), the State of Michigan, and several State and local officials were on scene. EPA immediately assumed the role of Federal On-Scene Coordinator and established a Unified Incident Command

<sup>25</sup> *Id.*

<sup>26</sup> *Timeline of incidents, supra note 9.*

<sup>27</sup> Enbridge personnel reported to the NRC that the incident occurred at 9:41 a.m. local incident time, but later stated to Federal investigators that he was confused due to time zones in Alberta and that the incident actually occurred at 11:41 a.m.

<sup>28</sup> See 49 C.F.R. § 195.52.

<sup>29</sup> *Pipeline Safety: Required Notification of National Response Center, Research and Special Programs Administration*, 67 Fed. Reg. 173 (September 6, 2002).

<sup>30</sup> Information contained in this section is only a partial description of the response and recovery work.

structure to coordinate Federal, State, and local agencies' response to the spill. That evening, EPA served Enbridge with a Notice of Federal Interest in an Oil Pollution Incident. The following day, on July 27, 2010, EPA issued an Administrative Order, pursuant to section 311(c) of the Clean Water Act (33 U.S.C. § 1321(c)), to Enbridge directing it to, *inter alia*, stop the flow of oil and address the discharge. The Order required Enbridge to: (1) stop the flow of oil into the Talmadge Creek and Kalamazoo River by July 28, 2010; (2) remediate the oil and contaminated soils in and around the immediate vicinity of the release by August 27, 2010; (3) deploy appropriate oil recovery and containment devices and equipment, e.g. skimmers, vacuum trucks, absorbent/containment booms, by July 28, 2010; (4) perform air monitoring and sampling as directed by EPA and public health officials; (5) perform water and sediment sampling of impacted areas as directed by EPA; (6) remediate all impacted areas (including shoreline) along Talmadge Creek, the Kalamazoo River, and Morrow Lake (if impacted) by September 27, 2010; (7) dispose of all wastes at EPA approved disposal facilities; and (8) submit a report to EPA detailing all work completed including monitoring and analytical data, disposal records, and all documentation related to the response by November 27, 2010. EPA also required Enbridge to submit for approval an Operational Health and Safety Plan; Pipeline Repair Workplan; Sampling and Analysis Plan; Quality Assurance Project Plan; Oil Containment and Recovery Plan; Source Area Remediation Plan; Remediation Plan for Downstream Impacted Areas; and Waste Treatment, Transportation, and Disposal Plan.

On July 29, pursuant to the EPA Order, Enbridge submitted its initial workplans for EPA review and approval. On July 31, EPA disapproved Enbridge's initial workplans, with comments requiring Enbridge to submit revised plans by August 2. On August 3, EPA approved with modifications the Oil Recovery and Contamination Plan; the Waste Treatment, Transportation and Disposal Plan; and the Pipeline Repair Plan, but disapproved the Sampling and Analysis Plan and required Enbridge to submit a revised plan by August 4, 2010. On August 5, EPA approved with modifications the Operational Health and Safety Plan. On August 10, EPA disapproved the Remediation Plan for Downstream Impacted Areas and the Source Area Remediation Plan. On August 11, EPA disapproved Enbridge's Sampling and Analysis Plan (for the second time) and the Quality Assurance Project Plan and required Enbridge to submit revised plans by August 14. On August 15, EPA disapproved the Response Plan for Downstream Impacted Areas (for the second time), the Sampling and Analysis Plan (for the third time), the Quality Assurance Project Plan (for the second time), and the Source Area Remediation Plan. Enbridge submitted revised plans per EPA directive; all plans are now approved.

On September 12, EPA reported that it has received approval for up to \$18 million to fund the Federal Government's operations in response to the spill from the Oil Spill Liability Trust Fund (Fund). EPA can request additional funding from the Fund if it determines more is needed. EPA has stated that the Federal Government intends to seek full reimbursement for all money spent on this response from Enbridge. About 84.7 percent of the \$18 million ceiling had been spent through September 9, with a burn rate of \$196,979 per day.

#### The U.S. Fish and Wildlife Service

The FWS is providing technical assistance on natural resource and wildlife issues to the United Incident Command, and is working to collect evidence for the National Resource Damage

Assessment. FWS is also working in partnership with other Federal and State agencies to collect and analyze evidence of impacts to natural resources and wildlife as part of the Natural Resource Damage Assessment. FWS established a wildlife rehabilitation center in Marshall, Michigan to stabilize and rehabilitate wildlife that is being rescued by trained wildlife responders.



On September 14, 2010, FWS reported that 1,485 wildlife (indicated in the below chart) have been treated at the rehabilitation center.

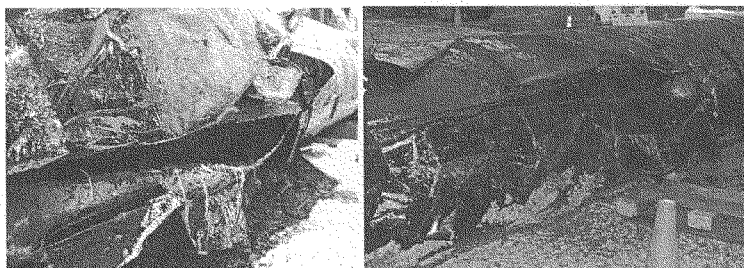
Live in Care	Treated and released	Dead on arrival	Died in care	Euthanized
368 turtles	91 Canada Geese	6 Canada Geese	3 Canada Geese	7 Canada Geese
19 Canada Geese	11 Mallards	3 Mallards	1 Belted Kingfisher	1 Mute Swan
5 Mute Swans	1 Wood Duck	1 skunk	2 Great Blue Herons	4 muskrats
3 Great Blue Herons	2 domestic geese	6 muskrats	3 muskrats	1 beaver
2 beavers	1 Blackbird	1 beaver	1 snake	1 mink
1 snake	3 Great Blue Herons	1 mole	10 turtles	1 snake
2 mussels	1 Rock Pigeon	2 shrews	3 frogs	2 turtles
	8 muskrats	6 raccoons		
	2 beavers	1 opossum		
	3 meadow voles	1 unidentified		
	3 opossums	3 snakes		
	9 snakes	8 turtles		
	819 turtles	16 fish		
	35 frogs and toads			
Total: 400	Total: 989	Total: 55	Total: 24	Total: 17

National Transportation Safety Board

The NTSB also launched four investigators within hours of being notified of the spill. The NTSB is leading the safety investigation of the pipeline rupture.

Two sections of the pipe, 23 feet, 4-inches and another 26 feet, 10 inches have arrived at the NTSB for further examination. The below photographs show the length of the fracture, which extends about 6.5 feet longitudinally with the widest portion of the opening measuring 4.5 inches.

According to the NTSB, the fracture was located about 25 feet from the upstream joint in a 40 foot section of 30-inch pipe.



#### Pipeline and Hazardous Materials Safety Administration

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for overseeing the safety of the nation's pipeline system; from design specifications and construction procedures to operation and maintenance of pipelines and onshore spill response planning. PHMSA only has jurisdiction over transportation-related facilities; it does not have jurisdiction over drilling or production facilities. PHMSA is working with the NTSB on the safety investigation and has enforcement authority over Enbridge.

Following the spill, on July 28, PHMSA's Associate Administrator for Pipeline Safety issued a Corrective Action Order to Enbridge, which found "that the continued operation of [Enbridge's] Line 6B pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, circumstances surrounding this failure, the proximity of the pipeline to populated areas, public roadways and high consequence areas, the hazardous nature of the product the pipeline transports, the pressure required for transporting the material, the uncertainties as to the cause of the failure, and the ongoing investigation to determine the cause of the failure, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment."

The Order requires Enbridge to develop and submit a written plan for approval prior to resuming operation of the section of Line 6B that ruptured, which must: (1) provide for a daylight restart and detail advance communications with local emergency response officials; (2) ensure adequate patrolling of the pipeline segment during the restart process; (2) expose the pipeline extending 50 feet on either side of the failed pipe joint to examine for corrosion, coating conditions, or other issues; (3) repair or replace pipe or coating as necessary in accordance with Federal regulations; (5) verify adequate cathodic protection for the area where the failure occurred; (6) perform incremental start-up in 25 percent pressure increments with each increment to be held for at

least one hour; and (7) include sufficient surveillance on each increment to ensure that no leaks are present when operation of the line is resumed.

The Order also states that once Enbridge receives approval to restart the pipeline, Enbridge must maintain a 20 percent pressure reduction in the operating pressure of the line, which shall not exceed 80 percent of the operating pressure in effect immediately prior to the failure. Enbridge had already reduced pressure on the line prior to the incident so this would be an additional pressure reduction.

In addition, the Order required Enbridge to submit within 60 days an integrity verification and remedial work plan to PHMSA's Regional Director for approval. The plan must include: (1) a review of the failure history of the entire U.S. portion of Line 6B over the past 20 years and develop a written report containing all available information on the locations of failures, dates of failures, and cause of failures and describing Enbridge's plans to confirm that the remainder of the line is not susceptible to more such failures; (2) an evaluation of the remainder of Line 6B to determine whether the conditions involved in the rupture, or any other integrity threatening conditions, are present; (3) a detailed description of the inspection and repair criteria to be used in the field evaluation of any anomalies that are excavated, which must include a description of how any defects are to be graded and the schedule for repairs or replacement; and (4) provisions for continuing long-term periodic testing and integrity verification measures to ensure the ongoing safe operation of the affected segment.

On August 9, Enbridge submitted its restart plan to PHMSA for review and approval. Once a restart plan is approved, an operator must carry out the plan and upon completion seek additional approval from PHMSA for the actual restart of the line.

On August 10, PHMSA rejected Enbridge's restart plan and specified various additional requirements that Enbridge needed to fulfill before returning Line 6B to service. Specifically, PHMSA noted that the plan did not contain "sufficient technical details or adequate steps to permit a conclusion that no immediate threats are present elsewhere on the line that require repair prior to any restart of the pipeline, even at a further reduced pressure." In its denial, PHMSA noted it would not approve any restart plan that "did not include excavating and exposing additional pipe and repairing or replacing additional pipe as necessary." PHMSA required Enbridge to: (1) determine, investigate, and remediate as necessary at least four additional anomalies in Line 6B subject to similar operating parameters and conditions as the anomaly associated with the pipeline failure; (2) provide inline inspection vendor reports and details of all reviews to PHMSA; (3) provide information on the anomalies reported at Mile Posts 710.74 and 751.22; (4) perform a hydrostatic test; and (5) provide additional clarifications, including a response to whether there are any other immediate threats elsewhere on Line 6B that require repair prior to restart of the pipeline at the prescribed reduced pressure.

On August 13, Enbridge submitted a revised restart plan to PHMSA for review and approval. PHMSA requested additional materials from Enbridge. PHMSA is now reviewing the restart plan.

On August 31, Enbridge provided the additional materials requested by PHMSA and notified PHMSA that it had completed the actions described in the unapproved restart plan and stated: “Adequate steps have been taken to safely restart Line 6B at reduced pressures and that the supplementary monitoring measures taken during such restart protect public and environmental safety.” In the letter, Enbridge officially requested approval to restart Line 6B.

On September 2, Enbridge met with PHMSA personnel to review the current conditions of Line 6B pipeline, pre- and post-release integrity assessments, and further measures employed by Enbridge to validate Line 6B integrity. Enbridge reiterated its conclusion that Line 6B is safe for restart. PHMSA is considering Enbridge’s restart request; the line is still shutdown.

#### **FEDERAL REGULATIONS ON INTEGRITY MANAGEMENT OF HAZARDOUS LIQUID PIPELINES**

In 2000, in the wake of several tragic pipeline incidents, PHMSA issued a Final Rule requiring pipeline operators to continually evaluate the potential consequences of failure of their pipeline segments that could affect a HCA, and set priorities for inspecting, operating, and maintaining the pipeline based on whether people, property, or the environment might be at risk should a pipeline failure occur.<sup>31</sup> According to PHMSA, pipeline segments that could affect an HCA represent about 44 percent of the total hazardous liquid pipeline mileage in the United States.

Specifically, all hazardous liquid pipelines operators are required to determine which of their pipeline segments could affect HCAs on an ongoing basis. For example, an area that an operator once determined did not affect an HCA might later affect an HCA, depending on the circumstances (e.g. new high population or environmentally sensitive areas). Once the pipeline segments are identified, the operator is then required to comprehensively assess the structural integrity of those pipeline segments that could affect those HCAs, using a variety of assessment methods determined appropriate by the operator. Based on these assessments, operators must take prompt action to repair any defects that could reduce a pipeline’s integrity. Integrity management assessments must be performed at least once every five years. However, an additional eight months may be added to the reassessment interval to allow for unforeseeable events (e.g., permitting delays, weather, tool failures) that could affect the ability of the operator to successfully complete an assessment.

Federal regulations allow each pipeline operator to determine the best method(s) of assessing the structural integrity of their pipelines, using one or more of the following three approaches: in-line inspection, hydrostatic testing, or direct assessment.<sup>32</sup> Alternative assessment methods can be employed if they can be shown to be effective. Certain defects are required under the regulations to be repaired within specified timeframes. If the defects are not repaired within those specified timeframes, Federal regulations allow the operator to reduce pressure on the line as an alternative method of remediation for a total of 365 days following discovery of a defect. If the operator wants to exceed 365 days then the operator must provide notice to PHMSA of the long-term pressure reduction, which must include proposed remedial actions.

<sup>31</sup> See PHMSA and Pipeline FAQs, available at <http://www.phmsa.dot.gov/about/faq>.

<sup>32</sup> U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety, prepared by Michael Baker Jr., Inc., *Pipeline Corrosion Final Report* (November 2008), at 33, available at [http://primis.phmsa.dot.gov/iim/docstr/FinalReport\\_PipelineCorrosion.pdf](http://primis.phmsa.dot.gov/iim/docstr/FinalReport_PipelineCorrosion.pdf).

As part of the program, PHMSA requires each hazardous liquid pipeline operator to maintain a written integrity management plan at the operators' place of business. Federal regulations specify eight elements that a pipeline operator's integrity management plan must include, but the plan is not submitted to PHMSA for review or approval prior to implementation of the plan (or when a plan is revised).<sup>33</sup> The plans are provided to PHMSA (at PHMSA's request) just prior to each Federal inspection, but they are not kept on file with PHMSA. [Note: PHMSA also does not keep pipeline operator response plans that are reviewed on file.] According to PHMSA, each pipeline operator has been inspected once to review their integrity management program; all major operators have been inspected twice; and some are on their third round of inspections. Enbridge's Line 6B was last inspected by PHMSA in 2006.

As stated, large portions of Enbridge's Line 6B are located in HCA's. Talmadge Creek and the Kalamazoo River are bordered by marshland and developed properties. Enbridge must therefore comply with the Federal regulations described above.

#### **SAFETY OF LINE 6B**

Since Line 6B was constructed in 1969, the line has been evaluated for corrosion seven times. According to Enbridge, in 2007, 12 high priority Magnetic Flux Leakage (MFL) inspections were scheduled across the Enbridge system to compensate for technological limitations with previously completed Ultrasonic Technology (UT) inspections.<sup>34 35</sup> These limitations include false negatives, echo loss, and tool variability. According to Enbridge, the volume of data to analyze the integration of the MFL data with existing UT data, at the time, overloaded the capabilities of the contractor that Enbridge hired to conduct the in-line inspection. As a result, Enbridge did not receive the final 2007 MFL report until June 4, 2008. Enbridge asserts that the company "did not have sufficient information about the condition of the pipeline to make discovery" until that time.

The final 2007 MFL report that was received by Enbridge in June, 2008 identified 140 corrosion defects that required repair under Federal regulations within 180 days.<sup>36</sup> Enbridge repaired 26 of those defects, leaving 114 defects remaining to be repaired. These include seven

<sup>33</sup> 49 C.F.R. § 195.452.

<sup>34</sup> MFL can detect corrosion by sensing magnetic leakage. First, it initiates a magnetic field in the pipeline. If there are any flaws in the pipeline wall, some of the magnetic field will escape. Sensors onboard the pigs detect and measure that leakage. Smart pigs equipped with MFL technology can determine whether the corrosion is internal or external, and they can also measure for changes in the thickness of the walls.

<sup>35</sup> Measurements are made when the pigs emit ultrasonic signals whose echoes are timed and compared with data to determine the wall's thickness. The same ultrasonic technology can detect longitudinal cracks, crack-like defects, and longitudinal weld defects.

<sup>36</sup> Federal regulations require certain repairs to be made within 180 days of discovery: (1) a dent greater than two percent of nominal pipe diameter; (2) a top dent greater than two percent of pipe diameter; (3) a bottom dent greater than six percent of pipe diameter; (4) calculated operating pressure less than maximum operating pressure at anomaly; (5) area of general corrosion with predicted metal loss greater than 50 percent of nominal wall thickness; (6) predicted metal loss greater than 50 percent of nominal wall thickness at a crossing of another pipe, in an area of widespread circumferential corrosion, or in an area that could affect a girth weld; (7) potential crack that on excavation is shown to be a crack; (8) corrosion of or along a longitudinal seam weld; and (9) a gouge or groove greater than 12.5 percent of nominal wall thickness.



dents, one of which is a 5.5 percent dent (about 1.9 feet from the start of the dent and 2.4 feet to the deepest point of the dent) oriented in the 12:26 o'clock position within the St. Clair River. Enbridge initiated an internal analysis to determine whether the 114 remaining defects should be repaired or whether the pipe should be replaced. According to Enbridge, an area between Mile Post 650 and 753 showed a relatively high population of required repairs and was a candidate for potential pipe replacement. Internal documents show that Enbridge believed it may be more economically feasible to replace the pipe than to make repairs. In June, 2009, a year after Enbridge first discovered the repair conditions were present, Enbridge decided to reduce pressure on the line in accordance with Federal regulations, rather than repairing the 114 defects while it continued to evaluate whether to repair the defects or replace pipe.

In June, 2009, Enbridge again inspected the line for corrosion using UT; 250 defects were identified for repair within 180 days.<sup>37</sup> According to Enbridge, the 250 defects were in addition to the 140 defects identified in the 2007 MFL report. Of those 250 defects, Enbridge repaired just 35, leaving 215 remaining defects identified in the June, 2009 inspection on the line.

In total, there are 329 defects that remain on the Line 6B, which require repair under Federal regulations within 60 to 180 days. Enbridge decided to maintain the pressure restrictions on the line rather than make the repairs while it continued to determine whether to repair the defects or replace pipe. According to Enbridge, the most severe defects are between Mile Posts 661 and 719. Enbridge calculated that the defects would take about 11 years to grow to a corrosion leak and 16 years to grow to a failure pressure.

Under Federal regulations, if a pipeline operator does not conduct the required repair, then the operator may reduce pressure on the line for 365 days; if the operator wants to exceed 365 days at reduced pressure, the operator must submit a report to PHMSA providing notice of a long-term pressure reduction which must include proposed remedial actions. On July 15, 2010, the same day that Enbridge testified before the Subcommittee on Railroads, Pipelines, and Hazardous Materials, at a hearing focused on integrity management of hazardous liquid pipelines, Enbridge submitted a request for long-term pressure reduction on Line 6B to provide the operator with more time to determine whether to repair the defects on the line or replace pipe. Enbridge requested a two-and-one-half year extension to the end of 2012 – more than four years following discovery of the defects – to make that decision and the necessary repairs or replacement.

On August 20, 2010, while Enbridge was in the process of cleaning Talmadge Creek and the Kalamazoo River due to the Marshall rupture, Enbridge submitted another long term pressure reduction notification on Line 6B focused on the St. Clair River defect identified in the 2009 UT inspection. This defect is located at Mile Post 751.33 and is located 73.1 miles from the Howell Pump Station and 6.9 miles from the suction station in Samia. Depth of the cover at the location is in the order of 15 feet under the river bed and includes layers of gravel, boulders, construction spill pile backfill, and silt. The depth of water at the dent location is about 30 feet.

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<sup>37</sup> *Id.*

From a regulatory perspective, the dent meets Federal regulatory requirements for a 60-day repair condition.<sup>38</sup> According to Enbridge, due to the inaccessibility of the dent for field assessment, the regulatory requirement for a 60-day repair was unachievable. As an alternative, Enbridge decided to reduce maximum operating pressure on the line by 50 percent (operating stress is now 18 percent Specified Minimum Yield Strength) and implement an action plan for an additional engineering assessment to assess the risk associated with the dent and determine the need for remediation, including a review of previous in-line inspection data, additional in-line inspection, third party Fatigue Life Assessment, and an internal engineering assessment. According to Enbridge, "Based on the results of the completed assessments, Enbridge is confident that the dent does not compromise the integrity or safety of the pipeline. The Fatigue Life Assessment determined that the minimum estimated fatigue life of the feature is at least 280 years." However, Enbridge notes that "although the safety and integrity of the pipeline is considered secure in the short-term, due to limitations of in-line inspection technology, there is a small degree of uncertainty of the long-term integrity of the pipeline if unidentified small fatigue cracking is present." Enbridge added that while the probability of failure is low, the consequence of a failure of the pipeline at the St. Clair River is high. In the interim, Enbridge is continuing to determine whether to repair or replace the pipe. The operator is expected to present its analysis of its options to PHMSA by September 26, 2010. According to Enbridge, once it decides how it would like to address the defect "additional time will be required to plan, permit and execute the remediation strategy. The repair option assessment is ongoing and a construction timeline has not been estimated. Initial conceptual timeline for the replacement option is about 12 months for planning, assessments, acquisition of permitting and construction." According to PHMSA, Enbridge has known about this defect since construction based on 1978 in-line inspection data.

Although the most severe defects on Line 6B are downstream of the rupture in Marshall, Michigan, which is located at Mile Post 608, according to Enbridge a 2005 inspection utilizing an Ultrasonic Crack Detection tool (USCD) showed a defect at Mile Post 608 that was smaller than the required repair threshold at the time of inspection. The 2007 MFL corrosion inspection and the 2009 Ultrasonic Wall Measurement corrosion inspection also identified metal loss in the area of the rupture, similarly showing shallow features through a narrow band, but (according to Enbridge) did not meet repair criteria under Federal regulations.

According to Enbridge, there is also evidence of stress corrosion cracking on the line. As mentioned earlier, upon construction of the pipeline, the pipe was coated in the field using then-commonly used polyethylene tape as a corrosion barrier. Polyethylene tape enables the ingress of water (from groundwater), and the insulating properties of disbonded polyethylene also limit the amount of cathodic protection in the line, which can protect the steel surface.<sup>39</sup> Enbridge was aware

<sup>38</sup> Federal regulations require that certain defects identified as a result of operator assessments be repaired within 60 days of discovery: (1) a top dent greater than three percent of nominal pipe diameter, and (2) a bottom dent with any indication of metal loss, cracking, or stress riser.

<sup>39</sup> Cathodic protection is a technique to control the corrosion of a metal surface by making it the cathode of an electrochemical cell. The simplest method to apply cathodic protection is by connecting the metal to be protected with another more easily corroded metal to act as the anode of the electrochemical cell. Electrochemical corrosion takes place when two different metals come into contact with a conductive liquid -- usually impure water or soil moisture -- resulting in a flow of direct current electricity. The current always flows away from the anodic metal (anode), and the anode is corroded. The current flows through the electrolyte to the cathodic metal (cathode), but the cathode is not

of this and had implemented a stress corrosion cracking program specific to Line 6B in the mid 1990's. Early on, Enbridge monitored stress corrosion cracking through field investigations during maintenance for other activities. The first crack detection in-line inspection was conducted in 2005 and was followed by investigative excavations based on the results of the 2005 inspection. Line 6B was in the process of being re-inspected using a specialized crack-detection internal inspection device when the Marshall rupture occurred. The tool for the 2010 inspection remains stranded in a location upstream of the Marshall rupture near Niles, Michigan.

In addition, Enbridge has identified Line 6B as being susceptible to internal corrosion, based upon data from a 1994 in-line inspection which showed internal corrosion defects on the pipeline. Line 6B has historically shipped low water and sediment content heavy crude oils. Enbridge's experience transporting these commodities demonstrates that the bulk hydrocarbon fluid is non-corrosive. However, at lower flow rates, isolated pitting corrosion can occur where sediment and water accumulate in the pipeline. In 1996, Enbridge initiated a mechanical cleaning and chemical inhibitor program. The inhibitor chemical used for Line 6B was selected to provide film-forming corrosion protection and an ability to reduce bacterial activity. In order to remove accumulated materials (sediment and water) and prepare the pipe surface for treatment, the chemical is preceded by a pipeline pig equipped with wire brushes to clean dirt and debris from the line. Treatments of Line 6B are being conducted twice each year. According to Enbridge, the operator has been successful in reducing Line 6B's susceptibility to internal corrosion; almost all of the internal corrosion is of "low severity with depths less than 30 percent."

Corrosion monitors dedicated to Line 6B include an electrical resistance wall loss monitor installed at Mile Post 495.2434, and a weight loss coupon installed in the Stockbridge station. The Mile Post 495.2434 wall loss monitor is capable of detecting pipe wall thickness changes of 0.00025 inches, and has shown a corrosion growth rate of 0.0001 inches per year.<sup>40</sup>

PHMSA, the Federal agency that is charged with overseeing the safety of our nation's pipeline system, was first made aware of the vast majority of the defects on Line 6B in 2009. On a media call last week, PHMSA stated that it has been aware of the dent in the St. Clair River since the 1980's. Enbridge provided presentations to PHMSA staff regarding the defects on Line 6B in November 2009, February 2010, and March 2010. Of particular concern, however, is Enbridge's and PHMSA's omission of this critical safety information in briefings with Committee staff leading up to a July 15, 2010 hearing held by the Subcommittee on Railroads, Pipelines, and Hazardous Materials. The purpose of that hearing was to evaluate the integrity management of hazardous liquid pipelines. Enbridge appeared as a witness at that hearing. Prior to hearings, it is common for Committee staff to request briefings from Federal agencies and witnesses on issues related to the hearing. The briefings with Enbridge and PHMSA career staff leading up to the July 15 hearing

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corroded. The potential that causes the current to flow in this manner is always due to some kind of difference between the anode and the cathode, such as a difference in the two metals, concentration of the conductive liquid, a difference in temperatures, a difference in the amount of oxygen present, or some other difference in conditions.

<sup>40</sup>In January 2010, PHMSA sent a warning letter to Enbridge about its disconnection of five corrosion control monitors on the line. Enbridge claims that the disconnection was due to their selection of alternative corrosion control methodologies.

included discussions on the safety of operations and, in PHMSA's case, the safety of Enbridge and another operator invited to the hearing. At no point did either Enbridge or PHMSA mention the safety concerns with Line 6B or the fact that PHMSA had been pressuring Enbridge to deal with the defects on the line. Further, Enbridge failed to mention to Subcommittee Members at the hearing that it had submitted a notification to PHMSA on the day of the hearing for a two and one-half year extension on remediating the defects in the line (an issue that is directly relevant to integrity management).

Following the rupture in Marshall, Michigan, Committee staff requested a timeline of activities related only to Enbridge's Lakehead System since 2002 and communications between PHMSA and Enbridge since 2002. Committee staff also requested a failure history on Enbridge. PHMSA reported to Committee staff that Enbridge and its affiliates are responsible for 163 pipeline incidents since 2002, 83 of which occurred on the Lakehead System. *See Attachment A.*

#### RELEASES OF LIABILITY AND MEDICAL INFORMATION

Committee staff conducted nearly 100 interviews with residents impacted by the Line 6B rupture in Marshall, Michigan, in addition to interviews of Enbridge, Federal, State, and local officials, and healthcare providers in the Marshall area. Committee staff also consulted with officials charged with overseeing claims processes in other oil spills, including the BP oil spill in the Gulf of Mexico. Kenneth Feinberg, who is charged with administering BP's compensation fund, informed Committee staff that the Gulf Coast Claims Facility (Facility) is providing emergency advance payments to individuals and businesses that are experiencing financial hardship resulting from damages incurred by the BP oil spill, without requiring any release from the individual or business. Individuals and businesses may apply for an emergency advance payment on a monthly basis or for six months of losses. In addition, the Facility has a comprehensive claim form which each individual must complete and sign. At some point in the future, the Facility will offer a lump sum payment to compensate victims of the spill for their present and future losses; at that time, the injured individual will need to sign an agreement releasing BP of any future liability.

Following the Marshall rupture, Enbridge opened two claims offices: one in Marshall and one in Battle Creek. Although evacuations were on a voluntary basis, many residents, in particular, those who resided in the red zone (most impacted by the spill), decided to evacuate. Enbridge informed those individuals that they should keep their receipts from the hotel and submit them for reimbursement. Many residents interviewed by Committee staff stated that they were required by Enbridge to sign Full and Final Releases from Liability in order to be reimbursed for hotel accommodations and food. The releases discharged "Enbridge, its employees, agents, partners, directors, and officers and affiliated companies and their agents, partners, directors, and officers, from and against all liability, claims, actions, causes of action, costs, and expenses, including without limitation claims for personal injuries, property damage, that [the signer] ever had, has, or may have against Enbridge, whether known or unknown related to the incident." *See Attachment B.*

Enbridge also provided air purifiers and air conditioners to residents in the red zone (an area designated for voluntary evacuation of residents) and other locations. Residents stated that they

were required to sign liability releases in exchange for that assistance. Other residents stated they were required to sign releases upon filing a claim, prior to evaluation and approval of their claim.

In addition to the liability releases, residents seeking medical attention by contacting the Enbridge hotline were required to sign broad authorizations for release of medical information, which Enbridge claimed was required by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) (P.L. 104-191), a law which governs health care providers, health care plans, and health care clearinghouses and designed to protect the privacy and security of patients' medical information. *See Attachment C.*

Following the pipeline rupture, Enbridge developed an arrangement with the Family Health Center of Battle Creek (FHC) to refer patients to the Center for care. FHC is recognized as a Federally-qualified health center by the U.S. Department of Health and Human Services (HHS), Bureau of Primary Health. FHC serves about 30,000 patients annually, and focuses on aiding the uninsured and under-insured. FHC offers a discount program through a grant from the Public Health Service within the HHS to help patients pay for healthcare; it is a sliding fee discount program with minimum co-pay for uninsured patients, which means payment is according to one's income level and family size. FHC informed Committee staff that they do not turn away patients in need of care.

Pursuant to the arrangement, Enbridge personnel would complete an Authorization for Care, which authorized persons seeking medical care to obtain care from the FHC. This Authorization for Care would indicate to FHC that Enbridge would take care of the patient's medical expenses. Enbridge, however, also required persons seeking medical care to sign a form entitled, "Authorization for Release of Medical Records Pursuant to 45 CFR 164.508 (HIPAA)." This form authorized the release of "any and all inpatient admissions all ER visits, outpatient clinic notes, diagnostic testing, radiology films, consults, doctors orders, progress notes, nurses notes, laboratory testing, social service records, reports, correspondence, consultations, memoranda, treatment plans, admission records, discharge summaries, medical summaries, diagnoses, and/or any writing of any kind ... [including] drug and alcohol records, communicable disease, HIV and AIDS records, and mental health records (not including psychotherapy notes)" to Enbridge. The form authorized the release of any of these records for a period of one year from the date signed, or the date a claim has been legally concluded, to any representative of Enbridge Energy Partners, L.P., of Houston, Texas.

According to residents, Enbridge never informed them that their refusal to sign the release would not result in denial of medical care. Residents were led to believe that to receive medical care, they had to sign the release. However, even if they did not sign the release, the FHC informed Committee staff that they would still have provided them with medical care under the FHC's normal operating practices.

There were also no limits on what Enbridge could do with the patients' information. FHC reported to Committee staff that FHC had concerns regarding the arrangement so they asked Enbridge to enter into a patient care agreement. FHC submitted a draft agreement to Enbridge in mid-August, which would have limited Enbridge's use of the medical information to oil spill claims

and prohibited Enbridge from sharing patients' medical information outside of the organization. Enbridge did not sign the agreement. *See Attachment D.*

On September 1, 2010, Chairman James L. Oberstar and Congressman Mark H. Schauer sent letters to the U.S. Department of Justice and U.S. Department of Health and Human Services (HHS) requesting inquiries into Enbridge's practices relating to the liability releases and medical information forms. Chairman James L. Oberstar and Congressman Mark H. Schauer also wrote to Enbridge regarding the allegation, and asked Enbridge to voluntarily rescind any and all releases of full and final settlement and any and all authorizations for releases of medical records that have been signed pursuant to the oil spill in Marshall, Michigan. They requested an immediate halt of Enbridge's practice of asking residents to sign the forms, and asked for copies of all signed forms and related materials.

On September 3, 2010, Enbridge sent a letter to Chairman James L. Oberstar and Congressman Mark H. Schauer stating that residents or businesses that were not satisfied with the claims process or Enbridge's approach have the option to seek legal recourse. Enbridge, however, committed to reviewing their claims process and discontinuing the use of releases that precluded the claimant from bringing future claims for physical injuries or medical conditions that result from the leak until Enbridge has an opportunity to meet with the parties to the letter. Enbridge did not state what it would do with releases signed prior to September 3. Enbridge also agreed to discontinue the efforts to obtain authorizations for release of medical information and that it would return the one file it had received from FHC. FHC maintains that it is still legally bound by the forms to continue sending the medical information to Enbridge; it is in the process of reviewing that requirement.

In response to the Committee letter, on September 7, 2010, Secretary Sebelius sent a letter to Patrick Daniel, President and Chief Executive Officer of Enbridge and stated that if the reports that the company had "misled or coerced individuals to sign forms authorizing the release of personal medical records to Enbridge upon referral to a local family health center; that these forms authorize the disclosure of an inappropriately broad amount of medical information, including information wholly unrelated to their current conditions or complaints; that the form could be directed to any provider, not only the one(s) to which the patient has sought treatment for the potentially oil spill-related condition; and that Enbridge has failed to adequately inform these individuals of their privacy rights under the Health Insurance Portability and Accountability Act (HIPAA) . . . that the company's actions are a deplorable affront to patients' privacy rights" and called on Enbridge to cease such practices immediately.

According to the HHS, "[a] health care provider may not coerce an individual into signing a HIPAA-compliant authorization in exchange for treatment, and an individual may revoke an authorization in writing at any time. In addition, providers in this situation may not deny treatment to individuals because they refuse to sign a HIPAA authorization."

HHS opened its own inquiry into the matter and requested copies of all Enbridge medical release forms used regarding the Michigan oil spill and "an explanation of their extraordinary scope." HHS further asked Enbridge to explain how they were advising Michigan residents of their ability to receive medical treatment even if they would not sign a release.

The Committee also requested copies of all liability releases and medical release forms and other relevant materials. Enbridge failed to provide the materials as requested.

HHS has reported to the Committee that Enbridge's form is not HIPAA compliant. HHS also reported that Enbridge is not covered under HIPAA; only health care providers, health care plans, and health care clearinghouses are governed under HIPAA and may authorize a patient to release medical records. Enbridge is not a health care provider, a health care plan, or a health care clearinghouse. In fact, HHS informed Committee staff that it has never seen a HIPAA form that provides such protected information to the entity that is responsible for causing the need medical care. It appears that Enbridge led people who signed the release to believe that the form was required under Federal regulations: "Authorization for Release of Medical Records Pursuant to 45 CFR 164.508 (HIPAA)." Residents who signed the form reported to Committee staff that they thought it was a requirement. Unfortunately, because Enbridge is not covered under HIPAA there are no protections for how the information it obtained from the medical provider may be used. Further, HHS has no Federal recourse against Enbridge because it is not covered under HIPAA. The only Federal recourse is through the U.S. Department of Justice.

**EXPECTED WITNESSES**

**Ms. Michelle Barlondsmith**  
Resident, Battle Creek, Michigan

**Mr. Andy Buchsbaum**  
Executive Director of Great Lakes Regional Center  
National Wildlife Federation

**Mrs. Susan Connelly**  
Resident, Marshall, Michigan

**Mr. Patrick Daniel**  
President and Chief Executive Officer  
Enbridge, Inc.

**The Honorable Deborah Hersman**  
Chairman  
National Transportation Safety Board

**The Honorable Lisa Jackson**  
Administrator  
U.S. Environmental Protection Agency

**Mr. James Lee**  
Resident, Marshall, Michigan

**Mr. Scott Masten**  
Senior Scientist, National Toxicology Program  
National Institute of Environmental Health Sciences  
National Institutes of Health

**Mrs. Debra Miller**  
Resident, Ceresco, Michigan

**The Honorable John D. Porcari**  
Deputy Secretary  
U.S. Department of Transportation

**Ms. Kelli D. Scott**  
Administrator/Controller  
Calhoun County, Michigan

**Mrs. Darla Thorpe and Mrs. Denise Green**  
Residents, Ceresco, Michigan



## ENBRIDGE PIPELINE OIL SPILL IN MARSHALL, MICHIGAN

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Wednesday, September 15, 2010

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,  
WASHINGTON, DC.

The Committee met, pursuant to call, at 10:15 a.m., in room 2167, Rayburn House Office Building, Hon. James Oberstar [Chairman of the Committee] presiding.

Mr. OBERSTAR. The Committee on Transportation and Infrastructure will come to order.

The Chair will advise Members and witnesses they are allowed to wear sunglasses. This newly reconditioned lighting system here, it is—I was watching it being installed during the recess, and it's energy efficient lighting. I didn't know it was going to be blinding.

Mr. Miller, our Committee manager, what did you do with this lighting? Did you goose up the electricity on it?

Yes, it is. I know that. I thought they repainted the room it was so bright.

A little obiter dicta aside, the Committee meets in very serious, even somber session this morning. We have had a long record of concern over the safety of the Nation's pipeline system. When I Chaired the Investigations and Oversight Subcommittee several years ago, one of our first actions was to inquire into a serious pipeline break in Minnesota on the northern fringe of the Twin Cities. I recall very vividly as we prepared for reauthorization of the pipeline safety program just prior to the Highway Subcommittee consideration of that legislation there was the massive rupture on the Williams' pipeline in Mounds View, Minnesota, northern fringe of the Twin Cities.

Our Subcommittee on Investigations and Oversight inquiry into that failure, with the very detailed report of the National Transportation Safety Board, showed that corrosion was the culprit, that cathodic protection had failed on that pipeline. Not only had the cathodic protection failed, but there were no shutoff valves in the vicinity of the pipeline rupture.

The pipeline had been laid some time before intensive population growth had spread to Mounds View. Notwithstanding, the pipeline company continued to treat that segment as a rural pipeline with widely spaced shutoff valves and no technology to detect a drop in pipeline pressure. And what happened was that there was a 7-1/2 foot long crack in the pipeline.

Liquid gasoline leaked into the soil and spread throughout an entire city block. Vapors from the liquid gasoline worked their way

up through the soil. At 2:00 a.m., a car driving along that street with a loose tail pipe, the tail pipe struck the pavement, sparked, and the gasoline exploded into a block-long fireball that melted and buckled the pavement, melted mailboxes along the street and one of the homes. A mother and her daughter came out the front door to see what was going on; and the fireball roared up the front lawn and engulfed the mother and daughter, severely burned, died a couple of days later.

In the aftermath, we found that, notwithstanding the explosion and the fire, the gas leak continued to flow for an hour and a half until the manually operated gate was shut off. I have talked about that incident in every hearing we have had over the ensuing years on pipeline safety.

All of us know where we were and what we were doing at a certain moment our life when some major tragedy occurred. When Franklin Roosevelt died I can tell you exactly where I was, whose living room, what time of day. We all know where we were on September 11th. Congressman Schauer, I am sure, will never forget where he was when he learned of the Enbridge spill in Marshall, Michigan. Nor will our colleague, Congressman Rick Larsen, ever blot out the memory of the Bellingham River gas line spill that claimed the lives of two young lads who had just graduated from high school, were celebrating their graduation by going on a fishing trip on this river and this wall of gasoline on fire roared down the river and consumed them.

Two months ago, the Subcommittee on Railroads, Pipelines and Hazmat had a hearing on the integrity management of hazardous pipelines. During the hearing, I questioned Mr. Richard Adams, the Enbridge vice president of U.S. operations for liquid pipelines, about the importance of identifying and responding immediately to pipeline rupture.

His comment, "Our response time from our control center can be almost instantaneous, and our large leaks are typically detected by our control center personnel. They have enough experience and training that with usually a leak of any size they can view that there is a change in the operating system, and there are provisions that if there is uncertainty they have to shut down within a period of time."

This is after 20 plus years of experience of pipeline failures. We did not know at the time of their testimony that Enbridge had requested a 2-1/2 year extension from DOT's Pipeline and Hazmat Office to—an extension of time to repair the 329 defects on that line that they had known about for 2 years.

Ten days later, the pipeline burst. Ten days later after the hearing in this Committee. It does not appear at this point that any of those 329 defects were present at milepost 608 where the rupture occurred. Records show that prior inspections in 2005, 2007, 2009 identified at that location a defect, but the defect in their judgment had not yet reached the repair criteria that PHMSA, the hazardous materials agency, had established in Federal regulation.

That is not good enough. The Federal regulations are a minimum standard that you must meet.

In aviation, the opening paragraph of the FAA act of 1958 says, safety in aviation shall be maintained at the highest possible level.

The purpose of that language was to encourage a culture of safety in the corporate boardrooms, and that is what is required here and that that level of safety should go beyond those minimum standards.

We will hear later in the testimony from the National Transportation Safety Board. We don't yet know the exact cause of the incident. We do know that the spill likely occurred sometime before Enbridge reported to the National Response Center. We know that, contrary to Enbridge's claims at our hearing, the control center didn't even realize that a massive rupture had occurred on the pipeline until a utility worker from an unrelated company called Enbridge to report oil was spilling into a creek.

We know that Enbridge personnel at the control center experienced an abrupt pressure drop on the line and they had multiple volume balance alarms over the course of several hours before sending a technician to the pump station three-quarters of a mile from the rupture. We know that Enbridge reported that the technician did not see any problems or smell any odors at the pump station.

We also know that numerous residents in the immediate vicinity of the pump station and others who were living some 9 miles away reported that they smelled strong odors the day before.

We also know that Enbridge knew about hundreds of defects in the line. We know that PHMSA was made aware of them, and we know that PHMSA failed to do anything to address Enbridge's inaction.

That is not a culture of safety. That is not a culture of safety in the head office of PHMSA, nor at Enbridge.

This corporation has been urging residents in the aftermath of this tragedy, under duress, to sign liability releases for reimbursement of hotel and food expenses resulting from their evacuation, signing liability releases for air purifiers that are being distributed which, according to information our investigative staff have gathered, do not address the health impacts of inhaling benzene or volatile organic compounds.

This corporation is not practicing a corporate culture of safety. Nor does this company properly assume responsibility when its personnel lead injured persons to believe they must sign away their lifelong medical records to Enbridge if they want medical care. Enbridge should not have the right—or have the power or the force to intimidate people into signing a document that the company can then use against them in later legal proceedings; and, at the same time, they claim that this is a Federal requirement under the Health Insurance Portability and Accountability Act, HIPAA, when they are not covered by HIPAA.

This sounds very much like Transocean on the mobile drilling unit in the Gulf coming back to their employees and asking and demanding that they sign a document saying they didn't see the accident, hear the accident, they weren't part of it, and they did not suffer severe injury in order to be covered—signing away their rights.

We went through this months ago in this Committee room with BP and Transocean and the mobile drilling unit. I am not going to tolerate this.

And Enbridge is also resisting our request for view of those documents. So we will deal with that separately.

You would think Enbridge would have learned a lesson from BP. You would think they would have learned from the history of pipeline failures in this country. When they occur, they are either a disaster to the environment or to residents near the pipeline. Neither is acceptable and that conduct by corporations is not acceptable, nor is it acceptable of PHMSA.

With that, I will yield now to our distinguished Ranking Member, Mr. Shuster.

Mr. SHUSTER. Thank you, Mr. Chairman; and I thank all the witnesses for coming out today. I look forward to hearing from everybody.

Of course, the ruptured pipeline which occurred in July—late July in Marshall, Michigan, is certainly a tragedy; and, as the Chairman stated, this Committee takes it very seriously. We hope to get a better understanding of what happened, and I don't think we are going to get a full understanding until the NTSB has done its full investigation of the situation.

So today we are pleased that we are going to hear from the residents about the spill and the problems that they experienced from the EPA administrator and the environmental damage caused by this bill, the Department of Transportation, of course, the NTSB talking about the events leading up to the rupture and what can be done to prevent these types of things from occurring in the future. But, again, we still have to wait until their final report, which I don't know when to anticipate that will be out so we can get the facts and really determine what really happened on that day and why it failed.

And our final witness of the day is going to be Pat Daniel, who is the President and CEO of Enbridge, the owners and operators of the pipeline; and he is going to talk about what they have done in the cleanup, which I understand is moving forward well, it is going well, as well as can be expected and what they are doing to help the residents cope with the spill.

It is my understanding that Enbridge has done some things that aren't required of them, offering to buy people's homes because they don't want to see the values go down. So they are trying to do those things. My understanding is they have bought four or five homes now and may be buying several more. But they are doing some things that are positive and not at this point required by law.

So it is a serious matter for this Committee. It is a serious matter for the agencies of the government. They are looking into it, and I get the sense that Enbridge takes this very serious and are going to step up and do what they need to do.

Again, we really need to wait to find out the facts from the NTSB and their final analysis of this.

It has been a rough month for pipeline safety. First, we had this spill, and then there was another that occurred in Illinois. Six thousand barrels spilled, got onto the roadway and a retention pond in Illinois. And then on Thursday the massive explosion in California, in San Bruno, California, which killed several people and destroyed many, many homes and a lot of property out there.

A lot of us take for granted how oil and gas are transported around the country and how natural gas makes it into our homes. But pipelines are an essential part of our transportation system; and they are still, even in spite of these tragedies that have occurred, still the safest and most efficient way that we deliver these products to consumers. But we need to make sure that we are doing everything we can to make it even safer.

These recent events have captured the public's attention and brought pipeline safety to the forefront, as it should have. I only wish that the government, PHMSA, the administration, DOT, would have looked at these things and had a sense of urgency before these events occurred.

The administrator, Cynthia Quarterman, has been before this Committee four times in the last 5 months; and each time she has appeared I have asked her when she expects the administration to transmit a pipeline safety reauthorization proposal and each time she has been unable to provide that answer to me. Then today, 15 days before the program expires—it expires on September 30th—we have a proposal. I would like to tell you it is a good proposal, but I cannot because literally we got an e-mail to us at 10:00. It is still warm coming off the press. So we haven't had an opportunity to look at this. And, again, it is 15 days before the program expires.

Congress is expected to recess on October 7th, and rumor has it maybe even October 1st. So I don't see there is any way we can go through a proposal and pass a proposal that is going to make sense, that is going to be thoughtful, that is going to look at the facts, especially when you have the situation here at the NTSB, no final report. So it boggles my mind.

It is stunning to me that the White House, the administration, was unable to come up with a proposal until, again, 15 days, 30 days after a tragedy occurs. Again, the President, when we had the highway reauthorization bill was ready to expire, it was 9 months into the President's term; and everybody said it is only 9 months. Well, now it is 20 months into the separation, and they are still playing catch-up. The honeymoon is over. If the administration expects to be taken seriously on transportation issues across the board, they need to start stepping up to the plate. I am very disappointed in that.

Again, Mr. Chairman, thanks for holding this hearing; and I yield back.

Mr. OBERSTAR. Thank you, Mr. Shuster.

I join in your frustration, but mine is tripled because we had the same experience trying to get a pipeline safety bill recommendation from the Reagan administration in the late 1980's and in 2006 we had similar problem getting one from the Bush administration.

There is something endemic in this agency that it does not—it is not responsive, and it is bipartisan nonresponsive, and we will not tolerate one or the other party delay. It has nothing to do with party. It has everything to do with lives, safety, protection of the environment and the confidence that the public should have that pipelines running particularly through urban areas are well managed, well maintained.

I have not yet had the opportunity to review the administration's proposal. I shall. But I do think that there is urgency, and I think we should begin the fashioning of a bill in Committee so that we can deal with this matter in due course. And we will consult closely, of course, and participate in partnership with the Republican Members of the Committee. Because safety knows no party.

I will now ask Mr. Schauer to make whatever opening comments he may have. Thank you for your vigilance over this issue and also Mrs. Miller, also from Michigan. Both Members are deeply affected and directly affected and have been extraordinarily responsive to the concerns of the people of Michigan, to their constituents; and I thank you both for your contributions and for your vigilance.

Mr. Schauer.

Mr. SCHAUER. Thank you, Mr. Chairman and Ranking Member Shuster. Representative Miller and I have many things in common, one of which is this pipeline runs through our district.

On Monday, July 26, at approximately 1:30 p.m., I was boarding a flight from Detroit to Washington for votes here in the House of Representatives that evening. It was almost that exact time that a company few in Calhoun County, Michigan, had ever heard of, Enbridge Energy Partners, reported an oil spill to the National Response Center into Talmadge Creek just south of the city of Marshall.

Starting about 9:30 the night before, on Sunday, July 25th, residents in the Talmadge Creek area began calling 911 complaining of a gas odor. As we will learn here today, this was just after a shift change in the Enbridge control room in Edmonton, Alberta, in Canada, the same control room that experienced 13 hours of alarms telling them that something was going wrong on Line 6B in Enbridge's Lakehead pipeline.

On Tuesday, after a brief meeting with the President in which he committed all necessary resources to deal with this largest oil spill ever in the Midwest, I flew home to see for myself. Jill Slaght of my staff, who is here today, a Marshall resident, was on the ground; and my team and I have been working with our sleeves rolled up with affected people ever since.

I saw the unimaginable there at home that day. I live in Battle Creek. I got off the highway, drove through Marshall, stopped, smelled, saw. My community lost its innocence that night and in subsequent days. One million gallons of heavy crude oil poured into the Talmadge Creek and then into the Kalamazoo River, a tributary to Lake Michigan.

I never would have imagined that just after holding hearings on the BP Deep Water Explosion spill to strengthen the Oil Pollution Act, my community would be dealing with the same images, images of oil-coated geese in a river literally flowing black with oil.

The ironies are too many to cite. Just 10 days before, as Chairman Oberstar stated, an executive of Enbridge testified before this very Committee on its integrity management system and stated its control room could detect the smallest of leaks. As we learned, it failed.

Also on that day, July 15, 2010, Enbridge requested, as the Chairman noted, to the Pipelines and Hazardous Materials Safety Administration, or PHMSA, that it be allowed to continue to oper-

ate Line 6B at reduced pressure for another 2-1/2 years while it considered repairs to identify defects in its pipeline. This is on top of the year—one year—that Enbridge had already been operating at reduced pressures while it considered what to do about known defects in its pipeline.

As a result of inline inspections since 2007, Enbridge knew of 390 defects but only saw fit to repair 61 of them, leaving 329 unrepaired defects in Line 6B.

The section of pipeline that ruptured south of Marshall wasn't even one of these. I learned from documentation provided by Enbridge to PHMSA about 2 weeks ago that the section of pipeline that tore—it literally tore—had a defect, but the defect didn't rise to PHMSA's threshold requiring repair. But isn't it Enbridge's responsibility to make sure that its pipeline is safe and that people won't be injured and the environment wouldn't be impacted? Enbridge has a lot of experience in this area, with 163 pipeline spills since 2002, 83 of them on the Lakehead system.

Mr. Chairman, thank you for holding this hearing today. It is important to the people of Michigan where 283 miles of this pipeline lies. This hearing is ultimately about people, people whose lives have been changed, for some permanently and irrevocably.

We hold this hearing for Mitchell Price who couldn't be here today but wrote to me about his property, his 30 acres of property along the Kalamazoo River that has been spoiled. And it's for Bobby and Berita Lewis who feel violated and whose lives have been turned upside down.

This is also a hearing about safety, as you noted, Mr. Chairman. Our current laws and regulations are not working as we have seen from this spill and others. The Enbridge pipeline spill is just one example of the need for further corporate responsibility and public oversight. There were three other incidents just in the past week, two from Enbridge lines. Public health was compromised by Enbridge's spill, with over 60 homes being evacuated. Area medical centers have reported over 120 visits related to illnesses from the oil spill. Over 1,000 oiled wildlife have been collected thus far; and the spill area is still today under advisories for drinking water, recreation, and fish consumption.

We do not yet know what the long-term impacts of the spill will be on the health, safety, environment, and economy, economy of these communities in my district. According to the National Institute of Health, there has never been a study of what effects are of the high exposure levels of benzene and related odors like the levels we saw in this spill to children and infants. The testing has only been done in adults.

Additionally, I am very concerned before this pipeline is restarted that it can operate safely, given the recent releases in Illinois and New York and the over 80 release incidents, spills reported by Enbridge since 2002 in the Lakehead system. I do not think it can.

Mr. Chairman, every inch of this pipeline must be inspected and every defect fixed before 8 million gallons per day of heavy crude oil is allowed to flow through it again.

From the very beginning, there have been questions surrounding when this rupture and oil spill occurred. Again, Enbridge stated in

testimony before this very Committee on July 15th about their response time and ability to detect the smallest of leaks. I am concerned about Enbridge's statement to the Committee about their equipment and personnel being able to detect leaks almost instantaneously, especially after this spill. Enbridge's control room in Alberta started experiencing alarms before the spill was reported to Federal officials at 5:58 p.m. On July 25th on this 6B line.

Additionally, reports of odors started coming in, as we know, that evening about 9:30 in Marshal; and it wasn't until 11:18 a.m., Mr. Chairman, on Monday, July 26th, that an employee of another utility company, Consumers Energy, called Enbridge, telling them that was oil spilling into the Talmadge Creek. The leak was confirmed by Enbridge personnel at 11:45 a.m.; and they reported the spill to the National Response Center at 1:33 p.m., nearly 2 hours after they confirmed discovery.

Over 13 hours of alarms in their control center in Alberta and they still were unable to discover and report the leak near Talmadge Creek in my district. Current regulation requires pipeline operators to report incidents immediately upon discovery of a release.

In 2002, PHMSA determined that "immediately" to be defined as between 1 and 2 hours of discovery, or the earliest practicable moment. Enbridge documentation indicates that reporting must be provided within 2 hours of discovery.

I introduced a Corporate Liability and Emergency Accident Notification Act, the CLEAN Act, to clarify the term immediately and the reporting requirements of a spill incident to the National Response Center to be no more than 1 hour after the discovery of an incident. My bill will also increase the current fines if a spill is not reported immediately after a release has been confirmed. In an accident like this, with real people and the environment at risk, every second counts.

Mr. Chairman, under current regulation—you noted this yourself, and I will come to a conclusion momentarily—under current regulation, railroad employees can lose their license to operate a train for exceeding the speed limit by 10 miles per hour, failing to make a break test, or occupying a main track without permission. Truck drivers can lose their commercial drivers license for speeding, making an erratic lane change, following another vehicle too closely, or even bottoming out the undercarriage of a highway vehicle grade crossing.

These are serious offenses. Don't get me wrong. But a company that has the longest petroleum pipeline in the world can spill 1 million gallons of heavy crude oil, devastating a local community and sensitive environmental areas and they don't have to fix all of the defects in their pipeline? That concerns me to no end.

My concerns do not only extend to Enbridge's pipeline safety practices but also the company's practices with the spill claims process and labor practices at the oil spill cleanup site. I have heard from citizens, and you will hear from some today, Mr. Chairman, who have been asked to sign waivers releasing Enbridge from any other liability in exchange for something as small as an air purifier that, by the way, offers no protection from benzene. Enbridge



also has citizens sign waivers releasing all of their medical history to the company in return for medical treatment.

This is outrageous and a clear HIPAA violation. People should not have to sign away their rights to receive medical treatment or be reimbursed for a legitimate claim.

I have also heard numerous concerns from community members whose businesses have been negatively impacted by the spill. Some citizens reported banks redlining people from buying their homes because it is in the vicinity of the oil spill, and numerous citizens are still concerned with the short and long-term health impacts from the spill.

Additionally, there have been news reports of labor and worker safety issues with one of Enbridge's contractors, Hallmark Industrial, LLC. One newspaper article, Mr. Chairman, reported Hallmark Industrial using illegal undocumented workers to help work on the spill cleanup site. This same article reports there were unsafe working conditions and workers who were not qualified with the proper certifications working on the oil spill cleanup. Now, this goes beyond media reports.

Illegal workers—and I am wrapping up. Thank you for your leniency. But illegal workers bussed by an Enbridge subcontractor from Texas were actually arrested upon return to Texas. This is wrong and illegal. There are many qualified workers in my district who would love to have the opportunity to clean up this oil.

Mr. Chairman, today we will hear from citizens—and I am concluding—in my district on how the spill has impacted their daily lives and how, up until they were on this list to testify here today, Enbridge denied some or all of their claims for compensation. Enbridge has offered most of the witnesses here settlements over the last 72 hours.

So, Mr. Chairman, perhaps we should hold three more additional hearings so that other citizens from my district impacted by this spill that have had their claims denied will too be able to get the damage reimbursement they deserve from Enbridge. The citizens in my district deserve to be treated fairly by this company and to be reimbursed for all damages that have already occurred and will continue to be occurred in the future. They deserve to have Enbridge held accountable for this oil spill and the safety of this pipeline.

Thank you, Mr. Chairman, for holding this important hearing and allowing the citizens of my district to be able to voice their concerns. I would like to thank all of the people from my district for taking the time out of their busy schedules to come and testify before our Committee.

Thank you.

Mr. OBERSTAR. The Chair recognizes the gentlewoman from Michigan, Mrs. Miller.

Mrs. MILLER OF MICHIGAN. Thank you, very much, Mr. Chairman.

If I could ask the staff while I am making my opening comments—I see Jimmy Miller there putting up the slide that I asked for. Nope. Wrong slide. I am looking for the slide on the St. Clair River.

As they put that up, I will tell you why I want to have the slide. Because a picture is worth 1,000 words certainly.

Mr. Chairman and the Ranking Member as well, I am so appreciative of having this hearing, of you holding this hearing. As you know, one of my principal advocacies is protecting our magnificent Great Lakes. I know you share that passion as well and certainly my colleague from Michigan.

And I welcome all of the Michiganians who are here today as well. It is not often that we have a Committee hearing when we have so many Michiganians testifying. And I just welcome you here, because I know you all share the same passion.

We are from the Great Lakes State. We love our Great Lakes, as all the States do in the basin.

OK, we have a slide up here.

Now, what we are doing today is what Congress needs to be doing and that is exercising our responsibilities from an oversight standpoint. And my colleague from Marshall has articulated very well the situation that has occurred in his congressional district with a portion of this pipeline owned and operated by Enbridge company, which is a Canadian company, looking through—but, you know, it has, for instance, a former Democratic governor from Michigan. Jim Blanchard is on their board of directors. It is an international company.

But, you know, as I watched with horror, as everybody else did in Michigan, I think around the Nation, what was happening in Battle Creek and Marshall, Michigan, there, just wondering if this oil, God forbid, were to get into the Great Lakes' system, what that would actually mean. And, of course, any oil spill is terrible. However, if an oil spill occurs over land, there are dynamics there. If an oil spill were to occur in the freshwater drinking supply for literally millions and millions of people, you would have another situation beyond catastrophic. And as we all talk about with the Great Lakes, which is fully one-fifth of the freshwater drinking supply of the entire planet, 20 percent of the freshwater drinking supply of the entire world, that is why we have this passion about water quality and clean water.

And I have watched this bill, as I say, in Marshall; and now since in the interim we have seen another Enbridge spill, unfortunately, in Illinois. Then we just read about one just outside of Buffalo in New York. And I have been trying to really track looking at the wiring schematics and the wiring diagram of where the pipeline emanates and where it is going to and how it impacts my district, how it impacts my State, et cetera. And as we exercise our oversight being made sure that we are asking the right questions of not only the company but the regulators certainly.

I think the entire Nation has been sensitized, obviously, to spills and what they mean in the short term and the long term when we all watched—the entire world watched what happened with the Deepwater explosion, which I know sometimes I tell my staff I feel like I am watching a person bleed to death and I don't know how to stop it, and I think many people had that kind of a reaction as we watched this terrible thing happen.

I just mention that because I am not suggesting that happened in this case, but we certainly have found that there was some cozy

relationship between the regulators and the companies, and Congress needs to make sure that that never, never, never happens.

Now, this portion of this Enbridge pipeline which emanates in Sarnia, Canada—and, Mr. Chairman, I always laugh. As a Member from Michigan, we always have the map of our State on the end of our arms. So I am always holding up—but this is my district here, from about this knuckle to the tip of the thumb. So this is the St. Clair river. You are seeing a small portion of the St. Clair River, Sarnia, on the Canadian side, our wonderful Canadian neighbors. But this pipeline is coming from Sarnia. It is going across the St. Clair River here.

The St. Clair River, obviously, is part of the Great Lakes system. That water is running—it is a very—it is probably the fastest, maybe outside of the St. Mary's River—but it is probably the fastest current in the Great Lakes basin. It is running about 6 or 7 knots, and it runs much faster along the U.S. side there.

So you can imagine if you just spilled a cup of water—excuse me—a cup of oil and how quickly that sheen would move when you have that kind of current. Think about an oil break there.

I am not trying to be an alarmist. On the other hand, I am trying to do what I was elected to do, which is oversight for a company that may have a problem here. So as we look at the list of anomalies, as they call them in the industry, the anomalies, we found that there was a dent, which is indicated on these overheads here. There is a dent about 300 feet off the U.S. side that Enbridge apparently found in 2009, and the regulators are aware of this as well.

I just mention this if you can—again, I am not trying to be an alarmist. But anyone can understand, God forbid, what would happen if we had any kind of an incident then. So we have to have absolutely zero tolerance.

I did—this dent actually—and I have met—I would also say that myself and my staff met just last week. We had a long meeting with Enbridge in my district office in Michigan. We talked about this. I don't want to go too long in my opening statement here. I will ask some other questions when I get an opportunity to ask questions.

They indicated to me that they use very sophisticated testing equipment through their entire system to understand where the anomalies are and prioritize what they all are. But they found this dent in 2009, August of 2009. It is about 40 years after the pipeline was installed. Although they told me that they think that this dent may have been there since 1969. That is when the pipeline was installed. So if they had this dent since 1969 but they only discovered it in 2009, it leads to a question about the sophistication of the technology that they are utilizing to inspect their entire pipeline. I would raise that.

Also, this dent in the pipeline meets the Federal regulatory requirements which would require a repair within 60 days. I just lay that out there. I will be pursuing this a bit more.

But they were supposed to fix this dent within 60 days. Keep in mind, they found it in August of 2009. I mention that.

I would just say this, Mr. Chairman, because I appreciated your comments about the agency. Some of the problems that the agency

does not respond, it is endemic, and it has been that way, and certainly Representative Schauer mentioned the same thing. I had sent a letter on August the 3rd to Cynthia Quarterman, who is the administrator of the Pipelines and Hazardous Material Safety Administration, PHMSA, as we call it. I have asked a lot of questions because I didn't want to come to this hearing and blind-side anybody, either the regulators or the company. I have been asking these questions very openly, putting them in written form. So I am not just blind-siding them at a congressional hearing. So they have plenty of time to give us the answer.

And I was looking forward to questioning her today, although I know she sent her deputy and not herself. And I am not making any allegations here. I am just reading from a CBS News report that says the official who runs the Federal agency that oversees pipeline safety recused herself from a Federal investigation into the cause of a massive Michigan oil spill because she once represented the company in question when she was an attorney at a Washington, D.C., law firm.

The Pipeline and Hazardous Material Safety Administration and the Department of Transportation is led by Cynthia Quarterman. She represented Enbridge Energy Partners, the U.S. Subsidiary of the Canadian Energy giant responsible for the 800,000 gallon spill. Now, I don't know. I am not suggesting there is a conflict of interest, but, unfortunately, she could not come. The administrator—the regulator could not come to talk to us because she represented the company in charge. So I will pursue that a bit more.

And I will just close with this, Mr. Chairman. I appreciate your leniency with my time as well.

One of the other problems that I think has been articulated very well by Representative Schauer—and I have the same concern—is the coordination and communication between the company and the first responders in the area. And I have found that in my own area, this district is St. Clair County. I have talked to the emergency management director there. I talked to the fire chief, the police chief of Marysville. That is the city that this pipeline comes into. And we just don't think that there is much—there is certainly—the largest room is the room for improvement. We think there is lots of room to improve communication between the company and the first responders in preparing their emergency response—again, God forbid that there is ever any kind of an incident again anywhere and whether it is in my district or anywhere in Michigan or anywhere in this pipeline.

So we are actually going to be having an informational hearing with our first responders in about 3 weeks, and we are also inviting all of our Canadian counterparts. Because you know one thing about the water in that river. The water doesn't know if it is in Michigan or Canada. It does not know. And people are drinking the water. So we include everybody on that.

But I look forward to hearing from the witnesses; and, again, I appreciate your leniency and giving me the time on this very, very important issue. Thank you, Mr. Chairman.

Mr. OBERSTAR. Certainly, those of our colleagues on the Committee who are directly affected should be able to expand on their

views on an issue of this kind; and I welcome the full statements by both Mrs. Miller and Mr. Schauer.

Point of clarification on Ms. Quarterman, the administrator of PHMSA. There is a requirement in the Obama administration for all executive level personnel to recuse themselves for a period of 2 years from any investigation or any action or rulemaking affecting an organization with which they had an affiliation prior to their appointment. So for 2 years she must recuse herself, and that is why we have not her deputy but the deputy secretary of the Department of Transportation testifying this morning.

Other Members wish to be—Ms. Brown, Chair of our Railroad Subcommittee and PHMSA and who has held numerous hearings on the subject of hazmat.

Ms. BROWN OF FLORIDA. Thank you, Mr. Chairman. I am not going to take my full time because I want to hear from the witnesses, but I want to thank you very much for your timely, timely hearing.

Sadly, much like BP and the spill in the Gulf, both Enbridge and Pacific Gas and Electric have a history of safety violations and planning resource following the accident is totally unacceptable. It also appears that BP and Enbridge have pressured local residents to waive their rights to seek damages caused by this accident.

In my opinion, these incidents have made it clear that self-regulation is not working in the pipeline industry. Our Railroad and Pipeline Subcommittee has held a series of hearings concerning pipeline safety and have found significant problems with reporting and inspection, as well as an unhealthy relationship between the pipeline industry and the agencies that regulate them.

Moreover, much like the sewer and water infrastructure in this country, much of the pipeline infrastructure is reaching the end of this useful life. Let me repeat that. The industry—the pipeline infrastructure is reaching the end of its useful life. There was a report this morning on CNN that I want to recommend to us take a look at that talked about how the infrastructure of the life that our forefathers had put in place is ending and we need to come up with resources as to how we are going to replace the infrastructure.

And this is just one example. We have had several all over the country. We have got to come up with how we are going to have the resources that we need to change this infrastructure; and with the high unemployment and the need for jobs, this is an adequate time to have training and put American people back to work in rebuilding our infrastructure. And we do know—I have to put a plug in—for every billion dollars that we invest in transportation, it generates 44,000 permanent jobs.

I am looking forward to the testimony, Mr. Chairman; and thank you again for your leadership in this area and also for the Members. Because as soon as it happened they contacted us and wanted us to—we got involved in making sure that they had the resources that they need to keep us informed.

Thank you, and I yield back the balance of my time.

Mr. OBERSTAR. Thank you for your vigilance and your passion.

Now, Mr. Ehlers, another Member of our Committee from the State of Michigan and our resident scientist.

Mr. EHLERS. Thank, Mr. Chairman.

And I would just say I have been there long enough to be called a Michigander instead of a Michiganian. It is a fine distinction which we argue about a lot in Michigan.

I do want to just—I will try not to repeat any comments made by my colleagues from Michigan that are more directly involved in this because of their geographical location. However, I have a 50-year record of being concerned about the environment; and this is just a stab in the heart to see that this happened in our beautiful State of Michigan.

But, Mr. Chairman, I would like to broaden this a bit as the Chair of the Subcommittee. Just the basic factor here with many of the problems we are dealing with is that we are facing an infrastructure crisis in this country; and I know you agree with that, Mr. Chairman, because we have had private discussions on this. But you have personally experienced it when the bridge collapsed in Minneapolis in your State, and this is happening again and again.

And it doesn't matter whether it is a bridge or a pipeline or it is a drilling anything from the Gulf of Mexico. We are not taking care of our infrastructure. We are getting sloppy, and we are taking things for granted.

And I hate to take the route of fining these companies an immense amount of money. If that is the only way to get their attention, that may have to be the thing we do, or have them face bankruptcy by lawsuits filed by citizens. Now, that is not a very productive way to address it.

I think that this Committee has to lead the way in this Congress in bringing the attention of the country to the infrastructure problems we face. And it is not just pipeline. It is sewers. It is sewerage treatment plants. We are so dependent on all these things in our everyday life. They tend to have been built in the middle of—after the middle of the previous century. And so they were all relatively new, built about the same time; and we just assumed they would keep on going forever, no matter whether it is sewerage or oil. And that is simply not true. You have to have maintenance.

And as—I forget the name of the famous longshoreman from San Francisco. He used to write books. But he commented once, you can judge the quality of the Nation by the attention it pays to its infrastructure. Because if you are paying attention to your infrastructure, you are worried about what your kids are going to inherit, you are worried about the citizens of the country having all the amenities they need and not having to worry about all of the side effects, whether environmental or fire or whatever.

So I think we have to start waving the flag here, Mr. Chairman, and take the lead in this Committee on making the Congress and the country aware of the importance of infrastructure and maintenance of infrastructure and then we will stop having to have hearings like this or like the Gulf of Mexico hearings. We can very comfortably enjoy the amenities of modern life in the United States with the confidence that they are well built and they are well maintained and we simply won't have these kinds of crises.

So thank you very much for the leadership you have shown since you became Chairman, and I urge you to continue that.

As you know, I am fading off into the sunset January 3. But I know I can depend on you, and I see Andy Buchsbaum, a long-time friend of mine from Michigan, a fellow environmentalist, between the environmental community and this Committee, we should be able to get this Nation squared away on its infrastructure.

Thank you very much.

Mr. OBERSTAR. Thank you very much for those wonderfully thoughtful comments. We shall miss your presence on this Committee and your contribution and your deeply felt and well-researched insights.

Eric Hoffer is the philosopher longshoreman from San Francisco who you quoted quite well. The second part of his quote is, show me failing sewer, failing streets, failing water systems, and I will show you a government that is failing.

Mr. EHLERS. Absolutely.

Mr. OBERSTAR. And we are indeed failing.

Mr. EHLERS. I knew I could depend on your infallible memory to remember the name of the author. But it is also not just infrastructure, but he also included in that social networks, for example, Social Security, et cetera.

Thank you.

Mr. OBERSTAR. Thank you. Thank you very, very much.

Our newly successful representative of the District of Columbia, congratulations on your crowning yesterday, overwhelming vote, the Chair of our Subcommittee on Economic Development and other matters.

Ms. NORTON. Thank you very much, Mr. Chairman, for your congratulations and especially for this hearing.

I simply want to say a word about an issue that you have stressed ever since I have been on this Committee, and that is essentially that infrastructure does not have eternal life, but, because you cannot see it, it may appear that way. So we appear to get serious about the infrastructure that you cannot see only in the wake of catastrophe.

We get more serious about roads because we bumble across them. But it is very scary to believe that it takes a major disaster to make us look beneath the streets, beneath the water where the infrastructure can—as we have learned recently—destroy the environment or destroy us.

Mr. Chairman, I am particularly concerned about the natural gas explosion in San Bruno. What bothers me about that is not simply that there was an explosion, but it appears that people were building these lines below the homes where people live. Now, I don't know if developments sprang up after the natural gas lines were laid, but the notion of being in your house and having it blown up because you are sitting on top of a natural gas line or some other line is truly frightening. Bad enough to have something explode in front of your house. So I hope that in discussion and as our materials indicate we are looking at Enbridge as emblematic of an aging infrastructure and what it can mean if we don't pay attention. And I must say that San Bruno rears its head as an unusually dangerous example, and that is why I am particularly appreciative of the opportunity to hear these witnesses and to question them.

Thank you very much, Mr. Chairman.

Mr. OBERSTAR. I don't think other Members of the Committee—  
Mr. Garamendi.

Mr. GARAMENDI. Mr. Chairman, thank you for this hearing; and for Representative Schauer and the people in your district, the tragedy that occurred there is of great significance.

Our representative from Washington, D.C., spoke about the San Bruno situation. At least four people died, perhaps more; 50 homes destroyed.

A very serious problem in my own district to the east of the San Francisco Bay. What was considered to be the riskiest pipeline in California travels through Livermore. It turned out it was not the riskiest. It turned out to be the second riskiest pipeline, the first in San Bruno.

Mr. Chairman, I have a letter to you and to the Ranking Member requesting a field hearing which I hope we can take in the near future to California to discuss the situation there.

[The information follows:]



JOHN GARAMENDI  
10TH DISTRICT, CALIFORNIA  
2459 RAYBURN HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-0510  
PHONE: (202) 225-1880  
FAX: (202) 225-5914  
DISTRICT OFFICE:  
1981 N. BROADWAY, SUITE 220  
WALNUT CREEK, CA 94696  
PHONE: (925) 932-8899  
FAX (925) 932-8159  
<http://garamendi.house.gov>

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515**

COMMITTEE ON ARMED SERVICES  
SUBCOMMITTEE ON AIR AND LAND FORCES  
SUBCOMMITTEE ON READINESS  
COMMITTEE ON SCIENCE AND  
TECHNOLOGY  
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT  
SUBCOMMITTEE ON TECHNOLOGY AND INNOVATION  
COMMITTEE ON TRANSPORTATION AND  
INFRASTRUCTURE  
SUBCOMMITTEE ON AVIATION  
SUBCOMMITTEE ON WATER RESOURCES AND  
ENVIRONMENT

September 15, 2010

Honorable James L. Oberstar  
Chairman  
House Transportation and Infrastructure Committee  
2165 Rayburn House Office Building  
Washington, D.C. 20515

Honorable John L. Mica  
Ranking Member  
House Transportation and Infrastructure Committee  
2163 Rayburn House Office Building  
Washington, D.C. 20515

Dear Chairman Oberstar and Ranking Member Mica:

I write to you today to request that the House Transportation and Infrastructure Committee conduct a field hearing on the devastating San Bruno pipeline explosion that occurred on September 9<sup>th</sup>, 2010.

The explosion and ensuing fire that erupted along a segment of a Pacific Gas and Electric Company high-pressure pipeline in San Bruno, California, has claimed the lives of at least four people and destroyed or damaged more than 100 homes. While the National Transportation Safety Board is investigating the causes of the explosion, I feel that immediate Congressional action is warranted. Specifically, I request that a field hearing take place focusing on the following aspects of pipeline safety: the role of the federal regulatory agencies and processes, its adequacy of staff and budget; the role of the state regulatory agencies and processes, its adequacy of staff and budget; the role of utilities, its adequacy of staff and budget; and existing and planned urbanization near existing high-pressure pipelines.

Thank you for your leadership.

Sincerely,   
John Garamendi  
MEMBER OF CONGRESS

## Fremont, Livermore have Bay Area's highest risk gas pipelines

By [Mike Taugher and Paul Rogers](#)

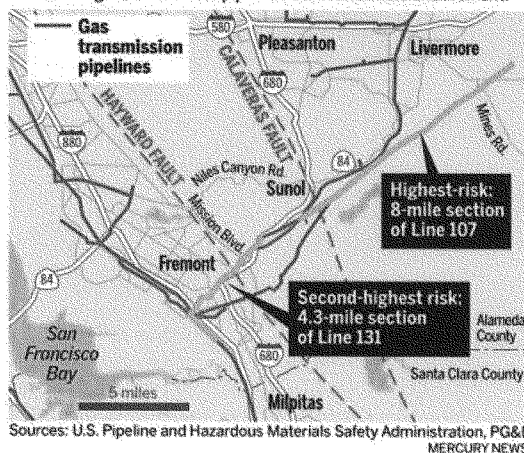
[Bay Area News Group](#)

Posted: 09/14/2010 04:59:01 PM PDT

PG&E's highest-risk gas pipelines in the Bay Area are in the East Bay, according to a regulatory filing last year.

### Bay Area's riskiest pipelines

Last year, PG&E told state regulators that the Bay Area's two highest-risk natural gas transmission pipelines are in Livermore and Fremont.



In making its case for customer rate increases, PG&E told regulators some of the money was needed to replace its riskiest pipelines, including one in Fremont and another between Livermore and Sunol.

The documents filed with the California Public Utilities Commission don't explain exactly why the company rated the two East Bay pipelines as the highest- and second-highest-risk natural gas transmission lines in the Bay Area. Nor do they state the age of the pipelines.

But the risk was ranked by combining the likelihood they would fail and the consequences to life and property if they did fail.

Typically, engineers consider the population density of communities, the age of the pipelines and other factors, such as nearby earthquake faults, when assessing pipeline risk, said Bob Bea, a professor of engineering at UC Berkeley.

Bea, who has worked extensively on natural gas and oil pipelines, including recent studies of the BP blowout in the Gulf of Mexico, said he was not surprised that the two East Bay lines are considered top risks because the one in Fremont is near the Hayward Fault and the one south of Livermore crosses the Calaveras Fault, two of California's most dangerous earthquake zones.

"Many of the existing pipelines we have in this part of the world were engineered before the days of recognizing how you cross a fault with a pipeline," Bea said. "That makes one hell of a big

difference. Crossing a fault at right angles is asking to have the pipeline sheared -- much like cutting a straw with scissors."

The eight-mile segment of Line 107 between Livermore and Sunol, "is the highest-risk pipeline in the Bay Area," PG&E told the state agency. Replacing it would cost \$35.1 million.

It would cost \$13.4 million to replace a 4.3-mile segment of Line 131 in Fremont, the second-highest-risk pipeline in the Bay Area.

The 30-inch gas line that blew up in a San Bruno residential tract last week killed seven people and destroyed 37 homes.

"We understand that customers can be concerned," said Matt Nauman, a spokesman for PG&E. "And obviously we are continually monitoring and upgrading our gas system."

Nauman said for security reasons he could not discuss specifics, but that if people want to know how close a transmission pipeline is to their homes, they can call PG&E and the utility will provide the information in writing.

He also noted that PG&E will examine the two East Bay pipelines for leaks as part of the statewide inspection of all its transmission lines in the next month.

Livermore officials were never informed of the pipeline risk, said a Livermore official who described his attempts to get information this week from PG&E as "frustrating."

"If they're rating things as high risk, they should be working with local jurisdictions to inform them of that," said Livermore assistant city manager Troy Brown. "We have a right to know that information."

The segment in Livermore skirts the city's southern edge, starting around Greenville Road and heading southwest toward Highway 84, Brown said.

The Fremont pipeline goes from the Sunol Grade near Interstate 680 west to Interstate 880 near Auto Mall Parkway. It was unclear what section of that pipeline needed to be replaced, said Fremont fire Chief Bruce Martin.

"Is this simply a prioritizing of maintenance projects or does this represent an imminent problem?" Martin said. "That's an unanswered question."

Martin said he was seeking information from PG&E to determine the severity of the pipeline risk, but, in any case, he said, it would have been "a welcome gesture" had PG&E provided that information earlier.

The filing mentioned a third pipeline, a 7.9-mile segment of Line 108 between Stockton and Ripon that is PG&E's highest-risk pipeline in the San Joaquin Valley.

All three segments are scheduled for replacement from 2011 to 2014 under a risk-management program regulators approved in 2000.

At that time, PG&E ranked the risk of its 6,438 miles of gas transmission lines by determining how vulnerable its pipelines were to breaking and how much a break would endanger people and property.

PG&E did not disclose the age of the two East Bay pipelines. But in the same filing with the Public Utilities Commission last year, it described a section of line about three miles north of the San Bruno explosion site as "high risk." It was built in 1948.

Bea said pipeline engineering has advanced in recent years. Now, he said, many gas pipelines in earthquake areas are built in trenches surrounded with foam or slurried clay, to absorb seismic shaking without the pipe breaking. Or they are designed to break in earthquakes like links of a chain, with automatic shut-off valves at either end of the link. Older pipelines lack those safeguards, he said.

Still, he noted that natural-gas pipeline accidents in the Bay Area have been rare. His advice for people who live near the high-risk lines? Pressure lawmakers and the Public Utilities Commission to make sure PG&E is inspecting and maintaining its lines.

"I think they should be concerned," Bea said. "That doesn't mean panicked, but concerned, so that they turn to the governments that are supposed to be 'of, by and for the people' and say that we expect to have our infrastructure properly maintained and configured so it serves the public interest."

Pipelines are considered the safest way to move large amounts of gas and fuel, but the catastrophic San Bruno blast and fire is forcing pipeline regulators to consider new safety measures.

"The Livermore line is a real concern because it's a major line coming in from the Central Valley," said Rep. John Garamendi, D-Walnut Grove. "PG&E has got to get on with it. "... There is a major infrastructure investment that is going to have to be made."

Garamendi said he would address the San Bruno explosion during a congressional hearing today that was scheduled to examine pipeline safety after a July spill from a pipeline that polluted the Kalamazoo River in Michigan with as much as 1 million gallons of crude oil.

Late Monday, California's top utility regulator ordered PG&E to conduct an expedited inspection of its pipelines and to reduce by 20 percent the pressure of gas in Line 132, which included the segment that exploded in San Bruno, among other measures.

Mike Taugher covers the environment. Contact him at 925-943-8257 or [mtaugher@bayareanewsgroup.com](mailto:mtaugher@bayareanewsgroup.com).

I look forward to the full discussion about the recommendations that Secretary LaHood has brought to us on legislation. Perhaps it will solve some of the problems. But, specifically, we need to sort out the relationship, the role of the Federal Government in this—the relationship with the State governments and the utilities and urbanization over and around existing pipelines. These things need to be sorted out. We need have the appropriate regulations in place.

I look forward to working with you and the Committee to achieve a greater degree of safety and, ultimately, the responsibility of the owners of the pipelines and how they are held accountable, which I understand is to be addressed by the recommendations made by the Secretary.

Thank you for the hearing. I look forward to the witnesses.

Mr. OBERSTAR. Thank you, Mr. Garamendi.

Ms. Johnson, welcome back from your neck surgery. We all hold you deep in our prayers, and it looks like you're overcoming this thing.

Ms. JOHNSON OF TEXAS. Thank you, Mr. Chairman. I just will not give up.

I am going to ask unanimous consent to put my statement in the record so that we can get to the witnesses.

Mr. OBERSTAR. Without objection, so ordered.

Ms. JOHNSON OF TEXAS. Thank you.

Mr. OBERSTAR. At the same time, we will include by unanimous consent the statement of Speaker of the House Nancy Pelosi on the pipeline spill that is the subject of this hearing and also to comment on the Pacific gas and electric explosion in San Bruno.

Without objection, so ordered.

Mr. OBERSTAR. I just observed that the Enbridge pipeline extends well over 1,000 miles through northwestern Minnesota through into my district in northeastern Minnesota and connecting into northwestern Wisconsin. We are holding Enbridge accountable and watching very closely how they respond to this tragedy.

Mr. Shuster observed there are some bright spots in the pipeline sector. The Koch pipeline in 2006 that failed in Little Falls and had a rupture spewed oil 75 feet into the air right alongside U.S. Highway 10. A motorist driving along realized that there are no oil fields in Minnesota and called the county sheriff.

The sheriff called the pipeline company, but they had already taken action from their headquarters to shut off the flow and had people on scene that evening. Now, that's an appropriate response, and they did everything that was required and more.

There are some bright spots where there is a corporate culture of safety, but where there is a failure it is our responsibility to intercede.

We also had a benzene tank car derailment in Duluth several years ago. Unfortunately, local first responders didn't know what the content of that car was except that there was this noxious cloud spreading over Duluth and Superior, Wisconsin. Thirty thousand people were evacuated from their homes. Only later in the day did the railroad company identify the material as benzene so that the first responders would know what type of equipment to wear and what type of action to take to contain the spill.

These are very serious matters that have human as well as environmental consequences. So that's the context in which this hearing takes place.

Now we will ask the first panel of witnesses to rise, and in the spirit and the tradition of our hearings on oversight all be sworn in.

Do you solemnly swear the testimony you will provide to the Committee today and all subsequent communications on this hearing that you will tell the truth and nothing but the truth, so help you God?

Thank you.

We will now begin with Ms. Debra Miller, a small business owner and resident from Ceresco, Michigan.

**TESTIMONY OF DEBRA MILLER, SMALL BUSINESS OWNER AND RESIDENT, CERESCO, MICHIGAN; SUSAN CONNOLLY, RESIDENT, MARSHALL, MICHIGAN; MICHELLE BARLONDSMITH, RESIDENT, BATTLE CREEK, MICHIGAN; JAMES ALAN LEE, RESIDENT, MARSHALL, MICHIGAN; DARLA THORPE AND DENISE GREEN, RESIDENTS, CERESCO, MICHIGAN; AND ANDY BUCHSBAUM, DIRECTOR, NATIONAL WILDLIFE FEDERATION GREAT LAKES REGIONAL CENTER, ACCOMPANIED BY BETH WALLACE, GREAT LAKES OIL SPILL RESPONSE COORDINATOR**

Ms. MILLER. Thank you and good morning.

I would first like to thank the Committee on Transportation and Infrastructure, its support staff, Mr. Chairman, and especially Mark Schauer and his staff for the opportunity to share our true stories on the impact from the Enbridge pipeline oil spill.

My husband Ken and I have two properties in the small, quaint village of Ceresco, Michigan. Our home is located 300 feet below the Ceresco dam, with approximately 680 feet of river frontage. And our property, the other property, is our business, a carpet store located immediately at the top of the dam, with approximately 200 feet of river frontage.

For 31 years, we have raised our daughters living on the Kalamazoo River, something that my husband had done. He lived in our same house as a teenager for 21 years. We have had the pleasure of being able to walk out on our back deck and look out over the Kalamazoo River at the dam and watch the fish swim just under the surface of the river. This is at work. We are blessed.

Up there is a picture of the Ceresco dam. On the left, is a picture that was taken from my home property looking towards the dam. If you look in the far left corner up there, that is where my business is. You can see what it looked like on Monday or—excuse me—Tuesday—Monday, July 26th. The river was black. On Monday, July 26th, approximately 100 million gallons—excuse me—1 million gallons of heavy crude oil spilled into our beloved Kalamazoo River, changing our lives forever.

Over the next few days, the Ceresco dam would become one of the key cleanup spots for the spill, referred to by some as Ground Zero 2—and I say that respectfully—resulting in helicopters flying overhead as many times as 50 passes a day, the beep-beep of large trucks backing up, the influx of 100 plus workers to our neighbor-

hood, workers who Pat Daniel Enbridge CEO admitted were brought in without any background checks and placed on our properties for cleanup.

Contractors, agencies, and their workers' vehicles parked where they could find an open space; and the roar of fan boats on our river with 427 Chevy block engines with open headers is what we listened to for weeks. We still do.

We have been living with all of this in addition to the undescribable smell of the heavy raw crude oil. It has permeated our homes, our business, and even our vehicles. Those of us living within 200 feet of the river remain under a water ban, having to use bottled water for cooking and drinking.

We have been assured by our local health department that while the smell is intense it is only a nuisance and not a health concern. This nuisance has caused burning eyes, throats, and resulting in headaches almost every day. I have had a cough since week one, and the headaches continue as well. As a cancer patient currently taking oral chemo, how can the health department assure me that breathing that benzene will not cause my cancer to return? I would argue it can't.

Our property has been utilized at will by Enbridge and its contractors for parking and staging, and by sheer logistics we have not had easy access to our home property. Many discussions with our local sheriff's department, they were the ones who would not grant us access to our home, and we ended up having Enbridge speak to them, and it was quite the ordeal.

Our business property was impacted when Enbridge moved in a vacuum truck a few days after the spill and then a day later moved in supply trucks and assembly line workers emptied the trucks and effectively blocked our customers from accessing our store, effectively closing our business.

I had several conversations with many Enbridge representatives, including Terri Larson, to help facilitate the first two Ceresco community meetings. I am a block captain for our Neighborhood Watch. So Enbridge had my contact information and chose not to call me in relationship to access to either of my properties.

After 3 weeks of business interruption, I decided that I needed to go to our community center to get someone to talk to us about our closed business. Arriving at the community center, I was told after an hour that Enbridge was not discussing anything with businesses. Their priority was residential. Oh, and by the way, my house did qualify for the Home Buy-Out Program. I was shocked, to say the least. They had blocked my business for 3 weeks, small businesses in Michigan are hurting. They closed me at this point for 3 weeks, and they were not prepared to talk to me, and I was not a priority.

We would meet twice more with Enbridge. And I will be honest to say the last meeting was held on Friday, August 22nd, and my husband and I walked out of that meeting. Contrary to Enbridge's promise from the CEO, we did need to retain a lawyer. We had only wanted some information like when we might be able to get back into our business, and had they given me anything but that our business wasn't a priority I might have not been so frustrated.

I will tell you that on the following morning—no, excuse me, that's not true. Two hours after I got home from the meeting, I did get a call from Steve Wuori, and he asked me—he is vice president—asked me if I would be willing to come back in and talk to him. And I told him that I needed a breather. I was going to take a day and do volunteer work with the American Cancer Society. I needed that break.

On Monday morning, I did call a lawyer; and our lawyer has been able to have Enbridge hear us. We currently have an agreement on the table. As of my flight yesterday, I do not have a signed agreement from Enbridge, but the agreement is for limited access and limited business interruption. And they have agreed to purchase my property for a time frame if I decide to sell to them.

It does not guarantee a fair price if I ask them to sell it. Nor does it compensate me for any inconvenience, pain, or suffering. And we have nothing pending on the house property.

Again, I would like to thank the Committee for the opportunity to share how this spill has impacted us. I only hope that others truly impacted by this bill will not have to attain a lawyer to be heard. I hope this hearing will be the lightning rod that allows Enbridge to realize some of the methods, strategies, and programs they used in this bill were made in haste and were often ineffective and unsettling. I hope when Enbridge returns from this hearing and meets with other individuals with legitimate claims they will be forthright, compassionate, and fair.

I know that may not be good for the stockholders or their bottom line, but as one who is greatly impacted my bottom line is this: I was an innocent bystander. I was not responsible for the spill. I did not choose to breath that foul air. I did not choose to lose a summer to the home of vacuum trucks, fan boats, and helicopters and strangers on my river bank, not to be able to utilize our pool in our backyard for lack of privacy. I did not choose to close my business, and I certainly did not choose to watch the geese struggle while covered in oil. Enbridge made that decision for me.

May your community service efforts and gifts benefit those who were impacted or at least the greater communities impacted rather than the individuals who made you feel good. I sincerely hope this spill will ensure that you will be more responsible with the maintenance of all of your pipelines, even if it means replacing them all. I pray they will remain closed until that can be determined how safely to restart them.

Whether or not Enbridge Energy was negligent in its actions on Sunday, July 25th, is not for me to say. I look to those in the know to help us with that. How Enbridge Energy responded to the victims of this crisis was determined by Enbridge Energy. I pray that the legacy you leave behind in Michigan when you go back to Alberta is one of good will.

Thank you.

Mr. OBERSTAR. Thank you for your very heartfelt statement and your very personal experiences and those of your family.

I sympathize very much with you on chemotherapy. I lost my wife to breast cancer for eight and a half years, and I know the struggles that you go through and the challenges of chemotherapy. Breathing benzene is not one of the recommended treatments.



Ms. Connolly.

Ms. CONNOLLY. Thank you.

Thank you, Mr. Chairman and Members, for this opportunity. I come to you today as a concerned parent and on behalf of the children of a day care center that's located just 6/10ths of a mile from Talmadge Creek in the Kalamazoo River.

On July 26th, at 7:30 a.m., my husband and I dropped off our children at day care. Our home is about 2, 2-1/2 miles north of Talmadge Creek. Going just two blocks south from our home I could smell a strong odor in the air. When we arrived at the center, the odor was even stronger. It was hard to breath, and that's why I'm before you today.

I would like to start with health symptoms, my own personal experiences. The first night of this spill that evening my son vomited.

And the week following my daughter had a rash, which pretty much all the children at the day care center that have had rashes their explanation is that it's just eczema, that they don't relate it to the spill. My husband and I as we've gone to the day care we've experienced migraines, eye irritation, sore throat, nausea, and cough. At our home on Saturday, July 31st, we had our dog out in the yard. When he came in that evening, he had continuous vomiting and diarrhea. There are also nights at our home that we cannot run our air or open our windows due to the smell. So you can just imagine the strength of the odor at a day care that's even closer to where our home is located.

The first week of the spill an oil-covered goose landed on the property at the center. Of other children at the center there have been reported cases of vomiting, upset stomach, shortness of breath, lethargy, headaches, rash, irritation with the eyes, sore throat, and cough.

Shortly after this spill, we had a parent meeting with the EPA and other representatives. There were some statements that were made was no benzene or VOCs have been detected at the center. Toxicologists stated that there was positive benzene readings at the school. We were told, oh, that's just a misread, that apparently the machines or one of the machines was not calibrated before coming to the center and all it was doing was reading the data from the last location where it took the reading. They also stated that certain VOCs identified were just cleaning chemicals used to sanitize the machines or were chemicals used by the center.

I had a personal conversation with a toxicologist from CTEH. A few of those comments were where VOCs or benzene have been detected you would have to be exposed to those for high levels for almost a year. There was no comment or statement in reference to short-term exposure related to children.

I was also told that the center would just have to get its own toxicologist to do tests because they were just to the point where they just don't want to deal with it anymore. I explained that the center could not afford its own toxicologist. That person chuckled and said, oh, I know; I know how much Enbridge is paying me every day.

I was told that if I or anyone from the center would be coming to D.C. To testify, this toxicologist said to me, well, what do you have to say? You're not a toxicologist. You have no experience or

expertise in this. There is nothing you can validate. Why would they even bother having you come?

Well, my response is, I know I'm not a toxicologist, but I'm a parent, and I see the children and the staff of this center who have been affected by this spill.

I've heard from someone else who has also indicated that the Calhoun County Health Department, one person in that health department stated, there's no reason for anyone to come and testify from the day care because their claims are not legitimate.

As of today, four parents have withdrawn six children due to their concern of their short-term health effects of their children, concern of the smell, air quality, and potential long-term effects. An employee who has been with the center since it opened, helped them build it from the ground up, she's left the center because she has been sick since the day of the spill.

EPA and CTEH stated that tests were taken as of July 28th, when in fact the first test at the center was not performed until August 1, one week after the spill.

And on that time, I'll just add a quick note. The benzene came up at 4.5, one week after. I know the cut-off is six, and they make a big deal about how the numbers are cut off. But one week later, 4.5, children have been smelling this.

EPA, CTEH and the Department of Health had stated to us that no benzene or VOC detections were noted. Again, I'm not a toxicologist, but I've been going through the paperwork. There have been detections of both. While they've been at lower levels, I don't understand how you can refer to accepted levels for an adult as that for a child or an infant who is unquestionably at a greater risk of harm from exposure to contaminants in the air.

Just before coming here, we had received a letter from the Department of Community Health, and a few of the comments within that letter stated that chemicals monitored could come from other sources than the spill. The response would be then why were the children and staff sick just after the spill? They had none of these problems before.

They then implicated that the staff who were stating symptoms, they stated that they were influenced by their own discussions, overstated reporting, publicity, and potential legal issues. To me, that is absurd, and it's just insulting.

When the people were there questioning the staff they made no calls to any parent to speak to them about what their children were going through. They only spoke to staff, and that was it. It ended. They also indicate that they cannot determine the days following the spill how the air has affected short-term effects.

So, in conclusion, it's been almost 7 weeks since the spill; and the following questions remain: Should the day care center have had more attention brought to it and should it have been closed or evacuated during at least the first few weeks? I question what are the known short- and long-term risks of infants and children exposed to low levels of these chemicals? Who will be held accountable if our children develop leukemia or other permanent health problems?

The argument made by Enbridge is they say you cannot prove that the spill may be the cause. Well, my response as a parent is you can't prove that it's not.

The Department of Transportation has been aware of Enbridge's violations for at least 8 years. Shouldn't this tragedy also be directed to the Department of Transportation for them allowing them to continue their operation of the pipeline? I also hope that there will be long-term health studies to those affected by the spill.

I would like to thank you for your time, and on behalf of my family and everyone at the child care center I hope our questions can be answered.

Thank you.

Mr. OBERSTAR. Thank you very much for that also very heartfelt testimony.

On the issue of levels of benzene, you make a very good point, that there are significant differences between a standard for adults and a standard for children whose systems are not fully developed and have not evolved the capability to cope with those particulates and volatiles in the air that an adult system can. Nonetheless, the EPA has established a level of 15 parts per billion of benzene in the atmosphere as the level that was present in various places in the region of the spill. Their standard is 6 parts per billion. But that's a standard that, as I understand, is set for adults. There is a very significant difference between what adults can tolerate and what children can tolerate. And if your dog was sick, dogs have the ability to—their sense of smell is 400 times that of humans, so that dog was the precursor to human exposure.

Ms. BarlundSmith.

Ms. BARLONDSMITH. Mr. Chairman, Members of the Committee, thank you for the opportunity to speak to you regarding the Enbridge oil spill and its devastating effects on me and my neighbors.

My name is Michelle BarlundSmith. I reside at Baker Mobile Home Estates in Battle Creek, Michigan. It's a community of about 70 homes, mobile homes. We are approximately six miles down river or 13.5 by canoe.

The park we live in is a former campground turned into a mobile home park. The park is surrounded on three sides by the river. I've lived there for 3 years and am 200 feet from the river.

I first noticed the smell of the oil Sunday evening when my husband and I returned home. The smell was so strong I thought we had a gas leak and walked around my home and two other homes looking for a leak. We determined it was not natural gas and could not figure out where it was coming from.

On Monday, I took my 83-year-old mother to the dentist. When we returned home, I was informed by a neighbor of the spill. It was late.

In the evening, 2 hours later, we see ambulances, fire trucks, and police outside our park. They say two men have fallen into the river, and one is missing. Several of our neighbors and us grab flashlights, stand on the bridge and shine them into the water. We are looking for the missing person.

At 1:00 a.m., it was discovered that the missing man had made his way out of the river and made it to a neighbor's home. My husband and I returned home with headaches.

The next day I went down to the river to take my first photos of the devastation. It shocked me. And I then went to Bridge Park. Bridge Park is where my husband and I take our two dogs to walk a couple of times a week and we do quite a bit of photography there. We were escorted out of the park by the police very politely, and they told us we could take photos from the bridge above.

On the way home, my husband said to me, we're in trouble. We need to get evacuated out of the park. We take more photos. I upload to iReport on CNN. He's a news junkie. So I did.

I received a call from one of their reporters asking, what oil spill?

I said, we have a million gallon oil spill in our river running past our home.

Well, we're not aware of it, why?

And I told them straight out, do you believe an oil company wants you to know that they've spilled a million gallons into a river? They just started testing the air in the park, everything is normal, we should be fine, but I see my neighbors and I getting more ill day by day.

Today, my husband and I stayed home. We went out in the afternoon to pick up some groceries. On the way back, I stop at the mill pond down river. Yep, there's booms and guys working.

When we return home, I watch the neighbors return. And after going to the bridge to take my evening photo, I run into the guy who had surgery 2 days ago. I ask how he is. He said he's more worried about his wife. She's been transferred to Bronson Hospital from Battle Creek. Then two of the neighbors come up and tell me that their children, a 3-and 8-year old, have been to Battle Creek Hospital and have been diagnosed with hydrocarbon poisoning.

The health department comes in. We start going to meetings put on by several of the different organizations. August 5th, Enbridge employees had finally started coming to the park to talk about residents. I meet with one gentleman, Daryl. He apologizes and asks what we want.

We told him we want a hotel in another city that will allow us to take our dogs, a gas card for coming back and checking on our home.

No problem. You book the hotel. I'll put it on a corporate credit card.

He asked what we wanted long-term. We told him we want out of the park because we don't want to be there for 3 years of clean-up.

We call him with the hotel confirmation number and info. He calls back and tells us, sorry, the credit card is not working. I'll bring you a check.

He comes back at 3:30, gives us a check, but says, sorry, it's not going to be able to be cashed today. You can do it tomorrow.

The next day, we wait until 12 noon to try and cash it. Nope, it doesn't clear. Go back in 2 hours, it doesn't clear. I asked the clerk if she's had similar problems. Yes.

I then tell one of the ladies who has been trying to help us get residents out of the hotel. She calls me and tells me Enbridge will

be in the park later. Sure enough, in pulls Enbridge and the police across the area. My husband starts taking photos. They tell me to go downtown and cash the check.

I go in. I attempt to cash the check. A gentleman appears and asks me to step into the hallway. He apologizes and says, sorry, we can't cash it. Can we wait another day?

I glance at the clock. The hotel is holding the reservation until 6:00 p.m. It's 5:45. He tells me it will be inputted into the system, and we should be able to cash it after 10:00 a.m. We leave. The man we spoke to was the vice president of finance for Enbridge, Mike Maki.

I call the hotel. We're on a first-name basis. They rebook me for the hotel tomorrow. I tell her, what's another day of fumes, headaches, nausea, et cetera? I'm too exhausted to drive anyways.

We end up being put into a hotel in Jackson, Michigan, which is 45 minutes away, for approximately a week. We're then asked to leave for 4 days because of the hotel's fault. We return home. We get sick.

We're re-evacuated for another week, and then we're returned home, and we've been there since, 3 weeks. We're getting sicker by the day.

Those were my previous entries into the CNN iReports. But I come from the airline industry. We are regulated by the DOT, the FAA, et cetera. So here are some of the questions presented by my fellow residents:

Why are we allowing the ones who caused the disaster to decide medical emergency procedures? Why are they controlling the State, the county, the township, and medical procedures? Why are they controlling agencies like DNR, reporting procedures, 800 numbers? Why are they controlling the cleanup? Why is there no standard procedure on medical testing for residents when there is one for their employees? Why no standards on evacuations?

Require these companies to set up escrow accounts for disasters and contribute yearly or quarterly. Kellogg's and Post Cereal had to be shut down for hours. Businesses and farmers need to be advised and reimbursed by these companies. They've been told they are behind us homeowners in restitution. Please require quicker reporting and not just on oil, on other chemicals.

Why was there no declaration of Federal disaster? A spill of major magnitude should automatically constitute a Federal disaster area. We need stiffer regulations, enforcement of the regulations, higher fines for failure to follow regulations.

This company has known about these faults of this pipeline and done nothing for a minimum of 3 years. Freeze their assets, shut down the pipeline until it's brought up to date. If this pipeline had broken in Detroit, you would be cleaning up two of the Great Lakes, affecting millions, not just a 30-mile stretch of river.

This is not a Democrat versus Republic issue. This is an issue of protecting your constituents' lives, health, and way of life. Ours has been destroyed. Our health hangs in the balance. And if the scientists are correct and this will affect our DNA and future generations of DNA, you are protecting the future generations of Americans.

You need to do more research on tar sands and transportation of this along with the effects on the environment, animals, and humans that should be funded by the oil companies or petroleum companies; and they need to be conducted by a third-party research team.

In conclusion, you are elected representatives and are placed here to make changes, write new laws, and protect this country. We are asking you to do that.

Oil companies must not be allowed to dictate their own rules and regulations. As they have clearly shown, they have no intention of protecting the environment, animals, or human lives in their pursuit of the almighty dollar. Therefore, you as our representatives must step in and regulate and enforce those regulations to protect us, the humans.

Thank you for the opportunity to speak to you.

Mr. OBERSTAR. Thank you for, again, your very heartfelt testimony, for your very specific recommendations.

I assure you that the Committee is pursuing these matters and has done for more than 25 years. We have not had as much success in moving stronger regulations through the Congress and through the executive branch as we would like, or as I would like, but we're at a place where I think we can do much better than we have done in years past.

We've passed a very strong oil spill response legislation through this Committee through the House. It's languishing over in the Senate because of procedural holds. But that legislation is patterned for raising the standards of accountability and oversight and action that on-land pipeline companies must undertake. So I assure you we are proceeding in this Committee on those issues.

Mr. Lee.

Mr. LEE. Thank you, Mr. Chairman, Congressman Mark Schauer. Thank you for your dedication. We have talked about this oil spill in length, and I want to thank you for your dedication. It is our area, it is our community, and I'm right there. I'm not going away.

I also want to thank Jason Leopold from truth-out.org. I have had numerous conversations with this gentleman, and he has the utmost care and respect in our neighborhood, even though he's not from there, and has given me the power to move on and be here today.

My story, even though in my written testimony started much earlier, early on in this oil spill, it's going to start with my wife being in the hospital. I say wife now, because as of September 1st, when we were in the hospital, we exchanged vows. As of October—or August 10th, my wife went to the doctors. The symptoms were showing neurological—Bell's Palsy, headaches, nauseous, lethargic.

I am just going to give you the main points and not go into much detail of their readings as far as what points per million, what points per billion. I'm going to talk about she's sick. That is why I'm here. It is my number one goal, to make sure my wife gets the treatment and the respect from a company that spilled over 1 million gallons of oil in our creek.

I don't live within 200 feet of this river. I don't live in the Red Zone. I live 708 feet in Squaw Creek neighborhood and 250 yards,

according to my range finder that I hunt with in a bean field behind our house.

My wife was crying in bed the day after we got married, September 2nd. She didn't have any answers from the doctors. She didn't have any answers from her husband, married the night before, because we don't know if I can make decisions for her legally if something was to happen. I was sitting there in a helpless rage watching my wife scared out of her wits, scared of her life, scared of her future, scared about her kids, what they're going to go through.

I remember the meeting August 26th with Mark Schauer—Congressman Mark Schauer, excuse me—and saw the desire and the fight that he had against this company. I immediately grabbed our laptop and I wrote to Mr. Schauer, explaining to him the situation that we are going through.

On August 10th, that first appointment that my wife had, we called Enbridge, their 800 number, and said—my wife said, I am going to get a CAT scan by recommendation from my doctor because I think it's from this oil spill. They said, thank you, Mrs. Walters. We will go ahead and put that in our files. They asked for no claim, and they said nothing of the sort that they were going to help.

Now I'm going to fast forward to—or, actually, I'm not going to fast forward. I'm going to go back to that August 26th meeting that Mark Schauer held and the information that we received.

I was enraged by the numbers: 80 oil spills in 8 years. I am finance manager at a car dealership. I do numbers. That's 10 a year. That's almost one a month.

And in my written testimony I wrote before the Chicago incident that 16 percent of defects fixed is going to result, in my opinion, in another state of emergency oil spill. I'm sorry. Two hundred feet set by our small little local agency Calhoun County department, they should have no business setting this in. We need higher government agencies stepping in and making a difference in an oil spill that is causing people and animals to get sick.

I'm asking you with respect, Mr. Chairman and the Committee, please, make a difference. Make this company accountable for what they are doing. Because they don't care about \$2.4 million as far as a fine. I didn't know—I knew of, and I talked about in my testimony, the \$2.4 million fine in the State of Minnesota. The fact that—and I did not know this—that it was a mother and her young daughter that opened up the door to find out what was going on, that those were the two deaths, I almost came to tears. It's appalling that it was \$2.4 million. I wrote in it should have been \$240 million, and I don't think that's enough.

They need to be held liable, zero tolerance. Do not let this oil line start, either 6A, 6B, or any other one they have that they have defects on. Zero tolerance, please, and make them fix the defects and make sure that they are being inspected. Because you're looking at a small window of all the community that is in Marshall, Battle Creek, Ceresco, and on down line Kalamazoo. Make a difference. Make them accountable.

I'm not going away. My voice is not going away. And I'm here to tell you I want changes. And I respect you guys. You are our

leaders. You guys are the ones that make the decisions. Please help the smaller people be safe. Because I no longer feel safe in my own neighborhood.

And in closing—I know I'm way over, but I needed to get this out. In light of our hearing, Enbridge did come, and my wife did not have insurance, and they were asking for big deposits, hotel rooms, to get her treatment that she's going to need neurologically that cannot be done in Marshall. As of Monday, I don't know if it's coincidentally 2 days before our hearing, but Enbridge has agreed to possibly assist and help in either getting her a referral or some of the damages. I thank them for that, because I needed the money to even show up here today because I was out of pocket about \$1,800 in the past month.

My wife is a dean's list on-line student going for hospital administration and ethics, and that's what it's about, a company and ethics. And I love you, honey.

Upon my flight home, she is meeting me in Detroit and we are going to the Cleveland Clinic. I did get her added on to my health insurance as of Monday, and they will not do pre-existing.

So I do thank Enbridge for trying to assist in that situation. But you are a month late. And, Mr. Daniel, you were there at that meeting August 26th when you first found out about my wife. And I didn't get a phone call. I did not get a letter. I didn't get anything. Sir, I'm not going away.

Thank you.

Mr. OBERSTAR. Thank you very much for, again, a very compelling and deeply felt testimony.

Our next witnesses are Darla Thorpe and Denise Green. You're now recognized.

Ms. THORPE. Good morning. I would like to say thank you, Mr. Chairman, and Committee, Mark Schauer, for giving us the opportunity to be here.

I would like to start by reading a clip out of an interview a year ago that was done on the village of Ceresco from the Battle Creek Inquirer. I'm just going to read the ending.

Heather Brown Rocco couldn't let me leave until we saw her favorite view in Ceresco. Paying no attention to the no trespassing signs, she undid the latch on a gate into the dam's old power station. On a freshly cut lawn next to the old brick building, the Kalamazoo River stretched out before us, a tranquil, expansive water winding from Marshall. A pair of swans swam in the distance far out past the fiery leaves and crumbling railroad bridge. We walked out onto the dam and peered over the side. The brownish-green water, which had momentarily been held captive, rushed out with a spray and continued down its journey, much as it had done for more than a century.

Questions we now ask: Where are the swans now and will they ever be back?

I am one of two trustees, Denise is the other, of our parents' trust; and it is my responsibility to get the estate settled. This alone has been a difficult process, as some of you probably might know.

The stress of the sale of our parents' home now as the oil spill has happened has risen to a much higher level. Enbridge last week



called me and said that they had reviewed our claim after I received a phone message 2 days prior saying that we were outside the 200 feet zone. But they said that they would purchase our parents' home because of settling the estate. And that we sincerely appreciate.

I understand since I've left to come here to Washington yesterday I've received three phone calls from Enbridge, including one from their lawyer. Our question—a new question has arisen. What are they going to purchase it for? We want only what it would have sold for if the spill had not happened at all. Because this is our childhood home and my family members still live there, we would like to know how Enbridge is going to, quote, unquote, make this right with the people, the people who live still in the Ceresco community?

Thank you.

Ms. GREEN. Good afternoon and thank you, Mr. Chairman and Committee Members.

I am the sixth generation in my family that has lived in Ceresco. I am also raising my daughters, which are the seventh generation. I find it disheartening to now have my children being raised with the possible water contamination, vapor intrusion, possible cancer and, property devaluation from the oil spill. Until now, my family never had to worry about any of these things. How safe are we?

We were told if we wanted to get away from the benzene-filled air that we could go to the McKinley Plaza Hotel. Some people did. When I asked my husband about going there, he replied, I don't know what they are thinking. We wouldn't be any safer there than we are at our home. The Kalamazoo River runs right by the hotel. How much thought did Enbridge take picking this hotel?

We were told if we felt the need for medical attention to go, Enbridge would take care of it. I took my two daughters and myself. They said our symptoms were from the ingestion of the benzene and there really isn't anything they could do for that. They cannot take the benzene out of our bodies.

We have been told all along that the air is at a safe level. We question why our air purifier reads bad air three or more times a day. The only way—my 12-year old asks me frequently, am I going to get cancer?

Mr. OBERSTAR. Just take your time and be composed.

Ms. GREEN. The only way I can answer that is, I don't know. The only thing we can do is pray that everything will be OK.

Again, I want to thank you for your time.

Mr. OBERSTAR. It's very difficult to relate these experiences. It's one thing to say it to yourselves and write it down. It's quite something else to express it in public. I can see all of the witnesses are overcome by their tragic experiences.

And now, Mr. Buchsbaum, you're next.

Mr. BUCHSBAUM. Mr. Chairman, Members of the Committee, thank you. It's good to see you again. I wish it was under different circumstances. We're just passing the tissues back and forth down here.

Thank you for the opportunity to testify before you today. I'm Andy Buchsbaum, Director of the Great Lakes Office of the National Wildlife Federation located in Ann Arbor, Michigan. Accom-

panying me is Beth Wallace, who is our Great Lakes Oil Spill Response Coordinator, a position we didn't think we would need a couple months ago. Beth's family lives in Marshall, Michigan.

Ms. WALLACE. Battle Creek.

Mr. BUCHSBAUM. Battle Creek.

First, let me say that our hearts go out to the people in Marshall and the people who live alongside the Kalamazoo River, people like those testifying here today who have lost their river and in some cases their homes and their health and their businesses.

Our office is about 70 miles from Marshall, so we were able to get down there as soon as we heard about the oil spill; and within about 48 hours we had staff down there that were trying to help. What we saw were proud people in one of the communities trying to cope with the devastation of the Enbridge oil spill. You've heard it: Oil in their backyards, fumes in their lungs, debris, booms, trucks in their neighborhoods.

Our written testimony describes in detail what we saw there, and you've heard it firsthand here, so I'm not going to repeat it right now. We're going to restrict our testimony to the impacts this bill has had on wildlife and recommendations for what we need to do to address those impacts to make sure this kind of thing doesn't happen again.

Beth is going to handle the wildlife impacts, and then I'll return to talk about the recommendations. Beth.

Ms. WALLACE. Mr. Chairman, Members of the Committee, thanks for the opportunity to testify today.

Like most of the people sitting next to me, I am from Calhoun County. I was born and raised in Athens, Michigan, which is 10 minutes from Battle Creek. My parents and siblings still reside there, along with my extended family and friends. This area is my home. Sorry.

When I heard about the spill I was on my way to work at the National Wildlife Federation. When NPR reported the latest information, I couldn't believe my ears. I immediately called my mother who works downtown Battle Creek for her descriptions of what had happened that made me sick. In the afternoon a couple of my co-workers and myself made the trip to Marshall and Battle Creek, trying to get a grasp on why it happened. As you will read in the testimony, it's completely devastating; and that devastation continues to this day.

Three days ago, I was searching for information regarding the oil spill in Illinois when I came across the heading from the Globe and Mail: Enbridge Suffers Another Pipeline Breach. Enbridge suffers. I would like everyone to remember that Enbridge is not suffering. These residents are suffering, and the wildlife is suffering.

As Andy mentioned, I would like to take this opportunity to provide my voice for wildlife. Because of delays in reporting, the continued lack of organization, little transparency, and letting Enbridge call the shots, we do not know the full magnitude this disaster has had on wildlife and our river. We do know the number of deaths of fish, birds, and other animals that Enbridge has reported to agencies is much lower than is occurring.

Ms. WALLACE. In our first visit to the Marshall site, we personally came across a very distressed oiled muskrat, along with many

oiled geese. We attempted calling the number located on the newly posted signs which went to a woman who gave us a new number. That number went straight to voicemail. We now know that the animals in that instance were not rescued as the animal rescue facility was not up and running until weeks later. So they were left, died and suffering. Because of rain and heavy flooding in the days prior to the spill, the oil has completely coated the banks and the wetlands along the river where most of the wildlife resides.

The Unified Command has said publicly in their cleanup plan that they are considering leaving this tarry oil in sensitive shorelines and wetlands because of the difficulties in cleaning it up. This is not good enough. The shorelines and wetlands are the lifelines for wildlife. Many of the species residing in the region consume food along the shorelines and those wetlands. They are at risk of being oiled and being exposed to toxic effects of oil for as long as it remains.

Enbridge needs to be held accountable for every drop of oil that is spilled and all of the damage they have caused and will continue to cause until this oil is completely removed.

Mr. BUCHSBAUM. Thanks, Beth. Just a few words about recommendations. The bottom line is that most of these pipelines, as you have heard, are getting old, getting to the point where they need to be better maintained and possibly replaced. As long as we rely on them to transport hazardous liquids like this heavy crude, there are going to be increasing numbers that spill.

You have heard that in the last week there have been two additional Enbridge spills. That is actually about average for Enbridge. In 2008 alone, Enbridge nationally had a total of 93 spills. That averages about two a week.

The only real solution is for our Nation to wean itself from addiction to dirty fuels. We need to stop subsidizing dirty fuels like the oil that is flowing through those pipes and we need to embrace, promote, and fund clean energy sources. But until that happens, we need to take action on pipelines.

Our written testimony provides detailed recommendations for those actions. Just a few highlights here. First, we need to require much more effective and frequent monitoring, maintenance, and reporting on existing pipelines. Our regulations today require maintenance, inline maintenance, inline monitoring of these pipelines only once every 5 years and that is only for the most used pipelines, only for certain areas. We recommend inline monitoring at least once a year for all pipelines. And it sounds expensive, but look at the alternative with these crumbling and aging pipelines. If we don't do that, the cost of the cleanups are going to far exceed that. And, of course, the damage to the community and the damage to the people, you can't put a price on that.

Second, we need to require companies to fix the weaknesses they find in the pipelines. You said it yourselves, we heard it today that Enbridge did monitor Pipeline 6B. It found weaknesses, decided not to repair them because they—it said that they didn't meet the Federal threshold. Well, the Federal thresholds need to be a lot lower and Enbridge needs to go and the other pipeline companies need to go above and beyond.

Third, if the spill occurs, there is a government—there is a Unified Command unit. That command unit needs to maintain control of the cleanup, the wildlife cleanup, and recovery. In this case, as all too often, that control was ceded, it was delegated to Enbridge. Enbridge wound up calling the shots it never should have called. Enbridge certainly has to pay for all of the damage it does and pay for all the response actions, but it should not be the one delegated all the responsibility to do all the work or much of the work, which it has been in this situation.

Fourth, Congress should pass the CLEAN Act, H.R. 6008, Congressman Schauer's bill. That is going to be very important for deterring future actions.

And finally—and you probably haven't heard this one yet, but I think it is very important. We need a new kind of trust fund to help the Kalamazoo River and the wildlife in the Kalamazoo River and natural resources damage after the normal oil trust pipeline fund has been paid out. One thing we know is it is going to take years if not decades for the harm that is coming from this to be fully played out, and that is going to be far after the trust funds that are currently existent in law, far after those moneys are spent.

There is a model for this in Michigan. It is called the Great Lakes Fishery Trust. It was financed by Consumers Energy to pay for damages to fish because of the dam. It is now 20 years old and it has been instrumental in helping fish in Lake Michigan recover from the damages from that dam. That is a good model here, and I would be happy to provide details later if you would like.

Again, thank you for the opportunity to testify about this, and we would be happy to answer questions.

Mr. OBERSTAR. Thank you very much for your testimony as well. To all of the members of the panel, my first observation is while you have been speaking to Members of the Committee, you have also been speaking to the Deputy Secretary of Transportation sitting right behind you, to the Chair of the National Transportation Safety Board, who have been paying very careful attention and, I observe, making notes on the testimony given by all of you at the witness table.

The second point I would like to make is that Enbridge in this situation is subject to the provisions of the Oil Spill Liability Act of 1990, OPA '90 as it is known. I was on the Merchant Marine and Fisheries Committee at the time when we wrote that legislation to deal with oil spills principally from vessels, and we have updated that act. My first term in Congress was right after the Torrey Canyon disaster in the English Channel, and we wrote legislation then to require over a period of time double hull vessels. And then came the Amoco Cadiz, a similar oil spill from a vessel. And then came the Exxon Valdez, in the aftermath of which we enacted OPA '90.

The provisions of OPA '90 are very broad and very compelling. First, it establishes an Oil Spill Liability Trust Fund, from which funds, some \$18 million, have been drawn down by the U.S. Environmental Protection Agency to cover costs from the spill, and the Federal Government will then pursue Enbridge to compensate the fund for all of the drawdowns from the liability trust fund.

Second, the provisions in OPA '90 where there is a spill for which the—and the operative language is facility, in this case the facili-

ties and on-land pipeline that spilled into a navigable water of the United States. And that then makes Enbridge liable for natural resource damage restoration, as well as damage to persons and property, with no limit on liability, no limit on liability.

I want you to keep that in mind in the context of this hearing. I will now yield to Mr. Schauer for 5 minutes.

Mr. SCHAUER. Thank you, Mr. Chairman. First, thank you all for testifying. I know it was very difficult for you to share your stories. I want everyone here to know that I didn't know any of you until you came to a public meeting a couple of weeks ago, until you began contacting my office to tell your story and ask for help. And I appreciate you coming.

I wonder if we could put up a slide or two. First, I will start out with a quick question. My time is limited, so you don't all have to answer. If you have something you want to say about a particular question. First, how far do you live from the river or how far do your children go to daycare and what is that? What does that distance—what has that meant with regard to how you have been treated by Enbridge Energy Company? Some of you have mentioned this 200 feet. If you could quickly respond.

Ms. Connolly.

Ms. CONNOLLY. Our child's daycare is right where Talmadge Creek and the Kalamazoo River meet. From there, our daycare is about six-tenths of a mile, which is much further than that 200 feet.

Mr. SCHAUER. About 3,000 feet.

Ms. CONNOLLY. So pretty much we have been told none of this is legitimate. The claims are just—they are just totally ignoring it. We have been told these are not legitimate claims.

Mr. SCHAUER. So a legitimate claim is one within 200 feet of the river?

Ms. CONNOLLY. Right. But we are talking about children, infants. I understand that they just questioned staff. Speak to the parents, talk to the parents who have had children having health reactions to this. So don't dismiss us just because we are out of the yellow zone.

Mr. SCHAUER. I heard the CEO of BP use that term, they will pay all legitimate claims. Patrick Daniel, who we will hear from today, at that public meeting said we will pay all legitimate claims. So 200 feet is something we will explore here.

Could we put up a slide picture of something that may look familiar to you. I don't know if you can see that. Do you know what that is? Does it look familiar? It is an air purifier. I think they were purchased from Wal-Mart I was told by the company to distribute. Did any of you receive one of these or offered one of these?

OK. Some of you. Well, I hate to be the bearer of bad news, they actually don't do anything for hydrocarbon inhalation. It might help with dust mites and animal dander, but that is about it. Were you led to believe that this would be helpful to you?

Go ahead.

Ms. BARLONDSMITH. I received one and many of the neighbors in the neighborhood received the magical air purifier. I very quickly realized that it was not going to do anything except assist with the

dust and air mites. Many of my neighbors, however, believed that this would keep them from becoming ill and they signed waivers.

Mr. SCHAUER. Has it done that?

Ms. BARLONDSMITH. No. I have neighbors that have been hospitalized three and four times. I have had neighbors that have left that are living with relatives because they can't return.

Mr. SCHAUER. But they were given an air purifier. Ms. Connolly, what about the child care center?

Ms. CONNOLLY. I believe it was out of the daycare's cost, which they have not been reimbursed. But they were advised by the Calhoun County Health Department and I believe also CTEH, they said you can put these humidifiers or whatever they are called in each classroom and that would help with the smells that were coming inside the center. They also had indicated that they put some fancy air filter on the HVAC unit because the unit at the daycare is up on top of the roof and it draws the air. It faces right where this spilled and it draws the air from that location. So the air that they are pulling into the school, it is pulling it right from the spill. So they have put in some fancy filter saying it is from NASA and it will break down any chemicals that are coming into the school and that is how we are going to fix it. We will put purifiers in the rooms and we will put this fancy filter in your HVAC unit.

Mr. SCHAUER. I want to go to the next slide. It is something called a full—it is a release, full and final settlement—I don't know if this is one we are going to put up there. No, that is not the right one. It is the liability waiver that the company is using and this one is redacted. But what it says, it is to a local resident, it was dated August 17th. Payment amount \$40 plus air purifier. No. That is not the right one either. But was anyone—did anyone that you know sign one of these release forms signing away all of your legal rights in exchange for an air purifier?

Ms. BARLONDSMITH. I did a small survey. I did not survey every single person in the park. But out of about 30 homes, I found 20 that have signed the waivers giving full legal responsibility away from Enbridge for air purifiers and air conditioners.

Mr. SCHAUER. Anyone else know anyone who was presented this form and signed this liability form?

Ms. BARLONDSMITH. I did not sign that liability form. I signed the medical liability form.

Mr. SCHAUER. I wonder if we could put that medical liability form up. We just had it up a minute ago. I guess not.

Yes?

Ms. THORPE. When we first went down to the—we called the 800 number and they told us to go down to the claims office, or whatever, and that was when they only had one in Battle Creek at the time. They were getting one in Marshall. But we were told we had to go to Battle Creek. So we went down there and we told the guy who took our information, made out the claim, and he flipped over the paper and he wanted me to sign that form and I said that I am not signing, I refuse to sign that. Well, why not? And I said because I am not going to. I refused to. That is something that—and just left it at that. I never did hear from them, from that portion from the claim.

Mr. SCHAUER. Chairman Oberstar and I have asked the Justice Department to look into the company's use of this form. The form on the screen now is a form that if signed by someone who is sick that is screened by the company and determined that they are in need of medical attention caused by this spill, they are asked to sign this form. I am going to ask any of you if you have done that or know anyone—I don't know if you know, but that gives the company access to all of your medical record, all past medical records.

Ms. BarlondSmith.

Ms. BARLONDSMITH. I wanted to go see the doctor. I do not have health insurance. My husband and I did go to the ER in Jackson when we were evacuated there and diagnosed with chemical inhalation. This form is what was required and they would not send you to a doctor until you signed it, period. It was not a suggestion. It was not a side request.

Mr. SCHAUER. So you signed that form?

Ms. BARLONDSMITH. I did sign that form.

Mr. SCHAUER. Are you comfortable with this company having access to all of your medical records, past medical records?

Ms. BARLONDSMITH. To be very frank with you, one of the side effects that you have with this is you do not think clearly. People are dizzy. Your brain cells don't work. Some of us have started stuttering, shaking and stuff like that. I read over it twice very quickly. I gave it to my husband. He glanced at it because he was going to go to the doctor also.

Mr. SCHAUER. He is not an attorney, I take it, or a health care provider?

Ms. BARLONDSMITH. Unfortunately, he is not an attorney and I wish he was. But I signed it because I was told if you wanted to see the doctor, you must sign this. Later, after I did get an attorney because they don't want to deal with us, I found out how evasive this form is. So they can go back and check 20, 30, 40 years.

Mr. SCHAUER. Well, fortunately, the Secretary of Health and Human Services, who Chairman Oberstar and I wrote to, has determined it is a violation of something called HIPAA and it is a violation of your medical privacy.

A final comment and then a quick question. First to the National Wildlife Federation, thank you. I went to the animal rehabilitation center and saw, as I described in my opening statement, animals, geese, fully coated, black. There is a photo within our packets that Members of the Committee and the public have. I have never seen anything like it. Again, it is what we were seeing on television from the Gulf.

Final question. Ms. BarlondSmith, is there still oil where you live?

Ms. BARLONDSMITH. Yes, sir. There is—I live in Battle Creek where two bridges adjoin, crossing the Kalamazoo. Behind the mobile home park is a wetland area. The oil and the water was literally to the backdoors of some of the residents' homes. They came in, they attempted to clean it, or so they say. They took a lot of stuff away. You can still find oil, pure crude oil in spots. They have covered up some areas with sand. There has been areas that are still completely covered. You can see the leaves, the grass; it is not cleaned up and they claim that it is cleaned up. We are frustrated

because now they are saying that further back in one of the wetland areas or marsh areas that they are going to allow that to stand and it will just dissolve magically over the next three—

Mr. SCHAUER. Anyone else see oil near their property?

Ms. MILLER. Yeah. Again, we have our property—our business property is immediately above the dam. As I testified earlier, it was one of the major cleanup sites. We had a number of workers below, down at the river banks. Our trees are now covered with oil, maybe 6, 7 foot—6 foot high. I took pictures on Sunday. And the back of our pole barn is covered. I am assuming from that it was the garbage bags that they filled with all the brush. But if you go down to the river at the dam on the top, there is an alcove back there and you can call it muck, you can call it whatever. If it is not oil, I really don't know what it is. I didn't get close because I do have some health concerns. I didn't trust the Calhoun County Health Department's judgment that I am safe to be down there. So I took pictures from a distance.

At our home immediately below the dam, we had a tree fall into the river this spring. It is a large tree. And equally I went down there Saturday with my grandson in the rain and there is—in between the branches, down in there, there is all—they haven't done anything. We live there. We live there and I can tell you the only thing we have seen them do on our property at home was to take the big hoses and they washed it down. What appeared to be just river water running through those hoses, I don't know technically what it was. But we have not had workers where they have cleaned the banks like they have in other areas. So our property as far as I am concerned at home hasn't been touched.

Mr. SCHAUER. Just finally—sorry, Mr. Chairman—before the accident, did you all know that you lived so close to a Canadian pipeline that was pumping 8 million gallons of heavy crude oil through your neighborhood? Anyone?

Ms. CONNOLLY. I would say no and actually I am someone who comes from the East Coast. I have only lived in Michigan for 8 years. I am from a suburb of Philly. We left that area because we loved Marshall and its beauty and its nature and to have a better life to start a family. I think we would be safer if we were still in the suburb of Philly instead of living right in this town where my children are spending 10 hours a day in a daycare where they can still smell it. So it is just ironic we come to move somewhere and we had no clue. I don't even know if the city knew, if the first responders knew. I think that should be put in the legislation as well, is that any town that has a pipeline running through it, everyone needs to know. So—

Mr. SCHAUER. Thank you.

Mr. OBERSTAR. The gentleman's time has expired. The Chair now recognizes Mrs. Miller.

Mrs. MILLER OF MICHIGAN. Thank you, Mr. Chairman. I guess I would just make a comment first of all to Enbridge. You know, as we have watched what has happened with the Gulf spill, all of us have seen all of these ads on TV with folks who say, well, I live in the Gulf, born and raised here, this has interacted me personally and I am here to talk about what BP is doing to clean up, et cetera. And they show the face of a sort of average looking American with



their name—this is who they are and they are talking very heartfelt about what has happened in their area in the Gulf. And I was reading an article in one of the Detroit papers the other day about apparently Enbridge is doing a poll to determine who might be a good spokesperson for them and who people might like to see on TV. Apparently they are going to be doing some advertising as a public relations thing. And they mentioned would you like to hear from a former Democratic Governor, Jim Blanchard, a former Governor of Michigan, because he is on the board of directors of Enbridge, or who would you like to hear from.

My only suggestion to Enbridge is I don't know if any of you would be interested in doing such a thing, but if they want to hear from the people, if they want to hear somebody who has been impacted, that has no interest, financial interest or any other interest in their company other than being able to be an advocate for what Enbridge could do to mitigate damage that has been done, I would just suggest to Enbridge, very respectfully, they don't have to look much further than our first panel of testimony here today. It was very difficult for all of us to listen, particularly about the daycare. Every one of you was very difficult to listen to that kind of a thing.

So I would suggest that. And I would just also mention again, our job here is oversight. That is the Congress' job. Everybody has a role to play just as you are playing today. And our role is to listen to testimony and to—whether or not we develop legislation, change some of the legislation our Nation has in regards to pipeline safety, et cetera, as well as talking to the regulators, suggesting that they promulgate rules, regulations, all to assist us in safety with our pipelines. And as I mentioned to you just as part of my oversight, I had sent a letter to Cynthia Quarterman, again who is the Administrator of the Pipeline and Hazardous Material Safety Administration. This was on August 3rd. I am a Members of Congress and I am just saying I have not received any response at all. Now, I can understand they are not going to get it the next day, but we have received no response at all. They certainly have been aware that we are going to have this hearing. And I was again looking very forward to being able to question her today at the hearing. And I appreciate what the Chairman has clarified here. But that they—why she could not appear. But we do not have anybody from PHMSA here, and I know in the next panel I will have a chance to question a person from DOT. But does anyone, particularly the residents, have any comment when you learn that Cynthia Quarterman, who is the regulator, the Administrator, actually just before she came here, got this appointment to regulate pipeline safety, she was the attorney for Enbridge, representing Enbridge here? Just generally.

Ms. BARLONDSMITH. The fact is whether it is EPA, DOT, PHMSA, they need to be out of the equation. They can't be involved with—the fact that she used to be an Enbridge attorney, she had to recuse herself? It is outrageous because unfortunately it makes the rest of the staff—I am sure he is a very nice gentleman—how do we know he is not getting pressure from his boss. Yes, she has recused herself. But how do we know that he is going to be able to do his job when she is standing over him as a boss. It cannot be—they must be kept separate. It must be as clean as

possible that there is no possibility that a department, whether it is DOT, health department, whatever, is lying in bed with the company in question. There is ethics that need to be involved, And the ethics in this, to be very frank with you, are questionable. If you ask, you will find.

Ms. CONNOLLY. One question I have in reference to that as well is I believe the people from the Calhoun County Health Department along with CTEH that are doing the air quality testing, the control of all of this is Enbridge because I believe the director for the Calhoun County Health Department is on their payroll now for his overtime or he is getting reimbursed for all of his extra work. Whether or not that is true, I am not 100 percent certain, but I believe that is what we were told at the forum that night was that he is getting reimbursed by Enbridge. CTEH, who is monitoring the air, they have been contracted by Enbridge. So they are in control of the air monitoring. The EPA has now recused themselves because they claim that they can't post all of the air data. So now they gave that back to Enbridge. Enbridge is in control of posting all the air quality results and the water results, and I don't understand how if one government agency was supposed to be in charge, bit by bit it is going back to Enbridge. How can they be controlling their own data and their own testing? That is just—I just can't understand how they can be put in charge.

Mrs. MILLER OF MICHIGAN. Well, it does—some people say you might make an analogy, Jesse James guarding the train or something like that. But where does the buck stop? And if the buck should be stopping with PHMSA, with the Administrator, who was a former lawyer for Enbridge—I am not making any accusations. I am just pointing that out. It does strike—yes, Mr. Lee.

Mr. LEE. Yeah. I was really unaware of that situation that you just brought to light to me. So obviously that is a huge conflict of interest. As far as getting truth and something done to legislate this company as far as rules and regulation, as far as the smaller agencies local, Calhoun County Health Department, I don't feel that they should be in charge of some of the important decisions, especially, in my opinion, the health—unfortunately they are the health department, but I don't feel that I think an emergency of this magnitude, they are not set up. Actually, Mr. Rutherford actually contradicted himself in one of those meetings saying that—and I believe Mr. Schauer had asked him are you—do you have everything you need, are you OK, fully staffed and he said yes. But another comment was made, I believe it was either that meeting or the meeting before, that he is overwhelmed, overworked, his 60—small little 60 employees just can't keep up. So there is a contradiction there and why doesn't he want another agency to come in there to help him is drawing speculation from me, raising eyebrows saying why don't they want other agencies to come in to help him, is there something being hidden. And that as a family from the community, if people are hiding truth about whether they are actually cleaning up, covering up this oil spill we need other agencies.

There is checks and balances. We have got them in government, and that is what we need as far as when there is an emergency, we need the checks and balances.

Thank you.

Mrs. MILLER OF MICHIGAN. Thank you. I know my time has expired. I would just again thank all of the Michiganians who have come here today to testify and others as well. Sometimes at our hearings we have very high profile witnesses testifying about various things, and I think all of us on this panel feel very confident in the state of America by being able to take advantage of the inherent good commonsense of everyday citizens who are impacted and give us suggestions on how we should proceed with our government. Thank you so much for coming.

Thank you, Mr. Chairman.

Mr. OBERSTAR. Thank you. And I join you in thanking the witnesses.

Ms. Edwards.

Ms. EDWARDS. Thank you, Mr. Chairman. And thank you especially also to my colleague from Michigan. I am not from Michigan. I am from Maryland, and why should it matter to me what happens in Michigan. Well, it matters because you are our communities and I just really want to thank you very much for your testimony, and I have to say in my short service on this Committee we have had on several occasions, Mr. Chairman, companies come before us who have done some wrong thing in some community, some accident where there are people who are affected and they try in so many creative ways to avoid their responsibility, to avoid accountability, to hoodwink, blackmail, however you want to name it, people in communities who have been victimized by their wrongdoing or by their accident, their—avoid liability and to people who come before us like Mr. Lee's wife who needs medical insurance and doesn't have it and so has to accept whatever it is that the company offers because you just want to be treated for somebody else's wrongdoing. And I just think if anybody asks why we need government, Mr. Chairman, this is why we need government. Because government has to be in a position, we have to be in a position as a Congress to look out for the little guy, look out for most of us who are in communities just trying to raise our families, take care of our families and do what is right. And then it turns out that just because we happen to live by a river in a community and a pipeline runs through it and there is a spill, that there is then no accountability. And I just think it is really not acceptable. And while this didn't happen in Maryland where I live, it could and it could in any kind instance. And I think we just have to really look out for our communities.

I really appreciate your testimony. I don't have any questions for you today. I think we have to get to the bottom of this. There has to be accountability and you have to receive the kind of compensation to which you are entitled to make your lives whole again, all of your communities, and that is part of our responsibility and oversight. It is part of our—and whether it is the Congress making sure that our Federal agencies do right or it is those Federal agencies simply doing right and taking care of their responsibility in communities, it has to happen. And so I just want to say, you know, in conclusion, that there are so many questions raised all the time about whether government costs too much or whether it intervenes too much. We see over and over again there are times when we don't intervene enough and where we allow people to go without

meeting their fullest responsibilities. And thank you very much to the advocacy folks at the National Wildlife Federation and others who are looking out for our people, for our communities and for our environment to make sure that there really is accountability. And this is not about stopping business from growing and doing business. But it is saying that in some instances, in all instances there has to be a balance that it is struck between protecting our community, protecting our families, protecting our environment and making a buck. And with that the buck stops with this Committee, it stops with the administration, it stops with our agencies. And someone is going to be held to account and you all are going to be made whole.

And with that, Mr. Chairman, I am finished. Thank you.

Mr. OBERSTAR. Thank you very much. The Chair recognizes Mr. Shuster.

Mr. SHUSTER. Thank you, Mr. Chairman. I thank all of you for being here. I just want to echo some of what my colleague from Maryland said. It is important—I am from Pennsylvania, but what happens in Michigan may happen in Pennsylvania or Maryland or some other State in this Union. So it is important for us to find out what happened, get to the bottom of it, and having you here today is extremely important. I know how difficult it is for you to be here because of what you have gone through, what you are going through. But we assure you that your testimony here today will be taken into consideration as we move down the road. And it is important for us to hear from everybody involved because that way we can step back and hopefully make wise decisions on whether it is further oversight hearings or passing new legislation that addresses some of the problems that we see or uncovered because of your situation.

So again thank you very much for being here today.

Mr. OBERSTAR. Thank you, Mr. Shuster. And Mrs. Miller and the members of the panel raised questions about the role of the Administrator of PHMSA. I am sure that Deputy Secretary Porcari will be responding to those questions raised. I saw him making notes and I am quite confident that he will respond to your concerns. If not, we will ask him about those. And I just did.

Mr. SHUSTER. Will the gentleman yield for a second?

Mr. OBERSTAR. Yes.

Mr. SHUSTER. I would just comment, Mr. Chairman, he does not work for PHMSA. He is the Deputy Secretary of Transportation, which the Chairman pointed out that somebody still might be under the false assumption. She works for him. He doesn't work for her. So we are glad to have him here today.

Mr. OBERSTAR. Finally, I just want to cite from section 1002, the Oil Pollution Act of 1990, covered removal costs and damages; all removal costs incurred by the United States, a State or an Indian tribe are covered by Federal law. Enbridge is required to pay any removal—Section B, Subsection B, any removal costs incurred by any person for acts taken in response to an oil spill. They are liable. They are responsible under Federal law. You don't need a new law to hold them accountable and responsible. Natural resource damages, damage for injury to, destruction of, loss of, or loss of use of natural resources, including the reasonable costs of assessing the

damage, which shall be recoverable by a United States trustee, a State trustee, an Indian tribe trustee. And I won't go on through all the other provisions. But there is very specific and very strict liability imposed on a company which has an oil spill covered by the provisions of OPA '90. And this Committee will ensure that Enbridge is held accountable, and we thank you very much for your extremely heartfelt testimony.

The panel is dismissed, and now we will bring Panel 2.

Mr. OBERSTAR. I ask members of the panel to rise. Raise your right hand. With regard to the testimony you provide to the Committee on Transportation and Infrastructure today and all subsequent communications regarding this hearing, do you solemnly swear to tell the truth, the whole truth, and nothing but the truth, so help you God?

[Witnesses respond in the affirmative.]

Mr. OBERSTAR. Thank you. We are now under some really severe time restraints because I have just received notice that we will have votes on the House floor a little after 2:00. So we will have to begin this hearing and hold ourselves to the strictest timelines and we will begin with the Chair of the National Transportation Safety Board, Deborah Hersman.

**TESTIMONY OF THE HON. DEBORAH HERSMAN, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD; THE HON. JOHN D. PORCARI, DEPUTY SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION; THE HON. LISA P. JACKSON, ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY; ACCOMPANIED BY SUSAN HEDMAN, ADMINISTRATOR FOR EPA'S REGION 5; AND SCOTT MASTEN, SENIOR SCIENTIST, NATIONAL TOXICOLOGY PROGRAM, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES, NATIONAL INSTITUTES OF HEALTH**

Ms. HERSMAN. Good afternoon. Thank you for allowing me to be here today.

Mr. OBERSTAR. We are not allowing you. We have asked you to be here.

Ms. HERSMAN. Thank you for inviting me to be here today, Mr. Chairman.

The accident pipeline, 6B, is owned and operated by Enbridge and was put into service in 1969. It is a portion of Enbridge's 1,900-mile Lakehead system with the operational control center in Edmonton, Alberta. Line 6B is a 30-inch diameter pipe extending approximately 300 miles from Griffith, Indiana, to Sarnia, Ontario, Canada.

Two goals of our investigation will be to determine what happened and when it happened. We do know that events surrounding the rupture began on Sunday, July 25th. Enbridge scheduled a shutdown of the pipe at 6 p.m. Eastern Daylight Time on July 25th and planned to restart the pipeline at 4 a.m. on Monday July 26th. By 5:58 p.m., the control center stopped the pumps—and you can see it on the slides up here—from Griffith to Mendon. At the same time, an alarm triggering pressure drop in Marshall initiated an automatic shutdown of the pump station there. At 9:25 Sunday evening, Calhoun County received the first of four 911 calls. The

four callers described natural gas, propane gas, and petroleum odors as well as a natural gas leak. Firefighters and a Michigan gas and electric utility technician went to the area, but they found no gas leak.

Line 6B was restarted at about 4 a.m. on Monday, July 26th, setting off another series of alarms at the control center over the next hour. It was shut down at 5 a.m. and then restarted about 7 a.m., triggering multiple alarms again. By 8 a.m., the line was shut down for the final time. The control center in Canada contacted an Enbridge technician in Marshall to survey the pump station, but that technician did not discover a leak at the pump station.

A Consumers Energy employee called Enbridge at 11:18 to report the spill which was visually confirmed by an Enbridge employee at about 11:45. An NTSB team arrived the following day. The section of ruptured pipeline was located in a swampy wetland area which was further saturated by the oil that had spilled. As a result, the process of excavating the ruptured pipeline took almost 2 weeks. However, the NTSB was ultimately able to transport two sections of pipe, each exceeding 20 feet in length, from the accident site to our training center in Ashburn, Virginia.

We are still in the very early stages of our investigation. We have cleaned the exterior of the pipe as well as the rupture surface to have a better look at the fracture under our microscopes. Select areas of the pipe have been inspected using nondestructive testing methods to survey the surface for cracks and flaws. Also, five samples were taken from the pipe and transferred to our materials laboratory for closer examination. A detailed analysis will be carried out by our laboratory staff over the next 3 months.

Although we have just begun our work on this investigation, we expect to focus on the following areas: supervisory control and data acquisition, or SCADA system operations; pipeline controller performance; operator notification and spill response; responses to 911 calls; inspection and maintenance history and; PHMSA oversight activities and actions.

As you all know, last week we received reports of a crude oil leak in Romeoville, Illinois, along Enbridge's 6A line. This pipe is 34 inches in diameter, and we discovered a 2-1/2 inch hole in the pipe. Our investigator in charge from the Marshall accident was in Romeoville and supervised the excavation and the shipment of that pipe back to our facilities.

Finally, I would like to take a moment to mention the NTSB investigation of the fatal natural gas explosion in San Bruno, California. There are 11 members of our team on the ground, including our vice chairman. We have removed three pieces of that pipe and it is in transit to Washington, D.C. for testing.

Like the Marshall accident, we are committed to finding the causes of these ruptures and making the appropriate recommendations to ensure that these tragedies do not occur again.

Thank you, and I am ready to answer any questions.

Mr. OBERSTAR. Thank you for a very succinct summary of a very extensive documentation on the spill at hand.

Deputy Secretary Porcari, I welcome you to the hearing. Thank you for being here.

Mr. PORCARI. Thank you, Chairman Oberstar, Ranking Member Shuster, and Members of the Committee. I am John Porcari, Deputy Secretary of the U.S. Department of Transportation. If I may, let me first clear up any misconceptions about the reporting relationships as has been previously discussed.

Administrator Quarterman is recused from these issues involving Enbridge. I would point out that the recusal is, in part, because as one of the first acts of this administration, President Obama doubled the recusal period for appointed officials to make sure that we are being held to a higher standard. That is obviously something that we all support.

I would also point out that, as I have been before with safety issues regarding PHMSA, as Deputy Secretary, I am directly involved. Secretary LaHood and I take safety very seriously. There is no greater illustration of that than the personal involvement that the two of us have in safety issues. If you are thinking about distracted driving or the longstanding, 20-year long attempt to try to have flight safety and duty time improvements in aviation, it is the personal involvement of the Secretary and his senior team that actually drives those advancements. So it is something we take very seriously.

Congresswoman Miller, you also pointed out that you had written to us on August 3rd asking questions regarding this incident. We did respond on August 18th. I will be happy to personally brief you either on the contents of that responsive letter or on any other questions that you have. It is a very important part of our job to be responsive and we take that very seriously. So thank you for your questions.

I would also point out that I visited Marshall twice this summer since the incident. I have seen firsthand the devastating impact both on the ecosystem and on the community and its members and, above all, on the families that call this community home.

Since the Obama administration took office, we have repeatedly warned Enbridge to focus on the safety and performance of its entire Lakehead pipeline system, of which 6B is a portion. This year alone, the Pipeline and Hazardous Materials Safety Administration conducted 11 inspections of Enbridge's Lakehead system and we initiated five enforcement actions. Last month PHMSA issued a final order assessing a \$2.4 million civil penalty against Enbridge in conjunction with an incident near Clearbrook, Minnesota where two workers died as a result of Enbridge's failure to follow safety regulations while repairing a pipeline.

Let me assure you that DOT will continue to ensure that Enbridge and all pipeline operators are held fully accountable for the safety of their operations and that they understand there are serious consequences if they fail.

As Secretary LaHood has stated from day one of this administration, safety is our Department's highest priority. So when Line 6B ruptured, releasing over 800,000 gallons of crude into the environments around Marshall, our response was swift. We immediately dispatched investigators to the scene. We were also quick to issue a corrective action order to Enbridge requiring the company to take specific steps to ensure the safety and integrity of Line 6B before

its return to service. That corrective action order is still in force today.

Let me also assure the Committee that our goal is to make sure that Line 6B is free of safety and environmental risks before granting Enbridge permission for a gradual restart.

Now, fortunately, no lives were lost in the Enbridge oil spill, but sadly the same can't be said for the tragic and deadly PG&E gas line explosion in San Bruno, California, which killed several innocent victims and injured scores.

Mr. Chairman, we are committed to working with you and Members of this Committee to ensure that accidents like this do not happen again. That is why our Department has launched a comprehensive review of the current pipeline safety regime so that we can identify potential legislative solutions and other actions we can take to ensure that all pipeline operators put safety first. To that end, Secretary LaHood this morning unveiled a legislative proposal to strengthen our regulatory authority and oversight capabilities on pipelines. This proposal would, among other things, raise the maximum penalty for the most serious violations from \$1 million to \$2.5 million. It would authorize 40 additional inspection and enforcement experts over 4 years. It would also improve the prevention, detection, and remediation of safety problems in hazardous liquid pipelines before we have an incident.

The legislative proposal will complement additional regulatory initiatives to improve pipeline safety. Specifically, we are going to be considering extending regulation to certain pipelines that are currently exempt from regulation, identifying additional areas along pipelines that should receive extra protection, and establishing standards and procedures for minimum leak detection requirements for all pipelines, among other initiatives.

Finally, this week, the department issued a notice of proposed rulemaking proposing to expedite new standards for pipeline control-room management procedures and controller fatigue. We are proposing to move up the timeline for that from February 2013 to August 2011. We look forward to working with you and the Committee to make sure that the underground pipeline infrastructure that we rely on coast to coast is safe, reliable, and has the most stringent oversight possible.

That concludes my remarks, and I look forward to answering any questions. Thank you.

Mr. OBERSTAR. Thank you very much for those comments, and your full statement will be included in the record, as well as the complete statement of all other witnesses.

And now Administrator Jackson. Thank you for being with us once again before this Committee.

Ms. JACKSON. Good afternoon. Good afternoon, Chairman Oberstar and Ranking Member Shuster, Congressman Schauer and other Members who are here with the Committee. Thanks for the opportunity to testify on EPA's response to the Enbridge pipeline oil spill near Marshall, Michigan.

On July 26, at 1:33 p.m. Eastern Time, Enbridge notified the national response officer that a pipeline release totaling an estimated 819,000 gallons of oil had occurred near Marshall, Michigan. The oil entered Talmadge Creek, flowed into the Kalamazoo River, a



Lake Michigan tributary. Heavy rains caused the river to overflow existing dams and carry oil 30 miles downstream. But now, thanks to the hard work of countless individuals, I am glad we have moved from the emergency response phase of this incident to the long-term cleanup phase of this incident.

I am glad to be joined this morning—this afternoon—excuse me—by Susan Hedman, the Regional Administrator for EPA's Region 5, who personally spent 17 days on site during the response working around the clock with a dedicated team of responders. And 4 days after the spill, I visited Marshall, where I met with local and State officials and saw directly the major challenges that EPA as Federal lead for this type of oil spill response would face.

The main goals of this operation were to contain the flow of oil and prevent its release into Lake Michigan, to directly communicate constant updates to the public and to Congress, and to ensure the protection of public health and the environment.

To achieve these goals, EPA mobilized an incident management team made up of numerous Federal, State, and local agencies, including the Coast Guard, the State of Michigan and other local agencies to oversee all of Enbridge's plans and actions. EPA also immediately began specific activities to ensure that the company would fully comply with EPA directives. EPA quickly issued an order under Section 311(c) of the Clean Water Act forcing Enbridge to conduct specific response actions, including deployment of recovery and containment equipment and proper disposal of waste.

EPA also began evaluating more than 30 miles of contaminated shoreline, floodplain and wetland areas through land, boat and air surveys to understand exactly where the oil was, where it might go and what it could contaminate. We began monitoring the air for harmful emissions and assessing water quality for contamination that could endanger public health.

Throughout the response, data show that both air and water quality was within acceptable levels for human health. The data, once compiled and verified, were quickly posted on our Website and we made it a major priority to keep the public fully abreast of the work ahead and the challenges posed.

In addition to constantly updating our Website with the most current information, we held three community meetings in Marshall, Battle Creek, and Kalamazoo to not only update residents on the overall status of the cleanup but, more importantly, to interact directly with community Members, to answer their questions and help assuage their fears. We also participated in other community meetings, including one hosted by Congressman Schauer. We also held daily calls for local and State elected officials and Members of Congress so they could respond to constituent concerns. Congressman Schauer in particular was a regular participant, and I commend you for your hands-on involvement in this response, sir.

Over the first weeks of the spill, both EPA and Enbridge continued to add response personnel and equipment to contain the movement of oil and to remove contamination from affected areas. We observed dramatic changes during this time. In less than 1 week, response efforts reduced heavy oil to a sheen over the majority of the creek and parts of the river. After an additional week, the sheen was visible only intermittently along the waterway. On Au-

gust 10, 2 weeks after arriving on the scene, the EPA declared the emergency response phase over, with the flow of oil contained 80 miles from Lake Michigan.

Let me show a few pictures to illustrate some of the major challenges associated and still associated with the spill. This is where it all started. You can see the edge of the pipe when it was first uncovered. For a perspective, the pipe is about 2-1/2 feet in diameter. Here is a picture showing oil covering the entire surface. It doesn't show too well in this light. But the entire surface of the Kalamazoo River is covered. That is near the leak site. You can see there is already some boom deployed there.

Here, this picture shows oil covering the entire surface of the Kalamazoo River further downstream. This is taken the day after the spill.

Note that the heavy flooding caused the water to overflow the dam. So we had oil coming through the dam but also overflowing due to the heavy rains that complicated the response effort.

Oil not only covered the water, but also got trapped in vegetation in the waterway and in the shoreline, and I want to be clear that when we say we have been able to reduce a lot of the sheen on the water, we are fully aware that the effort is really just beginning in all this vegetation and the sediment along the shoreline and it is a continuing potential source as long as it is there for additional sheens and impacts to the water itself.

The leak itself initially soaked five acres of wetlands with oil. We heard that in Ms. Hersman's testimony. Here is a glimpse of what it looked like after the contaminated pipeline was removed and the pipeline was exposed.

And here are some EPA employees working on the response. Just to go through some numbers from the response to date. 85 miles of absorbent boom, nearly 10 miles of containment boom have been deployed. 45,000 cubic yards of waste shift offsite to licensed landfill for disposal. More than 9-1/2 million gallons of oil and water mixture were collected from the spill creek—the spill site, the creek and the river. More than 200 boats currently deployed on the river. Total personnel on site ranges from 1,300 to 1,800 workers. And to date, the cost that EPA has incurred to respond to the spill totals \$17 million. While we expect that total to rise during the coming months, I assure you that we will work to recovery every penny of these costs from Enbridge.

But let me be clear, we still have work to do to clean up the long-term damage from this spill, and we will not leave until the work is done.

I thank the Committee for holding this hearing and look forward to taking any questions you may have.

Mr. OBERSTAR. And we will have questions. Thank you very much, Administrator Jackson.

Mr. Masten.

Mr. MASTEN. Chairman Oberstar, Members of the Committee, thank you for the opportunity to provide information about the potential human health issues associated with oil spills.

My name is Scott Masten, and I am a staff scientist at the National Institute of Environmental Health Sciences, an institute of the National Institutes of Health, which is part of the Department

of Health and Human Services. My work supports the National Toxicology Program, an interagency program that is administratively housed at the NIEHS. I am testifying today on behalf of the NIH, and I shall present a brief overview of our current understanding of the possible human health effects of exposures related to oil spills, along with a preview of some of our research efforts aimed at increasing our understanding of adverse health impacts among oil spill response workers and exposed communities.

Crude oil is a complex combination of chemicals consisting predominantly of carbon and hydrogen. These are collectively known as hydrocarbons. The chemical composition of crude oils can vary substantially from different geographic regions and even within a particular geologic formation. There are hundreds, if not thousands of chemicals present in crude oil, and we have incomplete knowledge of the toxicity of many of them.

We are most concerned about a particular class of hydrocarbons known as aromatic hydrocarbons, as well as other volatile organic compounds such as benzene, naphthalene, and polycyclic aromatic hydrocarbons.

Sulfur compounds such as hydrogen sulfide and heavy metals such as aluminum, lead, nickel, and vanadium can also be present to varying degrees in crude oil. These substances may also be of concern, depending on their level in the crude oil.

From studies of these chemicals individually, we know quite a bit about their hazardous properties, and we believe these are some of the chemicals most likely to be encountered in air, sediment, or water subsequent to an oil spill. The composition of spilled oil changes over time, and the oil nearest the source of the spill contains higher levels of some of the more volatile hazardous components.

Oil that has been exposed to air and water for a period of time, so-called weathered oil, has lost most of these volatile components. Nonetheless, this weathered oil still contains less volatile hazardous chemicals, and, therefore, skin contact should be limited. And if aerosolized by wind or physical disturbance, weathered oil could also be taken into the body through breathing.

It is critically important to note that the specific risk of developing adverse health effects are dependent on many factors, but, most importantly, risks increase with prolonged exposures to higher concentrations of the chemicals. Protective equipment and other precautions can be effective at reducing exposures and thereby reducing risks.

Given the chemicals present in crude oil, the potential for human health effects exist. However, understanding and quantifying these effects requires further study. There has been relatively little long-term research into the human health effects from oil spills. The few studies that have evaluated the human health consequences of oil spills have primarily focused on acute physical effects and psychological sequelae.

A number of the studies reported respiratory symptoms, including cough, shortness of breath, decreased lung function. These were among workers involved in cleanup operations. Other commonly reported symptoms in these studies include itchy eyes, nausea, vomiting, dizziness, headaches, skin irritation, and dermatitis. Addi-

tionally, in several studies of one particular spill, the cleanup workers there found evidence of genetic and endocrine effects in exposed individuals.

Regarding psychological consequences, generalized anxiety disorder, post-traumatic stress disorder, and depressive symptoms were reported among communities affected by the Exxon Valdez oil spill. Similar measures of decreased mental health were observed among communities near other oil spills.

The NIH is using a variety of funding mechanisms and programs to carry out important research related to the human health impacts of oil spills. The NIEHS, through the National Toxicology Program, has completed important steps in identifying knowledge gaps for oil-spill-related exposures of concern. The NTP has reached out to key agency partners to assess ongoing research activities within the Federal Government and to begin compiling common toxicology research needs.

Our initial research efforts are focused on chemical characterization of the oil and dispersant samples that were collected in the gulf region to gain a better understanding of the physical and chemical changes associated with weathering and biodegradation. The output from these various chemistry studies will guide the development and conduct of additional toxicological studies to identify important biological effects of the mixed exposures encountered during oil spills.

In June, NIH Director Francis Collins announced that the NIH will devote at least \$10 million to support these NTP studies in the initial stages of an NIH-led, large, prospective health study of oil spill cleanup workers and volunteers, termed the "Gulf Worker Study." In addition, BP has contributed \$10 million through its Gulf of Mexico Research Initiative to help fund the Gulf Worker Study.

This study will focus on exposure to oil and potential health consequences, such as respiratory, neurobehavioral, carcinogenic, and immunological conditions. The study plan also includes evaluation of mental health concerns and other oil-spill-related stressors, such as job loss, family disruption, and financial uncertainties. The study plan will be updated as comments and suggestions are received from the gulf communities and scientific experts via a series of NIEHS-sponsored meetings, community fora, and webinars.

In addition, the NIEHS has a grants program for time-sensitive research and community education that will include additional opportunities for research, including research on various health effects, to understand the unique risk of vulnerable populations, such as children, pregnant women, the elderly, and people with chronic health problems.

Although the above-mentioned research activities are focused on the gulf region, our expectation is that these research results will have widespread applicability to future public health activities relating to oil spills.

In conclusion, it is clear from our current and ongoing review of the available research studies regarding human health effects of spilled crude oil that there is a need for additional health monitoring and research. Follow-up of exposed people has only occurred for a handful of the oil tanker spill incidents from the past several

decades. These incidents involved exposure to different types of crude oil and, in some cases, refined petroleum products.

Historically, cleanup workers have experienced the highest exposures; although, for most of these studies, there is a lack of quantitative exposure information. And human health impacts are dependent on the scale of the release and on our ability to minimize exposure through proper safety precautions, training, and spill containment.

Ongoing and planned research in the gulf by the NIH and others will increase our collective understanding and provide a better foundation for making public health decisions for future oil-related incidents.

Thank you, and I am happy to answer any questions.

Mr. OBERSTAR. Thank you very much for those observations. We appreciate your testimony.

And we will now continue with Kelli Scott, administrator and controller and public information officer for Calhoun County.

Ms. SCOTT. Thank you. Good afternoon, Chairman Oberstar, Ranking Member Shuster, Members of the Committee. I appreciate the opportunity to be here today.

And thanks, also, to our local congressman, Mark Schauer, for your commitment to include local governments in the mix of panel members today.

My brief testimony will be from the perspective of county government on the oil spill and its impacts on our community. Given the fact that, although we are out of the official crisis mode, the oil spill is not yet all cleaned up, we still have more questions than conclusions to offer.

I am here today to frame briefly for you a picture of what Calhoun County, Michigan, was like before July 26th, what the county's involvement in the response effort has been to date, and what we believe the local concerns will be going forward.

Before this crisis that started locally ends locally, it is important to our board chair and our county commissioners that we begin through various engagements, such as this, to plan long-term restoration strategies. If what you hear today offers any preliminary lessons learned for future reference or leads to any assistance in this recovery strategy, we will all be better off.

As county administrator/controller, my position is that of the appointed county executive, reporting to a board of seven county commissioners. My main role in the oil spill response efforts has been that of public information officer. I have had some incident command structure training, but it paled in comparison to the real on-the-job experience I have had for the last month and a half with this major environmental disaster happening literally in the county's backyard. The oil spill site was less than a couple of miles from my office and from the county administration in Marshall.

I was notified of the spill by county officials at about 8:30 on Monday night, July 26th. And they informed me that I needed to get to the incident response and that we probably needed to declare a state of local disaster and emergency. At that point, I had never heard of Enbridge and was unaware that its pipelines traveled through our county.

When I got to the site, there were many local, State, and Federal officials already there, and the effort was already under way to form the incident command and to deploy resources. Included in the mix of who was there were our public health officer, Jim Rutherford, emergency management services director Durk Dunham, the county sheriff, and others. And it became apparent, even though we had no clue what the magnitude of the spill was, that we were going to essentially have to clear our calendars of all of the other county initiatives, meetings, full schedules, and dedicate as much resources as were needed to assist in this process.

So, the picture before July 26th: We are one of the larger counties in Michigan at about 136,000 in population. However, we have very much a small-town feel. Battle Creek, which is our largest city, is known as "Cereal City, USA." When we get outside in the morning, we are used to smelling the sweet smell of cereal from Kellogg's and Post. We are happy now that that smell of cereal is back and not the smell of oil.

Our Web site encourages people to visit, live, and do business in the county, proudly stating that we offer the serenity of country living and the cultural and recreational amenities offered in urban settings. The resources from our river are very much a part of the tourism strategy, and it is very unfortunate that we experienced this local tragedy that cut off recreational use of the river, which resulted in cancelled camping, fishing, canoeing trips, and other events that were already booked before the July 26th incident.

From a county budget standpoint, property taxes provide nearly half of our operating revenues of \$40 million. So, before July 26th, we were just ramping up our budget process for fiscal year 2011. We have a calendar year. We were projecting a budget deficit of \$2 million, had been experiencing 2 or more years of property value declines just due to the State and national economic crisis, and tax foreclosures had experienced significant increases in our county.

Also, our county ranks low compared with others when it comes to numerous key health indicators. So we were already challenged and had begun several local efforts to turn those health indicators around. And part of that strategy, again, was use of our environmental assets, such as the Kalamazoo River.

So our response as county government, the first step we had to do was to declare the local state of emergency. And then State statute really requires us to look out for public health, public safety. And beyond that, we realized quickly that we didn't have the resources necessary and have had to rely on a lot of environmental experts to make the tough decisions about evacuations, about water quality safety and air quality safety.

So the bottom line is, to date, the county of Calhoun has expended over \$300,000, coming mostly from our public health, office of the sheriff, administration, but even other offices such as equalization, who created over 400 maps for Enbridge, and the Environmental Protection Agency for various uses. Our road commission estimates over half a million dollars of damages to roads that we still have to wait to assess until the heavy equipment is gone. And we haven't even looked at the damages to at least one of the county parks that is on the river and is being used as a staging area.

My role, again, was as a public information officer and have been attending regular meetings—they were twice daily, initially—with all of the public information officers, including that from Enbridge. We tried to coordinate the media briefings. And communication throughout this process was one of the most difficult things, especially when we were dealing with evacuated residents and trying to communicate to them.

One of the early stories that had been in the media and I understand is being investigated is the response time and the reporting of the oil spill. One statement that I would just make on that issue is that we didn't find any record from our consolidated dispatch authority, which I have to state is separately governed from that of the county, of Enbridge contacting the county or the consolidated dispatch to alert of any potential problems with the pipeline, which we understand could have been Sunday night, the night before the reported spill.

Our understanding is that Enbridge was required to notify the National Response Center, but, there again, there was not notification from either Federal or State agencies directly to the county or consolidated dispatch. So there was some confusion there.

Looking forward, I would summarize with the five questions that our county and our residents have communicated to us that they are very concerned with on the long term. How long will Enbridge be here in town, and what will we be left with once they are gone? We are concerned that the EPA's September 27 deadline under their administrative order will be only an artificial end to the situation.

Number two, when will the Kalamazoo River be open for recreational purposes again? Will it be 2011, 2012, or beyond? And we also have no sense of how long the county government will need to be involved in air and water quality monitoring and testing.

Number three, how will this environmental disaster impact future economic development? How many businesses will avoid Calhoun County when contemplating start-up, expansion, or relocation?

Number four, what will happen to our property values, which we thought were close to bottoming out before the spill but were expected to rebound in the next year or 2?

And, finally, and maybe most importantly, are we safe? How can we be sure another pipeline failure doesn't happen in the near future? For vulnerable areas like ours where the pipelines run through populated areas, one spill is too many.

And I would just add, from a local response, just so that you are aware, on August 5th the Calhoun County Board of Commissioners resolved to create a local task force that will include officials from State, Federal, and maybe even the private sector to look at long-term strategies for dealing with these types of tragic events. One premise that we will be discussing is whether there is a need to accelerate the development of environmental cleanup and restoration technologies. We expect to start meeting next month.

And so, in closing, even though, again, the cereal smell is back and the river is much cleaner, submerged oil and residual oils in the flood plains and on vegetation and in sensitive areas still concerns the community. From my perspective, communication plans

that begin from the responsible party and include early and direct notification to local emergency centers of potential issues with pipelines would streamline response efforts, if nothing else.

And that concludes my remarks. Thank you.

Mr. OBERSTAR. Thank you very much for your testimony. And the questions that you raise are very important ones that we will pursue as we continue our oversight of this situation.

Chair Hersman, you have heard me say it many times that I hold the NTSB as the gold standard for accident investigation. Other countries in this modernized transportation world have developed or put in place accident investigation units modeled after the NTSB. And you are continuing to uphold those very highest standards.

I know that there will be lessons to be learned after the metallurgical studies and evaluations of the pipeline segment. And when do you—I would like to ask you if you can just give us an off-the-top-of-the-table estimate of when that work would be concluded.

Ms. HERSMAN. Mr. Chairman, are you talking about just the lab work, or are you talking about a final report?

Mr. OBERSTAR. The lab work. No, not the complete investigation, but the lab work so that you will have some idea of the questions that I have. That is, this is a 39-year-old segment of pipe. It is three-quarter-inch steel, if I understand, if I recall rightly. And was it steel of a quality that would meet standards set today? Or are even today's standards adequate or inadequate? What pipeline pressure was it built to withstand? Were the pressures greater than the design spec of the pipe? And while it was operating at lower pressure levels, was that possibly a factor in the pipeline failure?

Those are a number of questions I don't think you can answer yet because you don't have all the metallurgical analysis results.

Ms. HERSMAN. You are right, I can't answer all of those questions. But we do know that this pipe has a maximum operating pressure of 624 psig. At the time of the rupture, they were under a restriction from PHMSA to operate at a lower pressure, 523 psi. The operating pressure just prior to the failure was something less than that, 440 to 475.

We are still working through all the details, but that is some preliminary information.

The pipe is carbon steel and one quarter-inch thick.

Mr. OBERSTAR. Oh, it is quarter-inch. I thought it was three-quarter. OK.

Ms. HERSMAN. One-quarter-inch thick. It was manufactured to meet the specifications existing at the time it was installed.

You mentioned the Marshall pipeline was installed in 1969. The three events that I mentioned in my testimony, the other Enbridge pipe was installed on 6A in 1968. The San Bruno pipe that is involved in the California gas pipeline explosion, is from 1956. It is not uncommon for us to see pipe that is older.

There are a number of things that our team in our lab will be doing over the next few weeks and months. They are going to reconvene with the parties to the investigation as they conduct some of this work so that PHMSA and Enbridge have an opportunity to



see what we are doing. If we identify any concerns, the parties will have the ability to take action, too, as far as safety issues are concerned.

Mr. OBERSTAR. Do you know whether cathodic protection was maintained on that line continuously throughout its operation?

Ms. HERSMAN. That is certainly something that we will be looking at as part of our investigation. We know that it was coated with a polyethylene coating to provide some additional protection. We did document some issues in our initial examination of the pipe of corrosion on the pipe. We are certainly going to be looking at that as part of our investigation.

Mr. OBERSTAR. Thank you.

Deputy Secretary Porcari, I know that when the administration took office that PHMSA was a disaster of its own. It has been that way for a long time. And that you have taken steps to improve operations and upgrade the organization itself.

And you have outlined the proposals for reauthorization of PHMSA. But from just a quick reading, I don't see any provisions on leak detection. I don't see any upgrade on integrity management. And I wonder if you could address—I would like you to address those two issues in particular.

Mr. PORCARI. Mr. Chairman, I think those are very good questions.

The proposal that was submitted this morning, we believe, is a very good starting point and a significant advance over the previous requirements. From this incident, which we take very seriously, there are five issues, for example, that I am asking staff to review and determine if we can update the proposal, as necessary.

For example, for the integrity plans themselves, which are viewed prior to inspection, should copies of those be in PHMSA's possession, and should those be reviewed more aggressively before and outside of inspection cycles?

The second broad issue is the operating control centers. In addition to the recent rule-making that we just did, the processes and procedures there, are there further improvements that we should have?

Third, what is the threshold for damage repair? Is today's threshold adequate? Has technology advanced, has research advanced so that we can update that?

The fourth broad area is leak-detection systems. Should there be performance standards? Redundancy? Is the state-of-the-art different, and should those be requirements?

And then finally, fifth and broader, what are we doing in our research program, going forward for future requirements? Are we actually funding the research that we need that will define the future requirements so that this doesn't happen again?

And on all five of those, and likely more fronts, we will be moving forward.

Mr. OBERSTAR. Thank you.

I would like to proceed, although we have very limited legislative time remaining before the recess for elections, I would like to engage in a bipartisan conversation with you, your staff, and also with EPA Administrator Jackson to scrub this proposal that you have submitted, incorporate into it lessons from this hearing and

also from the BP oil spill, and at least fashion a draft bill in the remaining 3 weeks that we would be able to consider in this Committee. And if we can get there, to take at least Subcommittee action. And if not, have a bill ready so that, after the election, we might be able to proceed on it. Because the authorization is expiring for PHMSA, and I would not want that to happen.

Ms. Jackson, you have already, EPA has already issued Section 311 order authority on the Enbridge spill. What other authorities does EPA have to ensure cleanup and to hold the responsible parties accountable? And do you need additional action in light of this Enbridge experience?

Ms. JACKSON. So far, Mr. Chairman, I think that our general belief is that the authorities under the Clean Water Act, the Oil Pollution Act, are broad enough to enable us to pursue the response, to ensure reimbursement of response entities. There are opportunities for claims to be made from the fund if Enbridge does not live up to its responsibilities to the community or to individual folks.

There is an enforcement case to be brought potentially at some point. And that investigation, from the standpoint of EPA only, not speaking at all about NTSB's ongoing investigation, will focus on potential violations of the Clean Water Act with respect to the spill itself.

And, at this point, we have no reason to believe that there have been any authority issues. The law is quite broad.

Mr. OBERSTAR. Very good.

We know, those of us in the northern tier, that winter is en route. Although we have had one of the hottest summers on record, if not the hottest summer on record, we know in northern Minnesota and upper Michigan that the glacier is trying to reclaim its footprint.

And there are lessons to be learned from the Exxon Valdez, that cleanup in cold water—that was cold saltwater; this is cold freshwater—are different from those experiences in the gulf with warm saltwater. We know and you testified very thoughtfully at our BP oil spill hearing—and I appreciate your testimony; I have referenced it many times in talks since then—bacteria may be devouring the oil in the gulf, but at the same time they are consuming oxygen in the water column and leaving behind a carbon footprint of the decayed bacteria matter.

Think for a moment of the lessons to be learned from Exxon, from BP, and apply them to Enbridge and the river and the riparian lands.

Ms. JACKSON. Certainly, sir. You know, as you point out, very, very different environments, not just because it is marine versus freshwater. You know, it hasn't been spoken of much here, but this was a very beautiful recreational area, as I went over it. People hunt, they fish, there are kayakers. It is just a beautiful spot, especially in the summer. I am a southern girl, so the winter is a little less appealing to me, but I am sure people up there love it in the winter too.

Mr. OBERSTAR. We love it up there.

Ms. JACKSON. But I think one of the hardest things about this cleanup going forward—and I want to be very careful not to make any excuses for Enbridge, who must clean this up—is we don't

have some of the assets we might have where biological degradation is going to happen as quickly. But yet, we have such a very beautiful ecosystem. In many places, as you know, we didn't have roads to even get to these shorelines to access them. You know, we had to put in roads or temporary structures to get down there.

So there will be a real process with the teams and, of course, with folks who are also trustees to try to determine where active removal, say, in the case of sediment, is really crucial to ensure that we get this source material out. But where, in some cases, the best thing we can do is allow the shoreline to recover over time, which will certainly impact people's ability to enjoy certain areas.

So, there were no dispersants used or any agents, if you will, introduced into this environment—very different. This is, you know, freshwater close to land. We don't have anywhere near the dilution factor that would even indicate consideration of such a thing. And so, in some ways, we are more limited in our tools. And all of our tools for some of the remaining cleanup will have the unfortunate consequence of having, you know, potential real impacts to the ecosystem. So that will have to be weighed. And, certainly, the State and local officials, as well as Federal trustees, will weigh in on those issues.

Mr. OBERSTAR. Thank you. Do you and Secretary Porcari concur with me that the provisions of Open 90 apply to the Enbridge spill?

Ms. JACKSON. Absolutely, sir. I believe that this is—it says if there is even a danger that it is going to hit waterways, we should respond. But we absolutely believe that.

Mr. PORCARI. Yes.

Mr. OBERSTAR. We have a—I will conclude, but I was with my son and granddaughters on the edge of the Boundary Waters Canoe Area Wilderness in the first week of July, taking just a couple of days of respite. We hiked into and canoed into, portaged into the wilderness. And then in the evening we were sitting on the shore and observing a family of loons calling to each other, with a chick in the middle, and diving for food for their chick.

And it just occurred to me that in 3 months they are going to be migrating to Louisiana, to the wetlands. And they are going to land in those oil-soaked marshes. And I thumbed through my provision, which I had brought with me, of Open 90. And BP is liable for every oil-soaked loon that comes from Minnesota, Wisconsin, or Michigan. And I am going to hold them to it.

Ms. Miller?

Mrs. MILLER OF MICHIGAN. Thank you very much, Mr. Chairman. That is an interesting observation and frightening in its own way to think about the fly routes of migratory birds coming from your beautiful State and our beautiful State and going down to the gulf, et cetera.

And I would just, not to keep belaboring this point about Ms. Quarterman, but I did want to mention one more thing. And you don't have to respond to this; I just want to make a comment on here.

I will say that this administration, this President, said that they were not going to have lobbyists or folks from K Street, industry folks, coming in and regulating the agencies that they once either worked for or represented. That was a pledge that this administra-

tion said. And here is Ms. Quarterman, the PHMSA administrator, who, again, had to recuse herself from coming to talk at a congressional hearing because here she was, you know, a partner in the Washington, D.C. Office—I will leave out the name of the law firm. Her practice was focused on litigation and administrative law associated with pipeline safety, pipeline acquisitions, oil, gas, liquified natural gas facilities, et cetera, et cetera.

So I appreciate that somebody has to recuse themselves from talking to a congressional panel hearing, Members of Congress trying to understand that if a regulatory agency has been able to do their job, and the administrator has to recuse herself because she formerly was an attorney who represented Enbridge, the company that we are talking about now.

I am not asking for any comment. I make that statement.

But I would like to ask a question of you, Secretary Porcari. And as has been mentioned here—and I have not seen your reauthorization proposal, because, as you mention, you just submitted it a couple of hours ago, even though the pipeline safety programs do expire in 15 days. In 15 days, it is going to expire.

And I know you are still a relatively new administration, but, still, it would seem—I guess I would ask this question: Why did the administration take so long to transmit a proposal to the Congress? And if you just gave it to us this morning, some might think perhaps that is in response—that you have finally focused on this as you see what happened in Marshall, Michigan, as you see what happened in Illinois, as you saw what happened in California, as you saw what happened in Buffalo, New York.

And I am not sure if you—you know, just understanding the process of Congress, it is highly unlikely that we will be able to have Committee hearings, take testimony on your reauthorization, pass something out of Subcommittee, Full Committee to the floor of the House in about 10 legislative days that is left. It is highly unlikely—maybe, maybe, but I don't think so.

So I would just ask, what happened here?

Mr. PORCARI. Thank you, Congresswoman Miller. I will take the opportunity, if you don't mind, to first make a couple of points regarding Administrator Quarterman, because I think it is really important.

We selected an administrator that has both public- and private-sector experience that is relevant. As I mentioned before, the President put a higher public standard, a higher ethical standard, in place by doubling the recusal period, which is, in part, why Administrator Quarterman is not here today.

I would be here either way, given the severity of this event. As I mentioned before, both Secretary LaHood and I take these safety issues very seriously. You can only lead from the top levels of the Department if you want to change the culture.

Mrs. MILLER OF MICHIGAN. OK, I appreciate that. And I want to give you time to respond, but I have a limited amount of time. I appreciate your statement. Could you answer about the reauthorization?

Mr. PORCARI. I should also point out Administrator Quarterman is on the ground today in San Bruno with that very significant incident.

On the legislation itself, we are moving forward on a number of safety fronts. We are trying to do all of these simultaneously. We are trying to make up for lost time in terms of what needs to be done. We are also trying to make sure that the highest safety priorities are addressed as quickly as possible. This is one of those. In an ideal world, we would have had more time with this legislative proposal. We also thought it was important to understand, at least preliminarily, some of the lessons learned from this incident in the reauthorization proposal.

Mrs. MILLER OF MICHIGAN. OK, I appreciate that.

Now, the last reauthorization actually doubled, almost doubled, the number of Federal inspectors for the pipelines. And you are asking apparently—again, I have not read through this since we just got it—but for an additional 40 inspectors. Do you happen to know if you hired all of the inspectors that were authorized during the last reauthorization?

Mr. PORCARI. We currently have 137 authorized positions for our inspectors and enforcement personnel. We are continually hiring because of turnover. Those 110 of the 137 are currently filled. We have a very aggressive plan in place.

Mrs. MILLER OF MICHIGAN. So you did hire all that were authorized then?

Mr. PORCARI. No. We have 110 of the 137 authorized, currently.

Mrs. MILLER OF MICHIGAN. So you have not hired as many as you have been authorized for?

Mr. PORCARI. Yes.

Mrs. MILLER OF MICHIGAN. So you are running short on inspectors.

Mr. PORCARI. We are running short.

Mrs. MILLER OF MICHIGAN. OK. Let me ask you this, then. You also have initiated 24 enforcement cases against Enbridge's Lakehead system in the past several years, yet you are stating in your testimony that Enbridge techniques used to manage their pipelines have not changed.

Do you have any comment on that? Even though you are—I mean, you don't think they should change their management techniques? What is your thought on that?

Mr. PORCARI. Absolutely, we have very substantial concerns, and expressed them well before this incident, about Enbridge's management and operation, including the extraordinary step of summoning the CEO to a meeting where we could recount these previous issues and incidents and very directly ask the most senior management what they are doing about it. We followed that up with a meeting in the Kansas City regional office with the Enbridge senior officials, as well.

I think it is fair to say that that kind of action is atypical, and it is part of what we want to do and are going to do to make sure that this is a safer system. We saw problems, and are moving to act on them.

Mrs. MILLER OF MICHIGAN. Thank you.

And I would just have one further question then. I know I am running out of time here.

In regards to the dent in the pipeline in the St. Clair River that I have been so focused on here, Enbridge actually has told us, told

me at a meeting that they think that this dent might have been in there since the construction of the pipeline. I am not sure what your thought is on that.

But in August of 2009 when they discovered it, some 40 years after the pipeline was installed, apparently the dent meets the Federal regulatory requirements for a 60-day repair condition. And I have been told that you were apprised. I am not sure if it was you; somebody in your agency that understood this, informed about the dent.

Do you have any comment on—I mean, obviously the 60-day rule did not happen here.

Mr. PORCARI. Yes, and thank you for asking that. My understanding is, first of all, inline inspection has revealed this for about 30 years, this dent. It is something we take very seriously. Enbridge has until September 26th to present a plan for how they are going to remediate that problem. That is when the 60-day clock will apply. We will hold them to the highest standard on that.

I would also point out, however, that because it is work in the St. Clair River, the Corps of Engineers' and other permitting requirements will most likely apply. They will have to go through a permitting process.

Mrs. MILLER OF MICHIGAN. Depending on which one of the remediation—and I am going to discuss that when the Enbridge fellow comes here.

Mr. PORCARI. Correct.

Mrs. MILLER OF MICHIGAN. Three different—I met with them, and I will say that his story was different than yours, in regards to how long they knew about this dent.

But I appreciate your—and thank you, Mr. Chairman.

Mr. OBERSTAR. Thank you very much.

Any additional material may be submitted by the witnesses.

Now, the Deputy Secretary and Administrator Jackson both are due in the other body to testify. We have called to the Senate Committee and asked for a few minutes extra time. So I am going to ask Mr. Schauer and Mr. Garamendi to combine their time and be succinct. And then I would like to, before they go on with other witnesses, to then turn to Mr. Shuster, who may have some questions.

So we would like to compress this time. We gave the local witnesses an enormous amount of time to express themselves, which I think is appropriate, but that also now cuts into—

Mr. SHUSTER. I just want to remind my colleagues, this is the House. We are quicker, faster, briefer than the Senate.

Mr. OBERSTAR. Better.

Mr. SHUSTER. Exactly.

Mr. OBERSTAR. Now, Mr. Schauer and Mr. Garamendi.

Mr. SCHAUER. Thank you, Mr. Chairman. This is a very important panel. I will go right to Secretary Porcari and Administrator Jackson.

I would like to thank you both for being present, very present in my district. To your respective staffs, it is good to see some of them in the room that have been fixtures in Calhoun County.

This is an important panel because it will—we do play an oversight function, and this will help us make changes to the law that will hopefully prevent this from happening again.

Secretary Porcari, I look forward to reviewing your legislation. I think that is ultimately the product of where we are headed with this.

I am concerned, Mr. Secretary, about stalling from Enbridge. I will try to paraphrase, but they relied on a consultant at least to analyze an inline inspection, I believe from 2007. It took a year of back and forth between the consultant and the company to finalize that report. Enbridge knew of defects as a result of that inspection, but the question really goes to, what is the date of discovery?

But here is how it applies here. At that point of discovery, the company requested a year to operate under reduced pressure. So there was a year of back and forth between the consultant and the company. Discovery was delayed. Then there was an additional year granted by PHMSA for them to operate under reduced pressure and decide what to do about all of those defects.

I wonder if you can talk about that relationship discovery and even the reliance in your oversight of some of those consultants.

Mr. PORCARI. Congressman Schauer, that is a very important point because, from my vantage point, this has taken entirely too long. It is clear that when the year that Enbridge was entitled to under the law, the year of reduced pressure, was followed by a request, on July 15th, to extend that up to two and a half additional years it was a real source of concern to us. I should point out that we have formally notified Enbridge that we will not extend that.

But this gets to the heart of how enforcement works with PHMSA. Given the staff that we have, we rely on our State partners, in most States, and we also rely on the inspection and record-keeping that is done by the private-sector owners of the pipeline.

It is clear that there are some lessons learned from this incident. We know that better recordkeeping, quicker understanding of the types of anomalies that can exist out there in the pipelines, and quicker action on that may or may not have made a difference here, but it certainly makes sense to push that as hard as we can.

We know also that there are a number of aging pipelines like this throughout the country. We are trying to make sure that, whatever broader conclusions we can draw from this extended time period, we are applying them to other sections and pipelines as well, so that we can move as aggressively as possible.

But hindsight is 20/20. It is clear that reduced pressure for an extended period of time is not a strategy.

Mr. SCHAUER. Mr. Secretary, does PHMSA have too much discretion under current law or in its regulations in allowing companies to choose to operate under reduced pressure and, in some cases, for extended periods of times, rather than make repairs?

Mr. PORCARI. Congressman, one of the five steps that I have on my personal list on this, that I mentioned earlier, is the threshold for damage repair, which should inform the discussion and help drive us on that. Whether the current threshold is adequate or not really is an important question, because that would get to your question, which is how much time we would permit a pipeline company to have.

Mr. SCHAUER. I am going to keep us going, since we are in lightning round. But I would assert that the current threshold is not adequate, where the company knew that there was a problem at

this mile post where the accident occurred and was not required by your threshold to repair it.

Finally, it is a comment and question. Thank you for the tough corrective action order within days of the incident. One of the statements that you made, which is telling, about your decision on the restart plan is that, "The immediate—the corrective action was required because failure to order that would result in likely serious harm to life, property, and the environment."

My editorial comment is, it is a little late. But I would ask you to forecast for us where you are headed with the restart plan.

Mr. OBERSTAR. Briefly.

Mr. PORCARI. Briefly, the restart plan, which is currently under consideration, is much more comprehensive than the original one that we rejected. We are adding the extraordinary step of requiring a third-party that is reporting directly to PHMSA to come in and provide technical expertise, oversight, and essentially look over Enbridge's shoulder throughout this process.

We are also going through the extraordinary step of making this as transparent as possible for the community's benefit. We want to put on the web site as much information as possible, including the restart plan. It is not yet approved. Assuming that a restart plan is approved, there would be a gradual restart, not a light switch, but a restart if you will, where it would be restarted in phases.

Mr. OBERSTAR. I am going to interrupt at this point. I had intended to have Mr. Garamendi and Mr. Schauer share time, but Mr. Shuster has a couple of points that he wants to raise. We will ask him to do that. Mr. Garamendi for a brief comment.

We will then recess for these votes and resume after the 9/11 ceremony to take testimony from Enbridge.

Mr. SHUSTER. Thank you, Mr. Chairman.

Just two letters that I want to direct to the Department of Transportation. One to Ms. Quarterman and Mr. Secretary, it is from my colleague in Pennsylvania, Glenn Thompson, who represents the northern tier, a town of Warren, Pennsylvania.

He has a facility up there, United, that that pipeline directly feeds it. They are cut in half with the production in that facility. And there are 4,000 people employed there. He is urging PHMSA to do its review, obviously make sure all the safety is in place, but to restart that line as soon as possible because there are 4,000 people in that part of Pennsylvania whose livelihoods depend on it, and I am sure there are thousands across that line.

So I will submit that letter on his behalf.

Mr. OBERSTAR. Without objection, the letter will be included in the record.

[The information follows:]



GLENN "GT" THOMPSON  
5TH DISTRICT, PENNSYLVANIA  
124 CANNON HOUSE OFFICE BUILDING  
(202) 225-5121  
(202) 225-5790 (FAX)

**Congress of the United States**  
**House of Representatives**  
Washington, DC 20515-3805  
September 14, 2010

COMMITTEES  
AGRICULTURE  
EDUCATION AND LABOR  
SMALL BUSINESS

Ms. Cynthia L. Quarterman  
Administrator  
U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
East Building, 3rd Floor - Mail Stop: E32-303  
1200 New Jersey Ave., SE  
Washington, DC 20590

Dear Administrator Quarterman:

I am writing in reference to the oil pipeline failure and spill that was reported on July 26, 2010 near Marshall, Michigan, the Corrective Action Order issued by PHMSA on July 28, 2010, and the disapproval of the restart plan submitted by Enbridge Energy, L.P. (Enbridge) on August 9, 2010.

I am very respectful of the complicated task that PHMSA has before them. The public safety, property and the environment should be the utmost concern when addressing the pipeline failure of Marshall, Michigan. Additionally, the underlying economic impact of such events has the potential for significant disruption to the lives of those residing in and around the affected areas. Such is the case with United Refining Company (United).

United was founded in 1902 and owns and operates a modern refinery, producing a large range of petroleum products. United employs over 4000 employees and services over 375 retail outlets in Pennsylvania, Ohio and New York. The refinery located in Warren, Pennsylvania averages approximately 70,000 barrels of oil per day. Until recently, the refinery operated 24 hours per day, seven days a week.

Currently, and as a direct result of the rupture, United is running at 50 percent capacity. United relies on the Enbridge pipeline system for delivery of their crude oil supply. I have been informed that currently there are no economically feasible alternative supply sources. By no fault of their own, United and its employees are suffering a substantial and potentially life changing downturn, should supply be further delayed.

For these many reasons, I respectfully request that you give the utmost attention to Enbridge's safety proposal and ensure it is reviewed in a timely manner, to avoid the economic impacts this may have upon the residents of North Western Pennsylvania.

Sincerely,

  
Glenn "GT" Thompson  
Member of Congress

TITUSVILLE  
127 WEST SPRING STREET, SUITE C  
TITUSVILLE, PA 16354  
(814) 827-3985 (814) 827-7307 (FAX)

<http://thompson.house.gov>  
PRINTED ON RECYCLED PAPER

BELLEFRONTE  
3855 BENNER PKWY, SUITE 101  
BELLEFRONTE, PA 15823  
(814) 353-0215 (814) 353-0218 (FAX)

Mr. SHUSTER. And also, to Secretary LaHood, Mrs. Biggert from Illinois, where the other spill occurred, she sent a letter on Friday and wanted to get as quick as possible a response from DOT with a number of questions. Here is a list of reported accidents, inspection reports, things like that.

So we would hope that DOT could get Mrs. Biggert that letter, you know, in the next 24 to 48 hours. It looks like it is pretty straight-up information that she is requesting. So if you could do that, we certainly would appreciate it.

And I appreciate the Chairman's consideration.

Mr. OBERSTAR. The letter from Mrs. Biggert will be included in the record, without objection.

[The information follows:]

JUDY BIGGERT  
13TH DISTRICT, ILLINOIS  
  
COMMITTEES:  
EDUCATION AND LABOR  
FINANCIAL SERVICES  
SCIENCE AND TECHNOLOGY



WASHINGTON, DC OFFICE  
1034 LONGWORTH HOUSE OFFICE BUILDING  
(202) 225-3515  
FAX: (202) 225-9420

ILLINOIS OFFICE:  
6262 SOUTH ROUTE 83  
SUITE 305  
WILLOWBROOK, IL 60527  
(630) 655-2052  
FAX: (630) 655-1061

<http://judybiggert.house.gov>

## Congress of the United States

House of Representatives

Washington, DC 20515-1313

September 10, 2010

The Honorable Ray LaHood  
Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue, S.E.  
Washington, D.C. 20590

Dear Mr. Secretary:

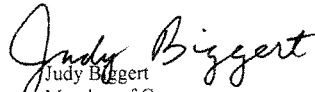
Yesterday, Enbridge Energy Partners reported an oil leak on pipeline 6A of the Lakehead System in Romeoville, Illinois. As containment and clean-up efforts continue, I respectfully request detailed information regarding Enbridge's inspection and maintenance history, to specifically include:

1. A list of all reportable accidents, incidents or safety problems on Line 6A of the Lakehead pipeline system and any action item ordered by the Department of Transportation as a result of such accidents, incidents, or safety problems.
2. Inspection reports and other related data for Line 6A of the Lakehead pipeline system.
3. All integrity management plans prepared by Enbridge for Line 6A of the Lakehead pipeline system including corrosion monitoring plans for the line.
4. All response plans maintained by Enbridge for Line 6A of the Lakehead pipeline system.

Pipeline safety is integral to public health, safety, and commerce. In the wake of other spill-related events, I believe it is important to closely examine monitoring efforts to ensure that government and industry are working effectively together to prevent these incidents from occurring again.

Thank you for your attention to this matter. If you need further information, please do not hesitate to contact my office at 202-225-3515.

Sincerely,

  
Judy Biggert  
Member of Congress

cc: The Honorable James Oberstar  
The Honorable John Mica

Mr. SHUSTER. Thank you.

Mr. OBERSTAR. She is a very dear friend and colleague. And I invited her to participate in the hearing, either as a witness or to sit with us. She is unfortunately not a Member of the Committee and not able to ask questions.

Mr. Garamendi, do you have a question?

Mr. GARAMENDI. I will be very, very quick with this.

To Ms. Hersman, thank you for your testimony thus far.

I understand investigations are under way. There will undoubtedly be lessons and information along the way that would inform us about the other high-risk pipelines in the area. I would hope that you would make that information available to California regulators, as well as to the utility companies, so they can immediately address any concerns that you find in your investigation and not wait for the final report.

Ms. HERSMAN. Absolutely. California PUC is a party to our investigation, so they have access to all of the information we are discovering in our investigation.

Mr. GARAMENDI. And the next question: Mr. Porcari, thank you very much for your work for bringing forth a proposed piece of legislation. I have asked the Chairman for a field hearing in California. We have enough pipe in California to keep us busy for a long time.

Specifically, at that hearing, I would like to hear a—or maybe at the October 6th hearing—a full discussion about the role of the Federal Government in setting standards and the implementation of those roles by the various State agencies across the Nation.

And, finally, I think we need to deal with urbanization. It is a major issue. It certainly was the situation in San Bruno. I know it is a situation in other parts of California. Do we need regulations for setback and protecting the public from urbanization over these pipelines?

We are out of time. You can comment in writing and at the next hearing, which I understand may be October the 6th.

Mr. OBERSTAR. Mr. Schauer has a 30-second intervention.

Mr. SCHAUER. Administrator Jackson, please explain what the September 27nd cleanup deadline means. I am very concerned about that deadline being met and the additional residue and oil that will need to be cleaned beyond that.

Ms. JACKSON. Sure, Congressman. The September 27th deadline was in the original administrative order to Enbridge, and it says that all oil and residue must be removed from the creek and the Kalamazoo River. That would include areas like sediment—you know, oil that has entered into the sediments or vegetation.

Obviously, that deadline is in front of us. And I will not speculate because it is an administrative enforceable order that the government has issued to the company. It was done, you know, because we felt it was important to put deadlines in, so people would understand that we were pushing this company to move as quickly as possible.

That being said, they have already passed one deadline, which was the August 27th deadline that all oil be remediated at the site of the actual rupture and leak. And EPA has yet to make a finding as to whether they have completely complied with that. So the de-

termination on whether they are in compliance with that enforceable order is outstanding on both of those counts.

Mr. OBERSTAR. I would ask Mr. Masten and Ms. Scott, do you have any time limitations? Would you be able to return after, I would think it would be after 3:30, around 3:30? Are you available?

Mr. MASTEN. Perhaps I could be. Just an airplane.

Mr. OBERSTAR. What time is your flight?

Mr. MASTEN. 3:45.

Mr. OBERSTAR. Then you are not available.

Ms. Scott?

Ms. SCOTT. I could be if needed.

Mr. OBERSTAR. We will ask you to return at 3:30.

The Committee will stand in recess until after the 9/11 ceremony and resume at 3:30 or as soon thereafter as possible.

[Recess.]

Mr. OBERSTAR. The Subcommittee will resume its sitting when we recessed for the votes and the 9/11 observance. I asked Ms. Scott to remain behind because Members have questions for her. And we will turn to Mrs. Miller, who was next in line.

Mrs. MILLER OF MICHIGAN. Thank you very much, Mr. Chairman.

And, again, Ms. Scott, we certainly appreciate you coming. And I listened to your testimony when you said you became an expert in an issue that you weren't previously an expert in probably, with the horrific thing that happened in Calhoun County therein. I am well familiar with Calhoun County, even though I don't have the pleasure of representing it in Congress. As you know, being the former Secretary of State, been there many, many times. I was through Marshall during the time that this incident was being attended to, et cetera, and had an opportunity to talk to a number of people downtown and around. And I certainly am appreciative of you coming.

You mentioned, though, about the emergency response and whether or not Enbridge—how they didn't contact the county or the consolidated dispatch, that they only were required to notify the National Response Center after the pipeline spill. And I am just wondering if you could flesh that out a bit for me on how you think that could be improved.

I don't know if you heard my comments. During August when we were home, I had an opportunity to meet with the Enbridge officials. And that was one of my biggest concerns, was the communication loop with counties, with the county, with first responders, with emergency management in some of my counties, because I am concerned about the dent in the pipeline under the St. Clair River. And I am going to talk about that when we have an opportunity in the next panel with the fellow from Enbridge.

But, as somebody on the local level, front lines, what was your thought about how the notification process and the notification protocols that are required were followed?

Ms. SCOTT. Sure. I guess our thought is that the county was actually—consolidated dispatch authority, which, again, is separately governed from what I would be responsible at the county. But they indicate that they were notified really only because the individual

from Consumers Energy called 911 and reported that they did actually find oil leaking on the morning of July 26th.

And so, our thought process is, you know, if there was any potential for Enbridge or anyone else who may have been notified sooner to call the county directly, possibly the process of notifying other local officials and/or dispatching the appropriate HAZMAT response and other teams could have started sooner. And/or when we started to get the 911 calls from local residents with the odor complaints that possibly if there would have been any sort of heads-up that there had been, you know, any concerns with pipelines, even though there was no confirmation of a leak, that they may have been able to put two and two together.

And some of that is just hindsight is 20/20.

Mrs. MILLER OF MICHIGAN. Right. You know, in my meeting with Enbridge, I asked them for, you know, the kinds of safety information that they put out. And I have a couple of brochures, which I will share with the Committee. And this is for emergency responders, local public officials. I said, what do you actually send to the first responders? And they were giving me some of this information. And then I said, in my case, who do you talk to, and had them give me a list of all the first responders in my district that, you know, would be interested in the pipeline and who the contact was, et cetera.

But it is interesting, in light of what has happened in Marshall and the attention that has been given even to the dent in the St. Clair River portion of it, that my first responders don't seem to know who to call from Enbridge. And I don't know if that is what happened in your case. But, you know, you are wondering about people, whether or not—who is notifying whom. It is very important that the first responders would have an immediate contact person at Enbridge. And perhaps they did, although I am finding that I don't think that was as clear as it could be to the local first responders.

And I did mention subsequent to that now in 2 or 3 weeks we are putting together a meeting in my district with all of the first responders along the affected area, both on the U.S. Side and the Canadian side. Thank God we haven't had an incident yet. We don't want to have an incident. We are going to be talking about what is going to happen with that dent. But whether this or anything, quite frankly—I mean, you are not going to have enough boom to respond immediately and probably shouldn't have all of that. But you need to know where to get it immediately and have, as I say, the notification protocol, et cetera.

So I would just, sort of, mention that to you. I don't know what your thought is. I mean, are you familiar with getting all these kinds of brochures? I am sure they sent the same brochure to everybody.

Ms. SCOTT. I would think so. And, again, you know, in hindsight, we know now that all of the pipeline owner information is readily available online, the pipeline maps. There are regular—and I don't know how regular—meetings with first responders that specifically meet with pipeline owners.

I think it has more to do with, you know, direct notification and whether it should come from the company or what you are refer-

ring to, which is, do we know who to call? I think they are two different questions.

Mrs. MILLER OF MICHIGAN. Uh-huh.

Ms. SCOTT. And I think, from the local perspective, it would be better to get a direct heads-up from the company and/or, if they call the National Response Center, could they then notify the locals. Because, honestly, we were notified through the 911 call from Consumers Energy.

Mrs. MILLER OF MICHIGAN. Thank you very much, Mr. Chairman. I appreciate it.

And I thank you again for coming to Washington. And we appreciate all of the work that you have done on the front lines and appreciate your testimony here to the Committee.

Ms. SCOTT. You are welcome.

Mr. OBERSTAR. Thank you.

And now the Chair recognizes Mr. Schauer.

Mr. SCHAUER. Thank you, Mr. Chairman.

Kelli, thanks for hanging around. I appreciate it.

Kelli, you live in the community too. And we have bumped into each other at official functions, at even things like high school graduation open houses. And I know you care very much about the county that you serve, and you do it very well.

I want to publicly thank you and all of those who are part of Calhoun County government that have been a part of the response in the overall effort, from the sheriff's department, the emergency response coordinator, the health department, the road commission, and others that I am sure I am forgetting. You are under-resourced and certainly struggling during a tough budget time—you noted that earlier—of declining property values. And the unimaginable happened. And your people have been working almost 24/7, and I want to publicly acknowledge that and thank you for that. And I hope you will take that back from this Committee and from me.

I did want to ask you a couple of questions, sort of, following on what my colleague from Michigan was asking about, was, sort of, do you know who to call?

And my observation was, you know, the 911 calls were starting 9:26 p.m. Sunday night, and then subsequently there were—there are two natural gas pipelines in that area, and they were both out there at different times. There was a mysterious truck that some thought was Enbridge. It was actually Michigan-Indiana Gas, I think, is the company. And then, of course, Consumers Energy was out there.

Do folks locally within coordinated dispatch and so forth, do emergency responders know that—or did they know prior to Sunday July 25th that that Enbridge oil pipeline was there?

Ms. SCOTT. I am told that the consolidated dispatch does have pipeline maps, albeit they were not online on their GIS system. They did have paper information and information about the pipelines.

I guess one point to note is that our consolidated dispatch center did not start operating until March or April of this year. So it is fairly new in consolidation, and so the dispatch operators came from other local communities. I mean, there is that dynamic, as well.

But they did have pipeline maps and definitely dispatched the proper fire response from the local units. And they did go check out and they did, on the record, have conversations about, well, it is not natural gas, it does smell like crude oil, petroleum, something; simply were unable to locating anything. And, again, it was 10:11 p.m. Before they were out there.

Mr. SCHAUER. And I am not finding fault at all with our local responders, but—and this may be, Mr. Chairman, something we have to look at in the law, as far as the local role, that first responders, dispatchers know exactly what that underground infrastructure is and have that emergency contact information. Because, apparently, Enbridge wasn't called until 11:18 the following morning by an official from Consumers Energy. So I think that is something we have to learn from.

I want to just ask you—this is really the big question. You talked about Calhoun County's assets, its recreational assets. And you, I think, asked the question rhetorically yourself, can this community ever be made whole at a time where there are declining property values?

And one thing I want to mention is that people who are being offered the purchase of their home are required to have an appraisal done. That is fair, sounds fair. It is a down market. So if someone's property has been contaminated or they are fearful, legitimately, that they would never be able to sell their home in the future—there are disclosure requirements in terms of selling your home, right? You have to disclose any contamination. So, essentially, they are being forced to sell their home in a down market, a very, very difficult prospect.

Here is my question: Can you even try to estimate the overall economic impact on our community and, you know, whether the company could ever really make the community whole, economically?

Ms. SCOTT. I think I started in my opening statement by saying, at this point, we have more questions than answers. And that is the big question. I think that is precisely why our county commission voted to establish this local task force or authority, where we can garner some expertise from those involved in economic development, we can talk to the economists, we can start to build a baseline for what our economy is right now, some of the indicators that will need to be measured. Because, as you noted, the real estate appraisals are being done according to normal real estate practices and appraisal practices, and the sales are being recorded accordingly.

The county's role in that is, from an equalization standpoint, when we go to equalize property values county-wide, we have to look at sales studies. And so it may not be for, you know, 1 to several years before some of the affected properties get sold and we figure out or we try to estimate what they may have been sold at if there were no oil spill versus what they are really being sold at. If we start to see evidence that businesses are choosing not to come to town, that will be factored in.

But I think we are really committed to a data-based approach to this, where we actually create a baseline, start to measure, and then the cause and effect will still be difficult to calculate. We have



about a \$4 billion tax base in the county. Some of the properties that were affected were not just residences but businesses, as was noted earlier, including at least one golf course that is right on the river that is currently for sale.

So, honestly, it is tough to say. And we still have faith that whatever can be documented and measured as far as economic impact will be made whole by Enbridge.

Mr. SCHAUER. I do have another question. We understand that Enbridge provided the county with a material safety data sheet on heavy oil that provides direct guidance and emergency response and evacuation—or direct guidance for the purposes of emergency response and evacuation. Unfortunately, it is not the real material safety data sheet of what was in the line at that time. The real one, which we obtained, is much more descriptive of emergency response and recommends an immediate, mandatory 1,000-foot evacuation.

Does that concern you, that the county that is responsible for public health wasn't provided that real material safety data sheet? It was provided to the EPA later, but not to the county.

Ms. SCOTT. I do know that what is on our Web site and what we obtained from Enbridge is what was considered more of a generic materials safety data sheet, and that we, from a county health standpoint, we didn't work alone in the decisions to evacuate, that we had the State's assistance, with their toxicologists, the department of community health. And so it is hard to say that, if we would have had different information earlier, you know, would the evacuation process have been different. And, again, that was a very difficult decision, whether to mandate evacuations or to make them voluntary.

That is one lesson learned that we will probably continue to reflect on. I think we did the best with what we had to work with.

Mr. SCHAUER. Well, I am going to answer my own question. It is a concern to me. And it would help you and people like Jim Rutherford, the county health officer, make decisions much more quickly. To have a generic material safety data sheet is not helpful.

This was—I am trying to find the—this is Cold Lake blend heavy oil, including naphthalene as a diluent. The material safety data sheet—and we have it there; that is the real one, as opposed to the generic one—requires mandatory evacuation for anyone within 1,000 feet.

So I think a disservice was done to Calhoun County and a disservice was done to the people that were affected. And that 200 feet that was derived around, you know, safe wells and safe drinking water seems to also be used for the purposes of this company to determine who should be compensated and who should not be.

Ms. SCOTT. I can't argue with that.

I would want to clarify on the issue of the 200-foot buffer, that was specifically only for the water quality issue and the drinking wells, and was strictly precautionary, that there were no drinking water quality issues found by any of the environmental experts.

In effect, the larger red zone that was referred to, which was used for purposes of the voluntary evacuation, was much larger than 200 feet from the river and could have been—and I don't

think we have the measurements yet, but it was closer, if not more than, the 1,000 feet.

So I think that will all need to get clarified. But it is my understanding that the red zone that was developed may actually be in compliance with the one—although it wasn't mandatory.

Mr. SCHAUER. It was voluntary. And that, I think, came 4 days later. Again, I am not finding you or the county at fault at all. You didn't have the information.

So, Kelli, thank you so much. I hope you and your husband get to enjoy Washington a little bit before you fly home.

Ms. SCOTT. Thank you.

Mr. OBERSTAR. Thank you very much, Ms. Scott, for your testimony and your patience all throughout this, waiting throughout this long day.

Ms. SCOTT. Thank you.

Mr. OBERSTAR. Our next witness and final witness of the hearing is Mr. Patrick D. Daniel, president and chief executive officer, Enbridge, Incorporated.

Welcome, Mr. Daniel. Thank you again for waiting throughout this day. I will now administer the oath.

With regard to the testimony that you will provide to the Committee on Transportation and Infrastructure today and all subsequent Committee communications concerning this hearing, do you solemnly swear to tell the truth, the whole truth, and nothing but the truth, so help you God?

Mr. DANIEL. I do.

Mr. OBERSTAR. Thank you. You are sworn in. And we look forward to your testimony. If submit any additional material for the Committee record, it will be received for our hearing purposes. And you may begin.

**TESTIMONY OF PATRICK D. DANIEL, PRESIDENT AND CHIEF  
EXECUTIVE OFFICER, ENBRIDGE, INC.**

Mr. DANIEL. Mr. Chairman, Members of the Committee, thank you for the opportunity to discuss the rupture of Line 6B near Marshall, Michigan.

Mr. Chairman, from day one, I have personally apologized for the mess that we made in Marshall and Battle Creek. Since July 26th, I have made it my personal mission to take full responsibility for cleaning up the spill and addressing all impacts on the environment and on individuals and businesses in Marshall, Battle Creek, and the surrounding area.

For the past 7 weeks, I have met with hundreds of residents, first responders, and government officials. I have participated in numerous public meetings, talked to residents on the street, and visited in living rooms with the families most affected.

The people of Marshall and Battle Creek have been open, they have been understanding, and they have been warm, despite very difficult circumstances. They have offered encouragement. They have shared their thoughts on how we can improve. And even some of our most vocal critics have been willing to sit down with me to work out solutions. They have treated Enbridge and our cleanup crews as neighbors, and we are doing everything possible to be a

good neighbor in return. But nothing short of restoring the area to the satisfaction of regulators and to the community will be enough.

Thanks to the dedication of emergency crews and the 500 Michigan residents that we put to work, the spill was quickly contained and we are now well on our way to remediating it. Throughout, we have worked with local mayors and sheriffs and State and Federal officials. And I thank them very much for working cooperatively with us.

Mr. Chairman, for Enbridge no spill is acceptable. We are committed to upholding the highest standards for pipeline safety and integrity, and we will continue to invest heavily in safety.

I am proud to say that we have approximately 2,200 employees in the United States. We deliver approximately 12 percent of the total daily imports of crude oil into the United States. That is more than Venezuela, Saudi Arabia, or any other country.

Even though we built our business in the oil and gas industry, we are also investing heavily in green energy, including seven wind farms and North America's largest photovoltaic solar facility.

Now to Line 6B. Upon confirmation of the release of oil, the pipeline was isolated. Crews began installing containment boom that is stored in Marshall, Michigan. Teams from our regional offices throughout North America arrived that day, and I arrived that night. We mobilized as quickly as we could so that anyone affected would have housing and medical care at our expense. We provided direct assistance for prepaid hotel stays, equipment, and services. We reimbursed individuals for cost-of-living and other expenses. And we established a home purchase program.

In doing so, we sought to establish a fair, reasonable, and efficient process with as little bureaucracy as possible. Even though we believe the process that we put in place was fair, we recently engaged former Michigan Supreme Court Justice Dennis Archer to evaluate the claims process and to make recommendations.

Before closing, I would like to talk about the recent spill on Line A in Romeoville, Illinois, and then about an issue of particular interest to Representative Miller.

On September 8, a leak was discovered on our Line 6A in Romeoville. We also understand there was a leak in an adjacent water main. Our line was immediately shut down and the oil contained. Nearly all of the oil has now been recovered. The cause of that line break is under investigation by the NTSB.

With respect to the St. Clair River dent, an internal inspection in August of 2009 indicated the existence of a dent in Line 6B where it crosses under the river. Because that site is very difficult to access, we immediately lowered the operating pressure to 50 percent of maximum allowed pressure to be conservative while we completed a comprehensive engineering assessment.

The likelihood that that dent will cause a leak is very remote. It is smooth, without evidence of corrosion or cracking. The pipe at that point is twice as thick as normal and is protected by concrete and engineered gravel. Nonetheless, Enbridge is committed to replacing or repairing that segment of pipe, and we will submit our proposed plan to the regulator by the end of this month for doing that.

In conclusion, Mr. Chairman, let me reiterate that for Enbridge no spill is acceptable. We understand that we must hold ourselves to the highest standards of openness and care in the communities where we operate. We have been serving America's energy needs for 60 years, and we intend to be a good neighbor for decades to come.

Thanks again for the opportunity to share our perspective.

Mr. OBERSTAR. Again, thank you for being with us. I know it is in your best interest to be here and to be open and accountable.

And you have noted the very considerable efforts made locally to make people whole, but you also heard the testimony earlier today by the families and the victims of the aromatic hydrocarbons, benzene and other vapors that caused illness, caused disorientation, severe problems for residents; the business owner whose assortment of carpeting was so infected by the spill vapors that they had to shut the business, couldn't sell product.

You have a huge hill to climb to make communities whole again, to make individuals whole again. And your statement makes it clear that the company will do so. And I took special note of your comment, no spill is acceptable.

And yet, when we took testimony prior to this tragedy, Mr. Adams, Richard Adams, vice president of U.S. operations for Enbridge, testified, quote, "Our response time from our control center can be almost instantaneous, and our large leaks are typically detected by our control center personnel. They can view that there is a change in the operating system, and there are provisions that, if there is uncertainty, they have to shut down within a period of time, and that would include the closing of automatic valves."

And yet this spill went undetected for, or unresponded to, a very long period of time. That is a serious departure from the testimony that was given by Mr. Adams. And it is something that should have been acted on, as he said, almost instantaneously.

I gave the example of the spill in the Koch oil pipeline in my district, in Little Falls, just outside of Little Falls, where within half an hour the line was shut down. And within minutes of seeing the anomaly on the screen in their headquarters in Oklahoma, the company was beginning to take action. They got a call from the sheriff's department. They didn't wait hours or days.

Why did it take so long to shut off that pipeline? Why were there not proximate shutoff valves both up- and downstream of this spill to prevent this huge loss of product and its consequential environmental as well as human effects?

Mr. DANIEL. Mr. Chairman, as I indicated, absolutely no spill is acceptable, and this is, by far, the worst spill we have had in the history of our company. We are currently working very closely with the NTSB, as indicated earlier, to find out exactly the cause, to go through the timeline to find out what the cause of the leak was. We have our own independent investigation under way, as well. We are working as a participating party with the NTSB. As you know, they have the pipe in their lab.

We want to find out more than anyone else why that pipe failed and all of the circumstances leading up to it. So we are working very hard on doing that.

Mr. OBERSTAR. But you didn't answer my question. Why was that—where is the nearest shutoff valve?

Mr. DANIEL. The nearest shutoff valve is just upstream at Marshall station. So, as soon as we were notified of the leak, the shutoff valves were closed.

Mr. OBERSTAR. How were you notified, though? Don't you have your own internal company monitoring systems to detect a drop in flow?

Mr. DANIEL. The leak was first brought to our attention, as indicated by NTSB earlier, at 11:16. We shut the system down, and we had confirmed by 11:45 that that leak had occurred.

Mr. OBERSTAR. But you didn't have an internal control system to tell you that it had failed?

Mr. DANIEL. Chairman, the pipeline was shut down overnight, and that was part of normal operating practice. It was not operating. And it was when they tried to start the pipeline up that the leak was notified.

Mr. OBERSTAR. Now, you were notified of and reported defects that total up to 329 defects in this segment of pipeline, but asked the agency, PHMSA, for time to reduce the pressure, rather than immediately act to cure those defects. Why did the company take that decision?

Mr. DANIEL. Mr. Chairman, the normal process that is used in inspecting a pipeline, as you know, is to run internal inspection tools through the line looking for corrosion, looking for cracks, or looking for geometric deficiencies in the pipeline.

Even a brand-new pipeline will have a certain number of anomalies in the pipeline or effects. And then what you normally would do would be to track those over time. And, as a result, we have a very extensive program for doing that inline inspection and tracking of those. It doesn't mean that every anomaly would require repair. They do over time. And we were in full compliance with that repair criteria.

Mr. OBERSTAR. But your supervisory control data acquisition report in response to the questions, did your SCADA, your control and data acquisition report, did its information, such as alarms, alerts, events, and volume calculations, assist with detection of the accident? And the company's response was "no." So you are saying that your own internal operational control systems were not supportive, were not operational.

Mr. DANIEL. Well, that is all part of our investigation in conjunction with the NTSB as to the exact cause and the timing of events that led up to the incident.

Mr. OBERSTAR. In August of last year, an internal inspection showed that a dent existed in the pipe where it crosses the St. Clair River, something Mrs. Miller is very concerned about. But your company analysis report that we have, the Committee, had likely been there for 40 years. Why it was not discovered prior to that time? Why was it not inspected? Why haven't you done something about it?

These kinds of incidents, that the numbers of defects that are discovered in the line and on which action is not taken, are serious failures in safety management.

Mr. DANIEL. And, Mr. Chairman, with regard to the dent under the river, as you are indicating, it was confirmed in August of 2009, and it was confirmed to be a smooth dent. And the reason why it was detected and confirmed in 2009 was as a result of the progression in technology for inline inspection that has occurred over the years.

And the analogy that I have used with many people is that we have gone through a similar progression as the medical profession has, from X-Ray to CT to MRI. Our technology keeps getting better. And in 2009 the nature of this feature was identified as a smooth dent with non-injurious indications.

We immediately did a full engineering assessment, with both crack and corrosion detection, to make sure there were no injurious impacts on that smooth dent. But even at that, we reduced the pressure to 50 percent to be extra cautious while we put the repair replacement program in place.

Mr. OBERSTAR. For how long a time would you retain reduced line pressure?

Mr. DANIEL. We will remain at reduced line pressure until that line is either repaired or replaced. And we will have the repair replacement program filed by the end of this month with the regulator.

Mr. OBERSTAR. Thank you.

I will now turn to Mrs. Miller.

Mrs. MILLER OF MICHIGAN. Thank you, Mr. Chairman. And I am just going to follow right up on what you were just asking about, in regards to the reduction of the pressure because of the dent.

Now, I am not going to ask you, Mr. Daniel, any questions about the Marshall, Michigan, spill because my colleague, Mr. Schauer, is well prepared to do that. But I am going to focus on the dent, since it is my district and I am very interested in that. And I would appreciate the staff putting up the overhead so everyone can see again why I have such a big interest in what the dent means.

But just in the previous panel we had Deputy Secretary Porcari, who testified that—he said PHMSA knew about the anomaly, the dent, since 1978, is what he said. And now you are indicating you didn't know about it until August of 2009. What is the discrepancy there?

Mr. DANIEL. Congresswoman, my understanding is that—and I believe last week when our people met with you, they indicated that anomaly most likely has been there since the line was installed, as indicated earlier. It wasn't clearly identified as to what the nature of the anomaly was until August 2009 when we filed that with the regulator.

Mrs. MILLER OF MICHIGAN. Now, in regards to the flow and the reduction by 50 percent in an abundance of caution, I suppose, additionally you were asking for a 2-1/2-year waiver to continue that flow; is that correct, at 50 percent?

Mr. DANIEL. I must admit I don't know whether there was a 2-1/2-year request on that. But I do know we will be filing by the end of this month with a plan to repair or replace it.

Mrs. MILLER OF MICHIGAN. Could you talk a little bit about the possible remediations for that dent?

And when you file your plan at the end of this month, again, as we are looking at that pipeline, which is the red for those that are looking at the overhead there, and the dent, which is identified close to the U.S. side, about 300 feet offshore there, that is about maybe 30, 32 foot of water, depending on the water levels, I suppose. And the pipe is 15 feet below the riverbed, as I understand it. And then it is, as you mentioned, encased in concrete, pea gravel, whatever your construction techniques were all those many years ago. And the pipe, if I am not mistaken, is 30 inches, and it is a half-an-inch thick. So it is thicker than you would normally have.

Mr. DANIEL. Yes.

Mrs. MILLER OF MICHIGAN. And the dent is 12 inches long and almost 7 inches wide. So however the dent got there, it is very difficult for us to understand how could you have had a dent after the construction of the pipe. So perhaps it did happen during the actual construction. I mean, the freighters going through, even if they were dragging an anchor, how are they going to dent a pipe that is under concrete, et cetera? It doesn't make sense. So, I appreciate that.

Now, your fellows, your staff was telling me that you have got three different possible remediation plans. And one of them would be to—and I guess I am asking you to correct me if—I am trying to understand what you might be suggesting at the end of this month.

One of them would be to drill under the river there and replace that section of the pipe. And I mention that that would immediately set off a lot of alarms, I think, just because, from an environmental standpoint, I mean, everybody in the Great Lakes Basin is just up in arms about any kind of drilling under the Great Lakes for gas or oil, although that is not what you would be doing here.

Mr. DANIEL. Right.

Mrs. MILLER OF MICHIGAN. Still, you can think about the public's concern about that. I am not quite sure how long the permitting process would—I mean, just the public hearings on that alone. But I am sure there would be a lot of debate about that.

And, secondly, that you would, as I say, replace that portion of the pipe, as was explained to me, which would necessity possibly actually closing the shipping lane there. And the Chairman is well aware of what a critical component the shipping is of not just Michigan but the entire basin. And so there would be, obviously, a lot of hesitancy about that.

And then again, with this 30-inch pipe, it was indicated to me that one of your remediation plans and possibly what you would be recommending would be that you would actually insert then a different, maybe a 21-, 22-inch, I forget, pipe inside that section, which would seem to me, as a layman, to be the easiest.

Now, I don't know if that is what you are going to be recommending. I don't know, if you do recommend that, what that means to you monetarily. I don't know what the psi is there with that, as opposed to the 30-inch. I don't know how much you—can you pump enough oil to continue to do what you need to do for your company? I am not sure.

I guess those are my questions. I know you are going to be answering us in a couple of weeks, but can you tell us a little bit about some of these things as you are going through your decision-making process?

Mr. DANIEL. Yes. Well, I can briefly outline that, Congresswoman. And, again, I have been so focused in Marshall over the last 7 weeks, myself, that I have not been through those three engineering alternatives in detail.

But you are right, those are the three different alternatives. And we will be assessing every part of each one of those, as you indicated.

The total replacement of the line involves boring under the river. And you are absolutely right that the permitting process is probably the biggest challenge there, because it is a very congested area and it will take time to get permitting and room in order to be able to do that.

Mr. DANIEL. So that option is being evaluated.

The one of pulling the smaller pipe through is certainly one that, on the surface, seems to work very well. It sometimes creates challenges with regard to cathodic protection of a pipeline, when you have a pipe within a pipe. So we are assessing that, as to whether that will lead to further problems down the road.

But those are the three alternatives that we will work our way through, and we will put forward at the end of the month the recommended one with the other two alternatives. And, believe me, our interest is in the safety of the line, and the cost is not relevant. We will do whatever is right.

Mrs. MILLER OF MICHIGAN. With the Chairman's indulgence, if I could just ask one final question.

Mr. OBERSTAR. We will continue for another couple of minutes, and then I will call on Mr. Schauer, and then we will come back to you after that.

Mrs. MILLER OF MICHIGAN. OK. I will just ask one final question.

Mr. Daniel, one of the things that we have in that immediate locale, although you can't see it from the overhead, but slightly upstream from that is the largest concentration of petrochemical plants in our hemisphere, I think, perhaps next to New Jersey. So we have had a lot of incidents, unfortunately, with chemical spills over many, many decades.

And, as a result of that, in the last several years, we have installed now a real-time water quality monitoring system, which has been located now—there are seven water intake pipes along the St. Clair River. One of them is just a football field from that dent, in Marysville. And then we have now extended that through Lake St. Clair, all the way down the Detroit River into Lake Erie.

And I mention this because notification has been a big topic of concern today. And by having this system, we have all the water plants sampling every 15 minutes. And they are sampling for 28 different types of whatever, whether they are sewage contaminants, various types of things, you know, polymers, whatever might come out of there.

And it is interesting, since we have put these in place, I don't know if it is serendipity, coincidence, now that all the chemical plants know that we are going to know when it happened and



where it came from, guess what? Almost no more chemical spills. It is really been a wonderful thing.

However, I was just notified today, the Macomb County—which is right downstream from there—Water Quality Board apparently had a meeting last night. And your company was represented there. And they were asked by the County Water Quality Board to participate in a public-private partnership, financially. They asked you for some financial assistance to continue this monitoring system.

And I would just urge you to consider the request that came from the Macomb County Water Quality Board because it is a very, very important thing. And notification is absolutely optimal. And it would seem to me almost in your best interest, as well.

Mr. DANIEL. Yes.

Mrs. MILLER OF MICHIGAN. So I just ask that, as well.

And, Mr. Chairman, I thank you very much for your indulgence and time. Thank you.

Mr. OBERSTAR. It is a very, very important subject nationally and especially for Michigan, where the tragedy has occurred.

I will now call on Mr. Schauer, but ask the gentleman to take the Chair while I step out for some other Committee business.

Mr. SCHAUER. [presiding.] Thank you, Mr. Daniel.

This gives me no joy, to go through this process. I would much rather be spending time helping businesses create jobs, helping communities grow and be healthy. But I remember when we first met—I am sure you do, too—was at the cafeteria at Marshall High School, and you asked me to hold you to the highest possible standard. And that is what I am doing.

I want to touch a little bit more on the question of 329 known defects. And I want to add to that—well, these are additional known defects on top of the 329 that were unrepaired, such as that at milepost 608 in Marshall, south of Marshall. That didn't meet PHMSA's threshold.

We know that you had been operating under reduced pressure for a year while considering what to do about them. And we know that, 10 days before the incident occurred, your company had asked for an additional 2-1/2 years to consider what to do. That doesn't give me great confidence.

And I hear your statements about safety being the number-one priority, but here is the question: When are you going to repair these defects?

Mr. DANIEL. Congressman Schauer, the repairs are under way. And we have had a very active dig and repair program through the summer this year. As a matter of fact, there were dig and repair work programs under way in the Marshall vicinity at the time of the leak.

So we established with PHMSA those defects that did require inspection. We are in the process of going in, digging up each location to determine whether there was a defect. If no defect was present, then we didn't do anything. If there was a defect that met the repair threshold, then those repairs were made.

So that program was under way at the time and continues to this day.

Mr. SCHAUER. Now, for all 329 identified and unrepaired defects within Line 6B, you are telling me that all 329 were under the process of repair or inspection to determine if repair was necessary?

Mr. DANIEL. No. Sorry if I misled. Not all simultaneously. We started a program of going in and inspecting those defects in the line and doing the repairs in an orderly fashion. But, no, obviously, not all simultaneously. I didn't intend to say that.

Mr. SCHAUER. So when will they all be repaired?

Mr. DANIEL. Well, that is something that we are working on with PHMSA on exactly what the timeline needs to be for the repairs. As you know, we reduced the pressure in the line while we were going through the repair program and as a result of just having done the hydro test on one section of the pipeline. Then we will start up at further reduced pressure going forward.

Mr. SCHAUER. Well, I am sure you know that I have asked PHMSA and the Department of Transportation to make sure that every inch of that pipeline is inspected and every defect is repaired. I have said it at the community meeting in Marshall, with you present, that I have no confidence that Enbridge can operate this pipeline safely, certainly not until all of those defects are taken care of.

I want to talk to you about, you know, a vendor you have used for inspections back to the 2007 inline inspection. And I mentioned this earlier to Secretary Porcari about a vendor reported back to you in April of 2008, and a revised report was—in which it indicated a number of these defects. A revised report was issued in September of 2008, a third revision in December of 2008, and a fourth revision to the report in May of 2009.

Why did this occur? This goes directly to discovery and to decisions that need to be made about these defects. That seems to be a game where the can is kicked down the road. That was a year's time that delayed the possibility of any repairs.

Mr. DANIEL. Congressman, my understanding is that, as a result of running the inline inspection tools through the line, there is a very large volume of data generated because it does a millimeter-by-millimeter analysis of the wall thickness and any defects in the pipeline.

And I believe, if I am understanding your question correctly, that the delay was with the vendor as a result of the time taken in order to inspect all of the data, the huge volume of data that they get back from these runs.

Mr. SCHAUER. Can you explain why your company asked for an additional 2-1/2 years on top of the 1 year you were operating under reduced pressure? If safety is your number-one priority, why were you not committed to making repairs rather than operating for another 2-1/2 years on Line 6B under reduced pressure?

Mr. DANIEL. Well, the program was one that was agreed to with the regulator. And by reducing the operating pressure, reducing the likelihood of any failure in the pipeline while it was undertaken as a result of the disruption associated with the digging program. But that was with the regulator.

Mr. SCHAUER. I want to be clear. You are not saying that the regulator had approved an additional 2-1/2 years, are you?

Mr. DANIEL. I am sorry, I can't answer that. I don't know.

Mr. SCHAUER. No, they had not. They had not. That was a request that was made 10 days before the spill occurred. It was July 15th.

I also want to ask about—you know, you sent a worker to the site about 9:41 in the morning on Monday, July 26th. Drove around, I am not sure he got out of his car; he said he could smell nothing. Everyone in the area stated that there was a very strong smell, almost stifling.

What was your person doing out there?

Mr. DANIEL. Well, the individual, I believe, was part of the normal operating crew. We have, I believe, 8 or 10 people at the Marshall station. But I can't speak to the specifics around any action he was taking at that time. He obviously conducted the inspection as requested.

Mr. SCHAUER. Just one more note on the operating under—your pipeline was operating at 80 percent of pressure. That is a pressure reduction. It had been for a year. And, again, there was a 2-1/2-year extension requested that had not been approved.

This accident, this—I don't know if you saw the pipe yourself. I did. It is a 6-1/2-foot-long rupture. The pipe tore open. Why should the people of Calhoun County or the people of Michigan have any confidence that your policy of operating under reduced pressure, including under the St. Clair River, actually is safe?

Mr. DANIEL. That is exactly what we want to find out from the NTSB investigation. And it is very important—in fact, more important to me than anyone else—that we find out, as a result of the metallurgical work that is being done with that pipe now in lab, as to exactly why it failed. And we are party to that investigation. We will also be conducting our own investigation.

But it is very important that we find out why it failed. And, at this point, as indicated by the NTSB earlier, we don't know why it failed.

Mr. SCHAUER. Well, I want to again remind you that there were 329 defects, plus this one, that hadn't met the threshold. The preliminary data—I didn't get a chance to ask Chairman Hersman to talk about it—was there were signs of corrosion in that line.

Chairman Oberstar talked extensively and asked you about your control room. You say you have trained people. I have talked to the NTSB about their findings. They have been there. There were alarms going off for 13 hours, all different varieties. Why couldn't they figure it out?

Mr. DANIEL. That, once again, is part of the investigation with the NTSB. And as they indicated earlier, we are in a preliminary stage of that. But, believe me, we want to know more than anyone. And we are conducting our own internal investigation, as well.

Mr. SCHAUER. I mean, can you understand why 10 days after that Vice President of U.S. Operations Richard Adams quote that Chairman Oberstar read to you about the control center and the ability to detect the smallest of leaks, why I don't have very much confidence?

Mr. DANIEL. I certainly want to understand the cause, and more so than anyone else. And it is very important for us to get to the bottom as to why that piece of pipe failed. So, yes.

Mr. SCHAUER. I want to talk about claims for a minute. Has Enbridge established levels of compensation for certain claims? We have heard of inconvenience claims. Does Enbridge have some sort of set amount that they offer people for inconvenience of harming them due to the pipeline rupture? For example, in this kind of situation, this person would get this much, and in this kind of situation, they would get that much.

Do the amounts \$210 and \$105 mean anything to you?

Mr. DANIEL. With regard to the latter part of your question, no.

But with regard to the first part, yes. Depending on the level of impact, if someone was in the direct impact area along Talmadge Creek, for example, where their property backs onto the creek or onto the river and therefore they had the cleanup crews and trucks often working through the night, their level of inconvenience payment and impact would be quite different from somebody who was maybe miles away but was inconvenienced because of roadblocks and traffic. Still both were inconvenienced, but at different levels.

Mr. SCHAUER. I will have you look at this quote from your spokesperson, Terri Larson. She has been in the newspapers a lot. "Enbridge was encouraging people most affected by the spill in the red zone to sign the full and final settlement release for \$210 dollars per adult in the household and \$105 per child."

I wonder if can you comment on her statement. That seems to be new information to you. Do you have knowledge of this?

Mr. DANIEL. I am not aware of the level of those settlements, no.

Mr. SCHAUER. So do you think \$210 per adult and \$105 for a child is fair compensation?

Mr. DANIEL. I don't think it would be fair for me to comment, not knowing the circumstance.

We have established what we think to be a very fair process with regard to claims. And it is very important, as you know, Congressman, as I have indicated before, that Enbridge feels that it should not be necessary to sue Enbridge to recover costs. And we want to be able to settle with everyone involved in this incident.

In order to make sure that our process is fair and perceived to be fair, we have arranged to have the former mayor of Detroit and a member of the Supreme Court of Michigan, Dennis Archer, come in to do a review of our claims process to ensure that it does meet those requirements.

Mr. SCHAUER. Now, a representative of your company, someone named Meredith, was contacting witnesses leading up to this hearing. I mentioned that earlier. Some of them mentioned that, as well. And I hope that, after their testimony, your company plans to live up to those commitments that were made to them.

Mr. DANIEL. Any commitments that we have made we will live up to. Obviously, we—by the way, as you know, I have met with many of the individuals that were on the panel earlier. I met recently with them in Ceresco. And we continue to work with them to ensure that we address their needs.

Mr. SCHAUER. I want to ask about the medical release forms. I think we have that that we are going to pull up on the screen.

Now, Mr. Daniel, is Enbridge a health care provider?

Mr. DANIEL. No, we are not.

Mr. SCHAUER. OK. How about a health care plan, health insurance plan, a health care plan?

Mr. DANIEL. Well, we have health care for our employees, a health care plan for our employees, but—

Mr. SCHAUER. OK. Or a health care clearinghouse or involved in the health care business in any way?

Mr. DANIEL. No.

Mr. SCHAUER. OK. The reason I am asking is because those three entities are the ones that are subject to HIPAA, not Enbridge. It is not only an infringement on people's rights, but it is borderline fraudulent. The top line alone of your form—it is very hard to read here—says, quote, "Authorization for release of medical records pursuant to 45 Code of Federal regulations (HIPAA)," end quote, leading people to believe that this is somehow required by Federal law. Every person we interviewed told us they thought they had to sign it—we have heard that here—in order to obtain care.

Now, what are you doing about this form and about the forms that were already signed?

Mr. DANIEL. Congressman, once again, we set up a process that we felt that was very fair and reasonable with regard to medical claims and care, very similar to the claims process that I mentioned earlier. It was very important to us that, for those that could afford to go to their primary care provider, that they do that and that we would then reimburse them. In the cases of those who could not afford to go and prepay, we then made arrangements with a family health center such that they could bill us. And, therefore, those individuals seeking health care didn't have to go through us.

The health claims—we made it known to all individuals they would have to take their health records with them to get service with the health care provider.

Mr. SCHAUER. But do you understand what this form does? I am not sure that you do. This is a blanket form. And, typically, health care providers—physicians, doctors, health insurance companies—offer it to patients to sign. They are not required to sign it. And what it does is it provides for confidentiality of sharing of medical records for medical purposes.

This form gives you access, your company and oil pipeline company, to one of these individuals, a person who has no health insurance—that is why they are coming to your person and getting screened and authorized by a non-medical person in one of your claims offices—this gives your company access to all of their medical records. Do you think that is appropriate?

Mr. DANIEL. We have no need or interest in the medical records of individuals, Congressman. I can assure you of that. All we have tried to do from the outset was to set up a system that was very responsive to the health care needs of the individuals. And that is one of the reasons why we have asked Dennis Archer to come in to review it, to make sure that the process is very fair and acceptable.

Mr. SCHAUER. So have you stopped the use of this form?

Mr. DANIEL. I don't know that offhand. I can get back to you and confirm that.

Mr. SCHAUER. Well, and I also request—and I think I requested this in writing—that you rescind all of those that have been signed. Would you agree to do that?

Mr. DANIEL. Yes.

Mr. SCHAUER. Thank you.

Just a couple of other questions. I am very concerned about the report of illegal aliens, undocumented workers, working on the site. Now, your testimony talked about—this was page 5 of your written testimony: “Our contractors are continually required to comply with all laws, and that includes that their workers are fully documented and qualified.”

Now, if it was a newspaper report, maybe it is true, maybe it is not true. Even an online publication, maybe it is true, maybe it is not true. But there were reports of one of your subcontractors, Hallmark Industries, that works for one of your contractors, Garner, that, first of all, bused workers from Texas. And I will remind you the unemployment rate in Michigan is 13 percent. And we have HAZMAT-trained workers and those that are prepared quickly to go through HAZWOPER certification.

So the first question—you can answer or not—is why your subcontractors are busing people up from Texas. And there are questions whether they actually were certified to do this work and whether they were provided to do the proper safety equipment.

But they fled back to Texas, loaded their busses, went back. You claim the contractor subsequently decided to terminate the contractor. These buses were raided by a sheriff in Texas, and, of those who ran, a number of them were caught. Forty-two of them were illegal aliens, undocumented workers.

So, you know, you are under oath. Is your written statement accurate? Your spokesman, Terri Larson, has said that is what you do. You obviously don't. It is of grave concern to me.

Mr. DANIEL. Contractors, Congressman, are bound to represent to us that they have complied with all laws. And when we heard of this—and I heard of it probably the same way you did, through the media—we approached our contractor, and they terminated the subcontractor. We had not hired the subcontractor directly; we had hired the contractor.

Mr. SCHAUER. Would you admit that you are responsible for all contractors working for you, contractors and subcontractors? Isn't that your obligation?

Mr. DANIEL. We do require that all contractors represent to us that they have complied with all of our rules and regulations.

Mr. SCHAUER. It didn't work out very well. I contend you have an obligation, and you have an obligation to actually do it.

I want to go to the other release form that Chairman Oberstar and I wrote to you about and wrote the U.S. Attorney General. It is this release/full and final settlement form.

The first one I want to show you actually is signed by your vice president of finance, Mark Maki. It has been redacted. They were paid \$206.40. And then at the bottom, note their addition. It says, “They”—I am assuming that means your company—“will not give me my money back. No longer in motel. Returning home without me doing this settlement. I don't agree with this.”

So they don't agree with this form. This, apparently, is a requirement for them to receive payment apparently for a hotel. Can you comment on this practice by your company?

Mr. DANIEL. Congressman, the intent of our claims process was never to cause people to sign releases for expenses incurred. And we have gone back through our records, have found out that, with the hundreds of claims processed, there were, I believe, 36 where that was the case. We have contacted all, and we have indicated that we will relieve them of the release that was signed. That should not have been done. That was not our intent.

Mr. SCHAUER. So you have changed your policy. So this person will have this form rescinded, then?

Mr. DANIEL. If that was for expense only, yes, that would be the case.

Mr. SCHAUER. OK. And similarly for this person with the \$40—not sure. It says, "Plus air purifier." They were apparently given \$40 for something, then got an air purifier.

So that one would be destroyed or rescinded, as well?

Mr. DANIEL. I am sure, again, if that was expense only, that it will. And I understand, Congressman, that there was one case where someone signed a release for an air purifier, and, again, that was inappropriate. For expense or something like an air purifier, there was no intent in the original design of this claims process for a release to be signed.

Mr. SCHAUER. My concern about this form is that it releases—and I am not an attorney—but it releases your company from all liability—"from and against all liability, claims, action, causes of action, costs and expenses, including without limitation claims for personal injuries, property damage that claimants ever had, has, or may have against the Enbridge Released Parties, whether known or unknown, related to the event."

So you are using this under some circumstances, or are you completely ceasing use of that form?

Mr. DANIEL. The medical release portion of that we have discontinued using.

Mr. SCHAUER. Now, both of these forms I have been talking about, this release of medical records and this liability waiver, have they been used for other accidents, other Enbridge spills?

Mr. DANIEL. Not that I am aware of.

Mr. SCHAUER. OK. So you have 83 alone in the Lakehead system in the last 8 years. So you are saying that this is new to Calhoun County.

Mr. DANIEL. Congressman, this is by far the worst spill we have had in the history of this company, and, hence, it is unprecedented in our history.

Mr. SCHAUER. My concern is, you seem like a very nice person, but your words and your sentiments and the actions of your company just haven't matched up, from the July 15th testimony of your vice president about the impeccability of your leak-detection system, of your decisions about how to operate and maintain the pipeline itself, to how you have treated some of my constituents. These are my neighbors. These are my neighbors.

What was your company—and I am not a corporate lawyer, an expert on corporate structures. But for the entirety of your Enbridge businesses, what were your company's profits last year?

Mr. DANIEL. Enbridge, in total, had profits in the range of \$800 million. That is Canadian dollars.

Mr. SCHAUER. \$800 million.

Mr. DANIEL. Yes.

Mr. SCHAUER. And you have in your testimony talked about the amount of money you have actually spent in maintaining your pipeline. It just gives me pause.

I appreciate you coming. I am sure this is difficult. But this Committee has a job to do, and not just to learn from this but, as Chairman Oberstar said, to hold your company accountable for what happened, its actions.

You know it, you have been meeting with people, you heard them here: This is a community that has been turned inside out. You have spread some good will in the community. I acknowledge that.

But I will ask this as a question. How can you keep your promise? I am giving you the benefit of the doubt. I think you mean it. But how can you keep your promise to make sure that this community is made whole?

Mr. DANIEL. Congressman, as you know, I have been primarily in Marshall, with the exception of 2 or 3 days, since the 26th of July. I am personally committed and our company is committed to doing everything that we can to make up to the people in Marshall and Battle Creek for the mess that we made. We are working very diligently to meet the September 27th deadline for cleanup of the spill, in conjunction with the EPA and all of the coordinating agencies.

But we are going to be there long after that. We have been in the community for 41 years, and these are our neighbors as well. And they will be our neighbors for decades to come. And you have my commitment that we will be there to make your constituents happy that we have done the right job.

Mr. SCHAUER. Well, I think there will have to be long-term relationship, because, as I said to Calhoun County Administrator Kelli Scott, I don't know how we calculate a further reduction in property values, a loss of recreational use of the Kalamazoo River. It is a very vibrant river. People canoe, fish. And believe it or not, in my community—and it is somewhat economically distressed—there are people that fish and feed themselves from that river. I don't know what kind of accountant we would need to find to calculate the real financial cost.

I think all of us wished that we had not met, because that would have meant that your pipeline had never ruptured. But I want to remind everyone here that this should never have happened. And the result was a million gallons of heavy, heavy crude oil spilled into the Talmadge Creek and Kalamazoo River.

To put that into perspective—this is your business, so I am sure you can relate to this. As our Nation watched the BP spill, weeks and weeks and months and months, it was 200 million gallons of oil. This is about one-two-hundredth. Think about that. One-two-hundredth the amount of oil dumped into the Kalamazoo River as was spilled into the Gulf of Mexico, one-two-hundredth.



I will conclude by asking for a commitment from you. In good conscience, I am not confident in your pipeline, pipeline 6B. The evidence will not allow me to be confident or have faith that you can safely operate your pipeline. I am asking for your assurance that you will not restart this pipeline until it is absolutely safe. Will you make this commitment to this Committee?

Mr. DANIEL. Congressman, we will not restart this pipeline until, not only do we deem it to be safe, but also the regulator deems it to be safe. And you have my commitment.

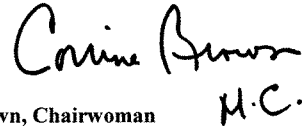
Mr. SCHAUER. Thank you.

I don't think I have any further questions. Mr. Daniel, you are excused. Thank you.

Members of this Committee will have 14 days to revise and extend their remarks.

And the Committee hearing is now adjourned.

[Whereupon, at 5:07 p.m., the Committee was adjourned.]

Handwritten signature of Corrine Brown in black ink, with "M.C." written below it.

Statement of the Honorable Corrine Brown, Chairwoman  
Subcommittee on Railroads, Pipelines, and Hazardous Materials  
Full Committee Hearing on the Enbridge Pipeline Oil Spill in Marshall, Michigan  
September 15, 2010

I want to thank Chairman Oberstar and Ranking Member Mica for holding today's hearing on The Enbridge Pipeline Oil Spill in Marshall, Michigan. This is a very timely hearing, as we are unfortunately experiencing a high level of pipeline accidents that have caused significant death and destruction.

Sadly, much like BP and the spill in the Gulf, Both Enbridge and Pacific Gas & Electric (PG&E) have a history of safety violation, and planning and resources following the accident were adequate. It also appears that like BP, Enbridge has pressured local residents to waive their right to seek damages caused by this accident. In my opinion, these

incidents have made it clear that self regulation is not working in the pipeline industry.

Our Railroad and Pipelines Subcommittee has held a series of hearings concerning pipeline safety and has found significant problems with reporting and inspections, as well as an unhealthy relationship between the pipeline industry and the agencies regulating them.

Moreover, much like the sewer and water infrastructure in this country, much of the pipeline infrastructure is reaching the end of its useful life, and we are going to need to make significant investments in improving these assets if we are going to accomplish the goal of protecting citizens

from the dangers of hazardous pipeline spills and deadly explosions.

We also need to develop new technologies and strategies for improving safety in high populated areas that are now located above these aging pipelines.

With the high unemployment rate this country is currently facing, we should be hiring and training inspectors and putting contractors to work replacing this aging pipeline infrastructure in the U.S. Gas and oil companies are making record profits, while the infrastructure that brings their products to market becomes more unstable and more dangerous.

I hope that those testifying today will have some good ideas about how we can prevent future accidents and what Congress can do immediately to improve the safety of the nation's pipeline infrastructure.

With that, I want to welcome today's panelists and thank them for joining us. I look forward to hearing their testimony.



**OPENING STATEMENT OF REP. STEVE COHEN**

Committee on Transportation and Infrastructure

“Enbridge Pipeline Oil Spill in Marshall, Michigan”

September 15, 2010

I am pleased to be here today to receive testimony from Administrator Jackson, Deputy Secretary Porcari, Chairman Hersman, victims of the Enbridge Spill, and our other distinguished guests regarding the horrific pipeline spill that occurred this July in Michigan.

This spring and summer has been an elucidating period for the American people. Every day the American people are subjected to countless green washing commercials that celebrate the oil industry for their commitment to environmental stewardship and protection. These convincing commercials flaunt the company’s “perfect” environmental record and express a sincere interest in moving beyond petroleum. But this year, the veil has been lifted and the American people have seen the true nature of the industry – cavalier, reckless, greedy, and filthy.

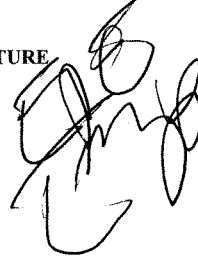
Perhaps no company rivals these negative attributes as much as Enbridge does. The recent pipeline disaster in Michigan is only one incident in a long line of displayed negligence. In fact, since 2002 Enbridge and its affiliates have been responsible for 163 pipeline incidents. We can no longer afford to destroy America’s communities and natural environment in an effort to satiate the oil industry’s unquenchable thirst for profits. We must exercise more oversight and cannot expand our pipeline network until we can safely operate our existing network. In particular, I would strongly recommend that we do not permit the construction of the nearly 2,000 mile Keystone XL pipeline, which has the potential to reap significant harm on communities and wildlife throughout our nation.

I would like to thank the witnesses for attending this important hearing today and offer my deepest condolences to those who were harmed by this tragic event.

COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE

“Enbridge Pipeline Oil Spill in Marshall, Michigan”

September 15, 2010  
Room 2167, Rayburn House Office Building



Thank you, Mr. Chairman, for holding today’s hearing to enable us to examine the recent pipeline rupture in Michigan, which caused nearly 820,000 gallons of oil to surge into a tributary of the Kalamazoo River.

Today’s hearing will focus largely on the magnitude of that rupture and subsequent spill in Michigan; however, it will also begin our discussion of the recent pipeline failures in Illinois and California.

Let me begin by saying I am outraged by Enbridge's apparent treatment of the victims of the spill in Michigan.

It is appalling that a company, whose failure to operate in a responsible manner resulted in a massive pipeline leak, would then attempt to persuade those affected by the spill it caused to turn over their private medical records, or to enter into settlement agreements that appear to take advantage of local residents when they are most vulnerable.



Based on the information that is currently available, Enbridge's actions show not only a total disregard for safety, but apparently a willingness to continue to victimize those it has already harmed.

Additionally, I am deeply concerned by the growing number of terrible accidents resulting from faulty pipelines.

As this Committee has already extensively examined, the *Deepwater Horizon* tragedy in the Gulf of Mexico was a staggering example of the damage that can result from inadequate regulation.

Now, we see a series of pipeline accidents. Not only did the pipeline transporting oil across Michigan burst, resulting in one of the largest oil spills in the region's history, but another has blown up in California, destroying an entire community.

These incidents present another urgent wake-up call pointing to obvious deficiencies in our regulatory regime.

These incidents have taken a significant environmental toll and a terrible human toll as well.

The Subcommittee on Railroads, Pipelines & Hazardous Materials, chaired by Congresswoman Corrine Brown, has been conducting an extensive examination of pipeline safety. The Subcommittee hearings have already identified significant issues needing further study—and the examination today of the Enbridge incident and ongoing investigations of the Illinois and California incidents will likely uncover additional safety issues requiring statutory and regulatory reform.

As we did in drafting and passing the CLEAR Act following the *Deepwater Horizon* incident, I urge quick action to protect our nation from pipeline safety risks and to ensure that our regulation of pipelines is equal to the risks these structures pose to the areas through which they pass.

Frankly, we must also ensure that PHMSA is fully equipped to require compliance from the firms it regulates. The disaster in the Gulf and now these pipeline accidents reveal industries unwilling to put safety first – even if their recklessness can literally kill. Therefore, we must act.

I look forward to the testimony of today's witnesses as we assess the extent of the damage of the July 26<sup>th</sup> disaster in Michigan, as well as the more recent pipeline incidents in Illinois and California, and I yield back.

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### CNN NEWSROOM

**Debating Natural Gas Drilling; Iran Frees U.S. Hiker; Is Overweight the New Normal?**

Aired September 14, 2010 - 09:58 ET

THIS IS A RUSH TRANSCRIPT. THIS COPY MAY NOT BE IN ITS FINAL FORM AND MAY BE UPDATED.

**KYRA PHILLIPS, CNN ANCHOR:** And earlier this morning, after more than a year of being held in an Iranian jail, American hiker Sarah Shourd has been freed. Shourd and her two hiking companions were taken into custody in the summer of last year after they allegedly strayed into Iran. Iran had demanded a \$500,000 bail.

Tehran's prosecutor general talked about it just a short while ago.

(BEGIN VIDEO CLIP)

**ABBAS JAFARI DOLATABADI, TEHRAN PROSECUTOR GENERAL:** We came to this conclusion that because of the situation that she was staying in, we decided to kind of give some assistance and from detention we decided to set her free through \$500,000 bailout, and then today the representatives of this lady who accepted to bail her out. It was paid in Muscat, a community bank of Iran. The money was paid there, and she -- the judge issued the release order and Miss Shourd was simply set free, and she can leave Iran if she wants to.

(END VIDEO CLIP)

**PHILLIPS:** The other two Americans with Sarah Shourd are still being held in Iran. CNN's Reza Sayah will join us from Islamabad, Pakistan in a few minutes with more.

**All right.** Let's talk about the way forward in San Bruno, California five days after that gas explosion and fire blasted through a neighborhood there. Survivors whose homes were destroyed are getting some help from the utility company.

**PG&E says it will set up a \$100 million fund to help rebuild the area.** Homeowners can get up to \$50,000 depending on the damage. More than three dozen homes were pretty much blown apart on Thursday. At least four people were also killed and four others are still missing.

**That blast blew a 28-foot section of natural gas pipe, about 100 feet, through the air.** Part of the ruptured pipe is going to a lab in D.C. for inspection now.

**CNN's Ted Rowlands has more on the investigation.**

(BEGIN VIDEOTAPE)

**TED ROWLANDS, CNN CORRESPONDENT:** This gas station's surveillance video shows the first moment of last Thursday's explosion. Watch closely as the man in the red vehicle gets out.

**First, you can see chunks of asphalt and debris, and then a massive wall of flames shooting into the sky.** Within seconds, the fire grows larger. A woman carrying a baby runs across the street away from the flames while others seem attracted to the blaze, some actually drive toward the fire. Nobody knew what was going on.

**UNIDENTIFIED MALE:** My first thought is a plane went down. OK. And I run up halfway down there. You know, the fire was pretty bad. **reporter:** Across the street, inside this grocery store, people said they first heard a strange hissing sound.

**Now, watch as the sliding door push in from the explosion. Watch it again in slow motion.** The store quickly turns to chaos. People start running away from one of the exits while others desperately try to get out of the store. Still unanswered, what caused this massive explosion. Many people here are getting impatient waiting for answers.

**BILL MAGOOLAGHAN, SAN BRUNO RESIDENT:** My kids play at that park which is now melted. You know, these are neighbors. You know, the woman down the block, my dog played with her dog and she's dead. It's not fair.

**reporter:** The investigation is centered on this section of pipe which is installed in 1948. Did the gas company, PG&E, miss warning signs that something was wrong before the explosion?

**ROWLANDS (on camera):** Several people in this neighborhood say in the days leading up to the explosion they smelled gas. One person even says he saw and talked to a PG&E crew about a gas leak, but PG&E says, according to their records, since the month of July, they've only been here twice.

**CHRISTOPHER P. JOHNS, PRESIDENT PG&E:** In one instance, there was a small leak at the meter, which we replaced and fixed it right away, and the second instance, there wasn't a leak found anywhere.

**ROWLANDS (voice-over):** We may never know if there was a second leak and if so, whether or not it was associated with the explosion. The pipe itself was last inspected in March. Keeping them honest, we asked for the results of that inspection but we were told they couldn't be provided because of an ongoing investigation. We got the same response at a press conference.

**GEISHA J. WILLIAMS, SENIOR VICE PRESIDENT, PG&E:** That is part of the NTSB investigation and I can't share the findings of that particular assessment.

**ROWLANDS:** PG&E is taking responsibility, setting up a \$100 million fund for victims, and this week, they plan on giving everyone whose home was destroyed up positive \$50,000, no strings attached.



They claim it's the right thing to do. What's still unclear is what PG&E might have done wrong and whether there's a chance it could happen again.

Ted Rowlands, CNN, San Bruno, California.

(END VIDEOTAPE)

PHILLIPS: All right. So let's take a look at how many old pipelines are out there and how often they're involved in accidents. Josh Levs has been looking into this for us this morning.

JOSH LEVS, CNN CORRESPONDENT: Yes.

PHILLIPS: We were talking about the Minneapolis bridge that was, you know, taken down by something like this.

LEVS: You know, it's interesting to talk about that because it's another example of infrastructure concerns inside the United States, things that need to be updated. You are hearing about some of the decades-old and certainly not the only pipeline that is decades old in this country. A great many of them are.

Look at this giant map next to me right here. This is a map of the U.S. and these are the gas pipelines, specifically natural gas pipelines in the U.S. The blue all over the country are the interstate pipelines that go across different states. The red is intrastate. You can see certain states out there have a lot of pipelines that operate within the states.

Let me give you some facts here. To put this in perspective for you, show you how many we are talking about in this country, 2.5 million miles of gas pipelines in this country, enough to circle the earth 100 times. And I want to show you this breakdown here. Because you have a lot of them carrying hazardous liquids. They got (INAUDIBLE) gas transmission, and then the natural gas distribution is by far the majority of it.

2.1 million miles just of that, and overseen by 3,000 different companies. So we're talking about a lot of companies overseeing millions and millions of miles there of these pipelines. In fact, we have some pictures for you. Let's take a look of what we have here. There is a report earlier this year from the Congressional Research Service, looking at safety issues, and they were taking a look at what happened.

And this is a couple of things that they said, first of all, said that for their few annual fatalities compared to other product of transportation modes. Companies operating natural gas transmission pipelines reported an average of one death per year, from 2004 to 2008, and the Department of Transportation said 63 natural gas transmission pipeline accidents in 2008.

So when you're looking at all of these miles and miles and miles, certainly it's not like this is happening every day. That said there are a lot of experts out there, Kyra, who take a look at this and say all of these miles of pipelines out there, they need to be watched really carefully. A lot more needs to be done. Some people say it's a real serious safety concern in America. PHILLIPS: It's up to these companies to investigate the pipelines, right?

LEVS: That's right. I mean, this is part of what is the concern about it, ultimately who is going to be taking a look at it and who isn't. In fact, the Federal Department of Transportation has about 80 inspectors who take a look at this and was bumped up recently with more money from Congress, about 100 but it is largely up to the state, individual states to have inspectors that oversee what the companies are them doing it. So you have kind of a web structure of who needs to oversee it and Kyra, that's another part of the challenge as well.

PHILLIPS: Well, how do you keep these pipelines safe? One accident is obviously too much.

LEVS: Right.

PHILLIPS: But we're talking about decades and decades old pipe.

LEVS: Right.

PHILLIPS: And there's got to be - I mean, obviously they can't replace all of it but there has to be something done to make it safer.

LEVS: Exactly.

And that's what they're trying to do. They're taking a look at some of the different examples that are out there. You certainly have some more experts out there, saying "look more inspections are needed to take a look at that." But let me show you something interesting here. We can go out on this.

This is something I just saw from the Department of Transportation, Department of Energy. Can you get a shot of this? This is a new technology that they're creating as a sensor to detect defects in buried natural gas pipelines. You would actually put it inside and it would move around on its own and it would search for any defects, any potential leaks, any potential holes. Now whether this itself will ultimately be a solution, I don't know but it is very comforting to see that there are people out there working on technology in addition to efforts to increase inspections. So hopefully you get humans and robots doing their jobs to try to update some of those things and watch out for holes, it could - it could - help us stay safe. Kyra.

PHILLIPS: Thanks, Josh.

LEVS: Yes.

PHILLIPS: Coming up at the bottom of the hour. We're actually going to talk about the increasing need for pipeline safety in cities across the country. Rick Kessler who is with the Pipeline Safety Trust will bring us up on what more that needs to be done, an advocacy group based in Washington.

Well, seven weeks from today, voters head to the polls and the all-important midterm elections but today we find out which candidates will make the final cut to earn a place on those ballots. Seven states are holding primaries today, so as the District of Columbia.

Today's voting will not only shape the races but also set the tone of how worried and angry voters are before the midterm elections. We are covering all the angles of today's races with the best political team on television.

All right. Let's begin in Delaware where the GOP establishment is facing a tough challenge from the tea party. CNN political producer Shannon Travis has reported extensively on the upstart conservative movement and he joins us live from Dover.

Hi, Shannon.

SHANNON TRAVIS, CNN POLITICAL PRODUCER: Hey there, Kyra. Delaware isn't used to getting this much attention for a Republican Senate primary, but when you put Sarah Palin, Joe Biden and the tea party movement in the mix, you are going to have us here and a lot of other media attention.

Let's take you through this. Obviously, Sarah Palin and vice president Joe Biden battled for the vice presidential slot and he obviously won that. Will she in her preferred pick for this race win this battle? You've got Christine O'Donnell, the conservative Republican who is running against Mike Castle, Congressman Mike Castle, who critics say that he is way too liberal, way too supportive of the Obama agenda, of Democrats, and right now, we are outside of an Elks Lodge where Christine O'Donnell will gather tonight.

They're hoping for a victory party. But it has been nasty and it has been mean. Voters are heading to the polls today with fresh barbs of attacks traded back and forth in their minds. It's anyone's guess what would actually happen tonight. The polls close at 8:00. Christine O'Donnell has actually voted.

So we'll see what happens but we've been hearing a lot around the state and on radio, different kinds of radio how nasty this race has gotten. So it's anyone's guess what will actually turn out.

PHILLIPS: So some analysts are saying that if O'Donnell wins it would give Dems a good shot at the seat.

TRAVIS: Yes, that's a slam that her critics are lodging against her, that she is way too out of the mainstream to actually win a general election. She may be able to pull it out in the republican primary but in a general election, that she might actually be able to pull out in a Republican Primary but a general election, a blue state like Delaware, that she would not be competitive enough and this might actually give Democrats a chance at a seat that a lot of Democrats had actually written off.

PHILLIPS: Shannon Travis, following the elections for us there, appreciate it. And for all the news on the big races and the latest development, log in to our website, cnpolitics.com. And later today, President Obama is due to speak to the nation's school children. He'll urge the students to make the most of their education. According to the text of her speech, he'll tell them "your life is what you make of it and nothing, absolutely nothing is beyond your reach." This is his second back-to-school speech. His first last year was met with skepticism from conservatives.

They thought he would use it to push his political agenda. That concern proved unfounded. And he received praise from both parties for delivering a positive message of education.

We're going to have live coverage of President Obama's back-to-school speech, it's scheduled for 2:00 Eastern, 10:00 a.m. Pacific.

Sarah Shourd's long ordeal in Iran is over. The American hiker was freed today and is now in the custody of her attorney. A live report coming up.

(COMMERCIAL BREAK)

PHILLIPS: American hiker held more than a year in Iran is free this morning. Sarah Shourd was charged with espionage and illegally entering Iran. She has hiking with two friends when they allegedly strayed into Iran.

Live now, our Reza Sayah, he is in Islamabad, Pakistan. So, Reza, how exactly did this come up exactly come about? We haven't touched on the fact that she is concerned possibly she might have breast cancer.

REZA SAYAH, CNN INTERNATIONAL CORRESPONDENT: Yes, I mean, that's what senior prosecutor in Tehran cited is the reason for the offer to release her for the \$500,000 in bail money. On Sunday he held a news conference and said because of her medical condition, which, according to the representative for Sarah Shourd's family is the discovery of a growth in her breast. She was also suffering from a pre-existing gynecological situation. And that's why Iranian officials are saying they offered to release her.

We are getting some new information about her release. I spoke to her lawyer, and he said the release took place late this afternoon Tehran time. He said he walked into Tehran's (INAUDIBLE) prison and he signed her release papers. The two waited out and she was handed to officials from the Swiss embassy in Tehran, of course, because Tehran and Washington do not have diplomatic relations it is the Swiss embassy in Tehran that is playing the role of mediator in this matter. The lawyer said that the release papers clearly said -

PHILLIPS: All right. Did we lose him?

SAYAH - prosecutor in Tehran spoke with state-run media -

PHILLIPS: All right. We apologize. We kept losing Reza's audio there but we will follow the story.

Bottom line, we don't know if this bail money was paid or not. We're still trying to investigate that, but the release apparently is due to some medical conditions that Sarah is going through. We'll work the story and try to bring you more information as we re-establish communication with Reza there in Islamabad.

All right. Let's check other international stories now. And we start in the Egyptian resort of Sharm Al Shaykh (ph) while Middle East peace talks are going on. Secretary of State Hillary Clinton stoke with Egyptian president Hosni Mubarak before she and special envoy George Mitchell began meeting with the leaders of Israel and the Palestinian authorities.

Today's talks are continuation of negotiations that were held at the White House earlier this month.

And we're off to the next, city of life, Paris, France, where the country's senate is voting today on a law banning any veils that cover the face. That includes the burqa, the full body covering worn by Muslim women. France's lower House of Parliament overwhelmingly approved the ban in July. Few global (INAUDIBLE) the French favor the ban by a margin of more than four to one. France has about 3.5 million Muslims.

And the city holy to three major religions, Jerusalem, remember that nanny in India who saved the life of an Israeli boy during the 2008 Mumbai terror attacks. Sandra Samuel (ph) says she would give her heart and soul for Israel. Now Israel is giving back to her, Samuel has been granted honorary citizenship and temporary residence in Israel. She's been caring for the boy since his parents were killed in that attack.

New pictures of Hurricane Igor, and it's a monster sized storm - we're going to tell you why you shouldn't worry about it too much though.

(COMMERCIAL BREAK)

PHILLIPS: All right. Checking the big board this hour. Dow industries down 18 points right now.

We're going to check our top stories.

Sarah Shourd, American hiker held in Iran for more than a year has been freed. Iran had charged her and here two companions with espionage and demanded \$500,000 bail. It's not clear if that was actually paid though.

A multi-state hunt going on for this man, Dr. Emilio Luna of Phoenix, Arizona. Dr. Luna is a pediatrician suspected of distributing child porn. He was under house arrest but cut-off an ankle monitoring device and took off.

It's primary day in seven states and the District of Columbia. Today's voting will not only decide the November ballot but also set the tone of how worried and angry voters are before the midterm elections. And how about a view from above. This is what Hurricane Igor looks like from space - there we go, as the category 4 storm swirls out in the Atlantic. An impressive site but despite its massive size, Igor is expected to weaken and is more of a potential threat to Bermuda than the U.S. Is that right, Rob?

ROB MARCIANO, AMS METEOROLOGIST: If that, if we can get it to miss Bermuda, it's the perfect storm because we can admire its beauty from outer space and have it just be kind of a fish storm. But we're not quite there yet. That shot from the International Space Station, which flies pretty low.

This shot from our brand new ghost imagery satellite, which is geostationary so this is way up there. And it's really far away. It's pretty hard tech, just launched in the spring. And not only is it high resolution from that altitude, but we were able to rapid scan these. They can take these images. They did it yesterday afternoon when the sun was up at about a one-minute interval. So that's just an unbelievable pretty much a quick time image of how the storm operates and you know, what the many intervals. Unbelievable. That eye is so distinct.

Here it is on the infrared. We can take this shot any time of night, kind of the night vision. Category 4 storm, 135-mile an hour winds. You can kind of see the cloud canopy getting a little bit fragmented but you also see this as important, a little bit of a turn. So we like that. We'll take that, and that's encouraging because once it starts doing that, we think that, you know, our forecast, the National Hurricane Center for it to continue at a northwesterly path and deep it away from the U.S., we gain confidence with that.



Bermuda is still in this cone. So we are concern for our friends there. And it's a big storm. That's for sure. So there's going to be big-time waves.

(INAUDIBLE) Julia, a category one storm and that's probably going to be a fish storm as well but it's pretty far out there in Africa. One other item of concern is this thing, just a disturbance right now but it's rapidly moving toward the Yucatan Peninsula. This may develop into something and will affect this area here over the next few days. So three things that we are watching -- we're in the peak of hurricane season. No doubt about that and mother nature not disappointing.

But you have a threat for seeing severe weather across the central part of the country. Here are some of the storms, actually these are left over from last night. Later on today, the back side of this may fill in just a little bit and we could see some gusty winds with maybe some hail. Certainly, some heavy downpours and frequent lightning. We could use the heavy downpours in places like Loveland, Colorado, where that fire almost at about 1,000 acres and 20 percent contained right now. Red Flag warnings up for parts of southern Utah.

That's a quick check on weather. Kyra, back over to you.

PHILLIPS: All right. Thanks, Rob. MARCIANO: You bet.

PHILLIPS: Tipping the scales and in denial. A new study says that three in 10 overweight Americans think that they're normal-sized. Maybe they're right. Even sounding off that weather overweight is the new normal? We'll be talking about it.

(COMMERCIAL BREAK)

PHILLIPS: Going cross country. First stop, Detroit, where accused underwear bomber Umar Farouk Abdulmutallab wants to be his own attorney. The Nigerian national faces multiple federal counts relating to the attempted Christmas day bombing of a U.S.-bound plane from the Netherlands. His next court date is set a month from now.

In Kingman, Arizona, one of three suspects who escaped a state jail and allegedly killed two people while on the run. He appeared in court yesterday. John McCluskey is described as the ring leader and triggerman in the jail break and subsequent slaying of a vacationing Oklahoma couple. McCluskey and his fiancée were caught three weeks later when they were recognized at a camping area.

Last stop, New Hampshire, police say they recovered thousands of dollars from a suspected burglary ring which allegedly used Facebook to help case potential hosts. Police say robbers just targeted as many as 50 homes that they knew were unoccupied by the Facebook postings of vacationing home owners.

Well, it's no secret that American waistlines are growing. More than two-thirds of adults qualify as either obese or overweight, according to the CDC. That's way up from a couple of decades ago but a new study says we're in denial about it.

"USA Today" reports that three in ten overweight Americans think that they're normal-sized even if the scale is screaming otherwise, and seven in 10 obese Americans think they're simply overweight. But you know, maybe they have a point. Heavy has become something of a national standard.

Take a look at this map showing the prevalence of obesity by state in 1995. That was 25 years ago and not a single state reporting to the CDC had an obesity rate greater than one in 10 residents but as the years passed, dark blue starts to dominate the map, and by 1997, they had to add new colors, red, dark red, yellow. Yellow shows the prevalence of obesity over 20 percent. And then red says the rates topped 30 percent in some states.

By last year, only Colorado and D.C. maintained an obesity rate under 20 percent. So the scale says one thing, but the mirror is saying something entirely different to a whole lot of Americans. Dr. Mwata Dyson is a health and wellness advocate. He's joining us live from New York.

I tell you what, doctor, just looking at these numbers, 30 percent of Americans say "OK, I'm fine, I'm normal, has overweight become the new normal?" DR. MWATA DYSON, HEALTH AND WELLNESS ADVOCATE: Unfortunately, it has, Kyra, but I'm less concerned really with the BMI lie was shown in this study and I'm more concerned with people's imagery. Most Americans will associate being an overweight based on what they see in the mirror, not really the numbers that they see on the scale.

PHILLIPS: And why is that?

DYSON: Because body image is really important to Americans. This is why we spend billions of dollars on health club memberships, on exercise equipment, on the fad diets and on cosmetic surgery.

PHILLIPS: But why don't people just want to be healthy and do what's right, eat what's right, exercise, so they have a longer life, they can be around to spend time with their grandchildren?

DYSON: Yes, I totally agree with you. I think part of the problem is we've been asking the same question, what, and not really concentrating on why. A lot of people, you have to be living under a rock to not know what's the difference between eating healthy or eating unhealthy or the importance of exercise, okay, but I think the issue here is why are people not doing this, you know? They know it's a health problem. They know it's a health risk, however, a lot of people are having concerns with being stressed out. So they're depressed about jobs, they're depressed about their employment. They have bad relationships, and this is one of the reasons that they don't eat healthy or that they don't exercise appropriately.

PHILLIPS: Now, you know, we've done a lot of stories before about vanity sizing, and just recently, it came out a number of men's stores were actually saying that pants were a size 36, but they actually were a size 41 with regard to inches. You know, why are companies doing this and lying to the consumer, and is this adding to the problem?

DYSON: Well, this is close to being correct, such that the best way to really measure somebody's weight is to measure their body fat -- or their belly fat, excuse me. And it's easy to do. If you have a tape measure, you can start and end at your belly button, you go around your waist. If you do it once a week or even once a month and measure your waist in inches, ideally, men should have less than 40 inches around their belly fat, and women should have less than 35.

So, they are correct for making the association, because it's the percentage of body fat that's really associated with the increased risk of problems like heart disease.

PHILLIPS: You talk about advertising. What do you think about these television shows, these reality shows like "The Biggest Loser" and "Celebrity Fit Club"? Do you think these are good for us to see, good for society? Or do you think it's exploiting people who are overweight?

DYSON: Well, it appears to be beneficial for those who win because it appears they lose weight. Now for the rest of us who are watching it, the viewers, it's more important that we are involved and that we're active in some type of plan. And this is why I tell patients to one, find a partner, to execute a plan to help you and the person you're working with to meet your goals.

PHILLIPS: How do we get out of this? How do we stop taking being overweight as just a normal thing and an okay thing?

DYSON: Well, I think it's each and every one of us really being accountable at the end of the day. As I alluded to earlier, one of the major problems people are not doing this is because they're just stressed out or they don't have access to healthy foods or they don't have recreational centers where they can exercise in their neighborhoods. You know, it's a lot of factors involved, and I really think it's going to take a community approach in order to see some success.

I for one would like to see everyone take a pact with a partner and come up with a plan. I can tell you're concerned. I would like for us to start right here on live television to say you and I are going to do it. The next time I come on television, I'm going to tell you my waist size

is to see if I've gone up or down. And hopefully, everyone else can follow the same trend.

PHILLIPS: OK! We'll see how honest people will be. Dr. Dyson, thank you for your time today.

All right, that brings us to today's blog question. We ask the question, has fat become a new normal? Not a ton of responses. But here's what some of you are saying.

Cindy said, "I suspect that the clothing industry has a hand in this, making clothes larger by inches but putting a skinny size on the tag. The best way to decide if a person is overweight is a good of tape measure!"

And Carroll said, "Being overweight is not normal at all. It's unhealthy and gives you health issues and a shorter life."

Patricia says, "We need to charge higher insurance premiums to obese people and offer free enrollment to local fitness programs, giving tax credits to any fitness program willing to allow programs like that."

Remember, we always want to hear from you. Just log on to CNN.com/kyra, share your comments. We sure appreciate it.

Well, that devastating explosion and fire in San Bruno is putting a spotlight on natural gas pipes throughout the country. We're talking to an expert about just how trustworthy those pipes are.

(COMMERCIAL BREAK)

PHILLIPS: Well, we've seen what that natural gas explosion did to San Bruno, California. Let's go ahead and rewind to the moment that the gas explosion happened.

Take a look at this security video from a gas station. On the left, you're actually going to see smoke rising, and then boom. Explosion and fireball. 6:07 Pacific time Thursday. There it is. More than three dozen homes were blown apart or burned to the ground. PG&E says it will set up a \$100 million fund to help rebuild that area, but four people are still missing and at least four people were killed, including a Janessa Gregg. She was only 13 years old.

(BEGIN VIDEO CLIP)

JANESSA GREGG, 13-YEAR-OLD KILLED IN SAN BRUNO EXPLOSION: The pavilion is not available today.

(END VIDEO CLIP)

PHILLIPS: That's Janessa at her Catholic school. She was student body president. Three of them in the same family. Three people who are still missing are all part of that same family, a father, son and grandmother.

That gas pipe was laid in 1948. A section that ruptured is going to a lab now in D.C. for inspection. And this whole episode has to make you wonder if something similar could happen in your neighborhood.

We are talking about that with Rick Kessler. He says it can. He's with the Pipeline Safety Trust in Washington.

And Rick, I was reading a quote. I actually came across an article this morning and that's why I really wanted to talk to you. You actually said, "If this was the FAA and air travel that we were talking about, I wouldn't even get on a plane."

RICK KESSLER, PIPELINE SAFETY TRUST: Yes, that's right. I know I wouldn't, anyway, and I wouldn't recommend you do.

The agency that oversees pipelines, the Pipeline Hazards Materials Safety Administration - it's part of the Department of Transportation - we call them PHMSA - is a very undermanned, underfunded agency that really doesn't have the authority it needs to regulate these things and maybe not even the will to regulate the pipelines.

PHILLIPS: So, what needs to be done? Because as I have been reading on, I mean, this pipe was decades old, and even some pipe is up to 80 years old, like the steam pipe that ruptured in Manhattan back in 2007? So, what needs to be done before something catastrophic like this happens again?

KESSLER: Well, at a minimum, the Pipeline Safety Act that governs nationally all oil and gas pipelines needs to be reauthorized, but it needs a major overhaul. We need more inspections. We need more people to inspect them. We need more stringent penalties. We need better training and all sorts of things. And we need a program to deal with these pipelines that are as old as you say.

The Natural Gas Act, which governs when they are laid, not their safety, dates back to 1935, so we have pipes in the ground from back then.

And there's a lot more. Plus, people don't know what's in their backyard. People don't know where the pipes are. They don't know anything about the inspection record. They don't know anything about how these pipes were fixed, if problems were found, what problems were found. So, we need a right-to-know for pipelines.

PHILLIPS: I thought Congress passed a law back in early, I think, 2002. I took some notes here, required -

KESSLER: I worked on it.

PHILLIPS: Okay, all right. So, you know what I'm talking about -

KESSLER: Oh, yes.

PHILLIPS: It required that these inspections be done on pipelines that run through heavily populated areas. So, what happened with that, Rick, because inspections were done, problems were found and what happened after that?

KESSLER: Well, you know, there's no real standards for things like leak detection and the repairs of these pipelines. So, problems are found, but what standard you have to repair to, what type of steel you use, the welding, all of these things, they are not strictly governed. We don't have the type of standards we need.

And the '02 act did a lot of good. It was a very bipartisan bill - Democrats, Republicans, President Bush - and it went a long way. But we were starting to use a football analogy from our own end zone and made a good jump out to the 30-yard line, but that's nowhere near the 50-yard line or a touchdown. So, there's a lot to be done, I think.

PHILLIPS: Well, the situation - well, I think everyone agrees with you on that point. Definitely a lot to be done.

And you know, we had a number of residents in the San Bruno area when this happened that said on camera, and I remember one in particular saying, that this smell of gas was so strong for weeks in this neighborhood. And they called PG&E, and that PG&E came out, and then a couple weeks later you had this explosion.

So, what can we do as consumers? Let's say I go home today and I smell gas and my neighbors smell gas and we know there's a problem? What can we do to get our utility company to do something immediately?

KESSLER: Well, Kyra, first, I have been remiss. Let me just say my heart goes out to the families of the victims and the hope for the survivors, the four that are missing.

What I think people can do is not just notify the utility, but I think they also need to call local government, whether it's the police, fire or the California Public Utilities Commission. But I think there's no reporting standard for these things in law that is of any real use.

Congressman Mark Shover of Michigan. In whose district you just had this oil spill, this Enbridge oil spill, has but in a bill that would require notification of local authorities within an hour, I believe, and I think that's something that is attracting bipartisan attention. I think that should be part of any reauthorization.

But, you know, only seven percent of these pipelines, the pipeline mileage, is actually required to be inspected under the 2002 law. We need not only to expand that but a process for continuing to expand the areas of pipeline that have to be inspected. And they've got to be inspected with more rigor than they are today. It's really up to the pipeline company.

PHILLIPS: Sure. And we have aging gas pipes nationwide, that's for sure. Rick Kessler, appreciate your time today.

KESSLER: Kyra, thank you very much.

PHILLIPS: You bet.

Checking top stories now. Sarah Shourd, the American hiker held in Iran for more than a year, has been freed. Iran has charged her and her two companions with espionage and demanded \$500,000 bail. It's not clear if that full amount was paid, though.

In Egypt, Israeli and Palestinian diplomats have resumed the long-awaited Mideast peace talks. U.S. special envoy George Mitchell says both sides have begun a serious discussion on core issues.

And going on right now, a multistate manhunt for this man, Dr. Emilio Luna. Phoenix, Arizona, a pediatrician suspected of distributing child porn. Luna was under house arrest but cut off an ankle monitoring device and bolted.

Finally, something to clap and cheer about in Bell, California. This little dot in an expensive Los Angeles County is mostly poor. The median annual income about \$40,000 per year. But the city manager was pulling in nearly \$600,000 a year. This is a story we just haven't wanted to stop talking about because other city officials were also making curiously huge salaries, too, before people in Bell got wind of it and ran them off.

Well, now we've got an update. Property owners will get some of their money back. The lieutenant governor made it official at a ceremony yesterday. About 300 bucks per household. Not a huge amount, but definitely a start.

But the story doesn't end here. People in Bell are working on a petition now to boot several city council members who were making about \$100,000 a year for their part-time service. Both state and federal agencies are investigating that city.

But you had to know that Bell wasn't alone. Vernon, California, now, just a few miles away. It has 90 residents. Listen to what their top city managers were making. About \$1.6 million a year, and getting perks like first-class airline tickets in a town that's laid off workers and out health care benefits because of budget problems. Makes you wonder how many more Bells and Vernons are out there.

Former president Bill Clinton still very much in demand. He hits the campaign trail for Democrats in trouble. Just one of our stories from The Best Political Team on Television. That's two minutes away.

(COMMERCIAL BREAK)

PHILLIPS: Time now for the latest news from our Best Political Team on Television. Deputy political director Paul Steinhauser at the desk now. What's crossing, Paul?

PAUL STEINHAUSER, CNN POLITICAL DEPUTY POLITICAL DIRECTOR: Kyra, brand-new this morning on the CNN political ticker. Where else? On CNNpolitics.com.

I'm talking about tax cuts. Remember, Republicans and Democrats in this town and across the country on the campaign trail are arguing about whether those Bush-era tax cuts should be extended for wealthy Americans.

So, what do you think? What do Americans think? A brand-new poll out this morning by Pew indicates that 3 in 10 say yes, extend the taxes for everybody, including the wealthy Americans. That's what the Republicans say. Another 3 in 10 say, you know what? Extend them for the middle class but not for the wealthy. That's the Democrats' argument. And another 15 percent, Kyra, say, you know what? Forget it. No tax cuts extension for anybody.

Another brand new thing this morning on the CNN Political ticker, check it out, if it's Tuesday, it must be Ohio. I'm talking about former president Bill Clinton. He's really kind of become a rock star for the Democrats on the campaign trail this year. Today, he is going to be with Ted Strickland, the governor of Ohio, a Democrat who faces a tough reelection this year. Clinton is campaigning with him twice today. Yesterday, he was in Pennsylvania for another Democrat, Joe Sestak of Pennsylvania, who's running for the Senate there.

And finally, can you believe this? The Tea Party and Coffee Party, are they getting together? The Coffee Party, we talked about it a lot earlier this year, it is maybe a progressive alternative, they like to think, to the Tea Party. The Coffee Party is having their first national convention later this month, 25th of September in Louisville. And guess who is going to be taking there? One of the top Tea Party leaders, Amy Kramer, from the Tea Party Express. Maybe there's a little kumbaya here. We'll have to find out and see, Kyra.

PHILLIPS: Tea Party, Coffee Party. What's next? What do you drink in the morning?

(LAUGHTER)

STEINHAUSER: I can't talk about that on TV.

PHILLIPS: OK. Could be an interesting party, though. Thanks, Paul.

We're going to have your next political update comes in an hour. And a reminder. For all the latest political news, just go to our Web site, CNNpolitics.com.

(COMMERCIAL BREAK)

(MUSIC PLAYING)

PHILLIPS: Well, about this time everyday, we honor a fallen servicemember in Iraq or Afghanistan. We call it "Home and Away." And it's a project that we're doing with CNN.com.

Today, we salute Sergeant Michael Christopher Hardegree of Villa Rica, Georgia. This photo of Mike with his girlfriend at the Atlanta airport was taken by his mom. He was on R&R and was returning to Iraq. Mike was killed September 10, 2007 when his vehicle rolled over in Baghdad. Six other soldiers died in that same incident.

Family friends say that Michael entered the Army, quote, "as an 18-year-old boy and died a man." He had planned on going to college, get a degree, become a member of the Army Special Forces just like his dad and his grandfather. This blue-eyed, redheaded sergeant from rural Georgia loved music and got this, sardines. Sergeant Mike Hardegree was just 21 years old.

It's an honor to remember those who lose their lives in service to this country. And if you'd like to help, you can. Just go to our Web site, CNN.com/homeandaway. You'll see a map of the United States. Click on a town, pull up one of the many bios there, follow the directions to upload your comments, your pictures, even your home videos. That way you can help us remember those who made the ultimate sacrifice.

(MUSIC PLAYING)

(COMMERCIAL BREAK)

(BEGIN VIDEO CLIP)

JAY LENO, HOST, "THE TONIGHT SHOW WITH JAY LENO": How is this for coincidence? I didn't tell you this, Ricky. I'm in the Raul's market on Sunday morning, I'm in the meat department, I run into Lady Gaga.

(LAUGHTER)

Apparently she was looking for something to wear to the VMA Awards. I guess she went with something from the Oscar Mayer De La Renta collection.

Did you see the dress she had on? Did you see that? It was made of meat! The dress was made of meat! It caused us problems at the awards. Show what happened.

(VIDEO CLIP) (END VIDEO CLIP)

PHILLIPS: Well, if you think that late night had a field day over Lady's Gaga wardrobe choice, don't forget Jeanne Moos. You know, the outfit is giving her plenty to chew on today.

(BEGIN VIDEOTAPE)

JEANNE MOOS, CNN CORRESPONDENT (voice-over): Who on earth would shop for a dress in a butcher shop?

CHER, SINGER: Lady Gaga!

MOOS: There she was, head to toe in not-so-prime cuts.

UNIDENTIFIED MALE: Doesn't look like the highest quality meat, so I don't know -- I don't see a lot of marbling.

MOOS: But you've got to give Lady Gaga credit for mounting the stairs, wearing raw steak wedges.

UNIDENTIFIED FEMALE: Oh, my God.

UNIDENTIFIED FEMALE: I don't like the shoes, actually.

MOOS: Lady Gaga left Cher holding the bag -- her bag made of meat.

LADY GAGA, SINGER: I never thought I'd be asking Cher to hold my meat purse.

MOOS: At New York's Fashion Week...

UNIDENTIFIED FEMALE: Raw meat! Oh, my gosh, it's amazing!

MOOS: Gaga's meat outfit met with raised eyebrows.

UNIDENTIFIED MALE: Wow. That's pretty rare.

MOOS: but even some of the rare birds at fashion week didn't find Lady Gaga's look well done.

UNIDENTIFIED MALE: It was revolting.

MOOS (on camera): Revolting?

UNIDENTIFIED FEMALE: I find it disturbing.

UNIDENTIFIED FEMALE: Did it smell, is what I want to know.

MOOS (voice-over): Sure didn't seem to hurt his appetite, though. The animal rights folks at PETA gagged on Gaga's latest stunt, calling meat "the decomposing flesh of an abused animal."

"MTV Style" first reported that designer Frank Fernandez created the outfit and posted photos of it on his blog, saying the meat came from his family butcher.

Unlike Cher's full-on body hug, Ellen DeGeneres kept her distance. Ellen's a vegan and presented Gaga with a veggie bikini and skirt.

ELLEN DEGENERES, TALK SHOW HOST: How's that?

MOOS: In the past, the bacon bra has had a moment of fame on Flickr, and contestants on America's "Next Top Model" had to compete wearing.

UNIDENTIFIED FEMALE: So, I have to wear beef panties, and they wrapped it around my neck.

MOOS: Gaga wore meat once before on the cover of Japanese "Vogue".

LADY GAGA: I am not a piece of meat.

MOOS: -- but which pieces did she wear? The director of meat at Fairway Market thinks it was brisket or flank steak.

UNIDENTIFIED MALE: You can see some resemblance to some of the parts of the outfit, with the way the lines are running.

MOOS: And then there's that hat.

(on camera): I'm pretty sure that hat is flank steak?

UNIDENTIFIED MALE: Well, it looks like it.

MOOS (voice-over): The meat wasn't dripping, but Lady Gaga's eyes were as she belted out her new song.

LADY GAGA (singing): Because God makes no mistakes.

MOOS: But he does make steak.

Jeanne Moos, CNN -

(on camera): So, we were thinking this is the first dress would you have to refrigerate.

(voice-over): -- New York.

(END VIDEOTAPE)

PHILLIPS: Tony Harris, you hungry? What are you having for dinner?

TONY HARRIS, CNN ANCHOR: A little Gaga rare.

PHILLIPS: Or bacon. A little steak.

HARRIS: Do you knead that? Do you tenderize that? What do you do with that? PHILLIPS: You lightly fry it.

HARRIS: You lightly fry it? Have a great day, Kyra.

(LAUGHTER)

HARRIS: We'll ponder.

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**CONGRESSMAN JOHN GARAMENDI**

Wednesday, September 15, 2010  
Committee on Transportation and Infrastructure - Full Committee  
Enbridge Pipeline Oil Spill in Marshall, Michigan

**Statement for the Record**

Good Morning Chairman Oberstar, Ranking Member Mica and members of the committee.

The Enbridge Pipeline failure and oil spill in Marshall, Michigan is another example in a series of disasters. The negative effects of the estimated million gallons of oil that spilled into the Kalamazoo River will outlive us.

However, the pipeline failure in Michigan is not the only recent tragedy. On Thursday, September 9<sup>th</sup>, a Pacific Gas and Electric pipeline exploded in the City of San Bruno, killing at least 4 people, destroying over 50 homes, devastating a community and jolting the psyche of the nation. Just yesterday, the Contra Costa Times reported that the highest risk pipeline now runs through my district, from Sunol to Livermore.

As the California Public Utilities Commission, National Transportation Safety Board, and other local, state and federal agencies investigate the causes of this pipeline failure, I feel that immediate Congressional action is warranted.

I request that a field hearing take place in San Bruno, California focusing on the following aspects of pipeline safety:

- The role of the federal regulatory agencies and processes, its adequacy of staff and budget
- The role of the state regulatory agencies and processes, its adequacy of staff and budget
- The role of utilities, its adequacy of staff and budget
- Existing and planned urbanization near existing high-pressure pipelines

Ultimately, the pipeline failures in Michigan, Illinois and California are clear reminders that we must invest in our nation's infrastructure to ensure the safety, security and economic well-being of our people, economy, and environment.

A handwritten signature in black ink that reads "John Garamendi".

SENIOR DEMOCRATIC WHIP

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(202) 225-8885

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**STATEMENT OF CONGRESSWOMAN  
EDDIE BERNICE JOHNSON**  
Committee on Transportation & Infrastructure  
Hearing on: Enbridge Pipeline Oil Spill  
September 15, 2010

**Mr. Chairman, thank you for holding this  
hearing today.**

**I applaud your and Chairwoman Brown's  
ongoing oversight of important  
transportation safety issues, including  
the disastrous oil spills and pipeline  
safety violations that we have witnessed  
over the past several months.**

**The Enbridge spill, which sent more than 1 million gallons of oil into Talmadge Creek which flows into the Kalamazoo River, in the District of our colleague Mr. Schauer, is particularly troubling.**

**It comes at the conclusion of a one-year Department of Transportation investigation, which imposed fines on Enbridge Energy Partners totaling \$2.4 million for safety violations which resulted in the death of Enbridge employees.**

**I join Chairman Oberstar in commending Secretary LaHood for holding Enbridge accountable and issuing the fine.**



**I'm pleased also that the Department has ordered Enbridge to revise and implement specific pipeline maintenance and repair procedures, as well as retrain its employees.**

**But, mostly I agree with Chairman Oberstar's initiative, at the request of Mr. Schauer, for this Committee to conduct an oversight investigation of the Enbridge incident in Michigan, as well as an audit of the Pipeline and Hazardous Materials Safety Administration's pipeline safety program.**

**It is critical that we evaluate the strength of existing integrity management and corrosion control regulations issued by the Bush Administration, as we seek to develop a strong and comprehensive reauthorization bill for the Department of Transportation's pipeline safety program.**

**Thank you, Mr. Chairman.**

A handwritten signature in black ink, appearing to read "Harry E. Mitchell". The signature is fluid and cursive, with the first name "Harry" and the last name "Mitchell" clearly legible.

Statement of Rep. Harry Mitchell  
House Transportation and Infrastructure Committee  
9/14/2010

Thank you, Mr. Chairman.

Today we will discuss the recent Enbridge pipeline failure in Marshall, Michigan.

As you know, the Environmental Protection Agency (EPA) has estimated that the Enbridge pipeline failure resulted in the release of an estimated one million gallons of crude oil into the Talmadge Creek and then to the Kalamazoo River, which flows into Lake Michigan.

Today we will review the emergency response as well as look into the medical liability releases that residents were required to sign upon filing a claim.

I look forward to hearing more from our witnesses.

At this time, I yield back.



Statement of  
Nancy Pelosi  
Speaker of the House

Before the Committee on Transportation and Infrastructure

September 14, 2010

Chairman Oberstar, Ranking Member Mica, and Members of the Committee on Transportation and Infrastructure:

I commend you for holding this hearing on the Enbridge Pipeline Oil Spill in Marshall, Michigan, and for expanding its scope to include the tragic Pacific Gas & Electric natural gas explosion in San Bruno, California and the Enbridge release of crude oil in Romeoville, Illinois. I would like to thank Representative Mark Schauer, who, as both a member of the Subcommittee on Railroads, Pipelines, and Hazardous Materials, and as the member representing Marshall, Michigan has done extraordinary work to maintain the committee's focus on this issue. And, of course, I must thank my fellow Bay Area colleague Jackie Speier for all she has done on behalf of the victims and families whose lives have been disrupted by the deadly pipeline explosion in San Bruno. And I wish to offer the gratitude of the entire Bay Area delegation to the first responders who worked valiantly to save lives and homes in the aftermath of the explosion. I also commend Representative Biggert for her work on behalf of the residents of Romeoville affected by the second Enbridge spill.

As we learned all too well in the wake of the *Deepwater Horizon* disaster, taking the safety and integrity of our energy infrastructure for granted can have devastating consequences for human life, our environment, and our energy security. As the Enbridge and PG&E pipeline failures have shown us, those consequences are not limited to the Outer Continental Shelf or coastal communities. Agencies charged with the inspection and regulation of our energy infrastructure must place the health and safety of our constituents first and go about their work in a transparent and impartial fashion. Where there are barriers and hindrances to effective inspection and oversight of our energy infrastructure, we must identify and remove them. With respect to pipeline safety, that task falls largely to this Committee. That is why I am encouraged that the Committee is conducting this hearing and that the witnesses are making themselves available to speak to all three incidents as well as the larger issue of pipeline safety.

As the Committee moves forward and contemplates further action to address pipeline safety, it will have the full support of the entire House to ensure that all that can be done is being done to prevent future incidents. Once again, I thank the Committee for its time and attention to this important issue.

LAURA RICHARDSON  
37TH DISTRICT, CALIFORNIA  
1725 LONGWORTH BUILDING  
WASHINGTON, DC 20515-0537  
(202) 225-7924 - PHONE  
(202) 225-7926 - FAX  
100 WEST BROADWAY  
WEST TOWER, SUITE 600  
LONG BEACH, CA 90802  
(562) 436-3803 - PHONE  
(562) 437-6434 - FAX  
<http://www.house.gov/richardson>



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**CONGRESSWOMAN LAURA RICHARDSON (CA-37)**

**COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**

**HEARING: "ENBRIDGE PIPELINE OIL SPILL IN MARSHALL MICHIGAN"**

**WEDNESDAY, SEPTEMBER 15, 2010**

**10:00 AM**

 **2167 RAYBURN**

Mr. Chairman, thank you for convening this hearing on the Enbridge Pipeline Oil Spill in Marshall, Michigan. I would also like to thank our distinguished witnesses for taking the time to appear before this committee.

EPA estimates suggest that the July 26, 2010 Enbridge Pipeline oil spill in Marshall, Michigan dumped roughly 1 million barrels of crude oil into the Talmadge Creek and Kalamazoo River. This incident threatens the environmental quality and public health of the surrounding communities. Unfortunately, this incident is far from an isolated event. As subsequent incidents in Romeoville, Illinois and San Bruno, California (just six days

ago) have shown, pipeline incidents are unfortunately current occurrences. The frequent nature of these events serves as a reminder that communities across the country are vulnerable to pipeline spills and explosions.

I am particularly concerned by reports of pipeline spills and explosions because the 37th Congressional District in California contains over 643 total pipeline miles in the National Pipeline Mapping System. More than 558 of these miles are hazardous liquid pipelines. The map of pipelines in my district looks like a spaghetti bowl with pipelines crossing in every direction. Not a single one of my constituents can possibly live more than a mile or so away from a pipeline carrying hazardous material. Unfortunately, from 2000 to 2008 there were 21 incidents in my district significant enough to be reported to the DOT's Pipelines and Hazardous Materials Safety Administration.

These incidents reaffirm something that the members of this committee already know—that we must redouble our efforts to modernize our infrastructure. Aging pipelines are extremely susceptible to leaks and explosions. In many states across the country structurally insufficient pipelines are in a nearly constant state of repair and maintenance. In

addition, we have to more diligently enforce safety regulations. Enbridge, who owns both the Marshall and Romeoville pipelines, has been responsible for 12 spills since 2003 in Michigan alone. Every pipeline should have a good safety record as their number one priority.

Finally, as Chair of the Homeland Security Committee's Subcommittee on Emergency Communication, Preparedness, and Response, I must also view these incidents from an emergency planning and disaster mitigation perspective. As the Gulf oil spill shows, and the more recent pipeline incidents in Michigan and elsewhere underscore, if we are to protect our environment, our domestic energy production, and the public health we must have the resources and contingency plans in place to immediately respond to emergencies and limit their repercussions. I will soon be introducing legislation to ensure that this is the case.

I look forward to hearing from the witnesses on these important issues. Thank you again, Mr. Chairman, for convening this hearing.

Schauer

Email me for  
a digital copy:

Mr Chairman and Ranking Member Shuster, Sara.metz@mail.house.gov

On Monday, July 26 at approximately 1:30 p.m., I was boarding a flight from Detroit to Washington for votes in the House of Representatives that evening.

It was at almost that exact time that a company few in Calhoun County, Michigan, had ever heard of – Enbridge Energy Partners – reported an oil spill to the National Response Center into Talmadge Creek, just south of the city of Marshall.

Starting about 9:30 p.m. the night before, on Sunday, July 25, residents in the Talmadge Creek area began calling 911, complaining of a gas odor.

As we'll learn here today, this was just after a shift change in the Enbridge control room in Edmonton, Alberta, Canada – the same control room that experienced 13 hours of alarms telling them that something was going on in Line 6B of Enbridge's Lakehead Pipeline.

After a brief meeting with the President – in which he committed all necessary resources to deal with the largest oil spill ever in the Midwest – I flew home to see for myself.

Jill Slaght of my staff, a Marshall resident, was there on the job and my team and I have had our sleeves rolled up and have been working to help affected people ever since.

I saw the unimaginable. My community lost its innocence that night and in subsequent days. One million gallons of heavy crude oil poured into Talmadge Creek and then into the Kalamazoo River, a tributary to Lake Michigan.

I never would have imagined that just after holding hearings on the BP Deep Water Horizon spill and strengthening the Oil Pollution Act, my community would be dealing with images of oil-coated geese and a river flowing black with oil.

The ironies are too many to cite. Just 10 days before, an executive of Enbridge Energy Partners testified before this very committee on its integrity management system and stated that its control room could detect the smallest of leaks. As we learned, it failed. Also on that day, July 15, 2010, Enbridge requested to the



Pipelines and Hazardous Materials Safety Administration that it be allowed to operate Line 6B at reduced pressure for another two and a half years while it considered repairs to identified defects to this pipeline. And this is on top of the one year that Enbridge had already been operating under reduced pressure while it considered what to do about known defects in its pipeline.

As a result of in-line inspections since 2007, Enbridge knew of 390 defects but only saw fit to repair 61 of them – leaving 329 unrepaired.

The section of pipeline that ruptured wasn't even one of these. I learned from documentation provided by Enbridge to PHMSA two weeks ago that the section of pipeline that tore had a defect, but the defect didn't reach PHMSA's threshold requiring repair.

But isn't it Enbridge's responsibility to make sure that its pipeline is safe and that people won't be injured and the environment won't be impacted?

Enbridge has a lot of experience in this area – with 163 pipeline spills since 2002, 83 of them on the Lakehead System.

Mr. Chairman, thank you for holding this hearing today. It's important to the people in Michigan, where 286 miles of this pipeline lay.

This hearing is ultimately about people – people whose lives have been changed, for some, permanently and irrevocably. We hold this hearing for Mitchell Price who couldn't be here but who wrote to me about his property along the Kalamazoo River that's been spoiled. And it's for Bobbie and Burita Lewis who feel violated and whose lives have been turned upside down.

This is also a hearing about safety.

Our current laws and regulations are not working, as we have seen with this spill and others.

The Enbridge pipeline spill is just one example of the need for further corporate responsibility and public oversight. There were three other incidents just in the past week, two from Enbridge lines.

Public health was compromised by Enbridge's spill, with over 60 homes being evacuated. Area medical centers have reported over 120 visits related to illnesses from the oil spill.

Over 1,000 oiled wildlife have been collected thus far. And the spill area is still today under advisories for drinking water, recreation, and fish consumption.

We do not yet know what the long term impacts of this spill will be on the health, safety, environment, and economy of these communities in my district. According to the National Institute of Health, there has never been a study of what the effects are of the high exposure levels of benzene and related odors, like the levels we saw in this spill, to children and infants. The testing has only been done in adults.

Additionally, I am very concerned before this pipeline is restarted that it can operate safely. Given the recent releases in New York and Illinois, and the over 80 release incidents reported by Enbridge since 2002, I do not think it can.

Every inch of this pipeline should be inspected and every defect fixed before eight million gallons per day of heavy crude oil begins to flow through it again.

From the very beginning there have been questions surrounding when this rupture and oil spill occurred.

Again, Enbridge stated in testimony to our committee's Subcommittee on Railroads, Pipelines, and Hazardous Materials on July 15, 2010 that their response time for release incidents "can be almost instantaneous, and our large peaks are typically detected by our control center personnel."

I am concerned about Enbridge's statement to the committee about their equipment and personnel being able to detect leaks almost instantaneously especially after this spill.

Enbridge's control room in Alberta started experiencing alarms the day before the spill was reported to federal officials at 5:58 p.m. on the 6B line. Additionally, reports of odors started coming into local emergency officials on that evening at 9:26 p.m.

At 11:18 a.m. on July 26<sup>th</sup>, Consumers Energy reported to Enbridge that there was oil in the Talmadge Creek. The leak was confirmed by Enbridge personnel at 11:45 a.m. and they reported the spill to the National Response Center at 1:29 p.m., nearly two hours after confirmed discovery by their personnel.

Thirteen hours of alarms in their control center in Alberta, and they still were unable to discover and report the leak near Talmadge Creek in their pipeline.

Current regulation requires pipeline operators to report incidents immediately upon discovery of a release. In 2002, PHMSA determined "immediately" to be defined as between one and two hours of discovery. Enbridge documentation indicates that reporting must be provided within two hours of discovery.

I introduced the Corporate Liability and Emergency Accident Notification Act (the CLEAN Act) to clarify the term "immediately" in the reporting requirements of a spill incident to the National Response Center to be no more than one hour after the discovery of an incident. My bill will also increase the current fines if a spill is not reported "immediately" to the National Response Center. It should not take more than an hour to report a spill release after it has been confirmed. In an accident like this with people and the environment at risk, every second counts.

Mr. Chairman, under current regulations, railroad employees can lose their license to operate a train for exceeding the speed limit by ten miles per hour, failing to make a brake test, or occupying a main track without permission. Truck drivers can lose their commercial drivers license for speeding, making an erratic lane change, following another vehicle too closely or even bottoming out the undercarriage at a highway-rail grade crossing. Those are serious offenses – don't get me wrong – but a company that has the longest petroleum pipeline in the world can spill one million gallons of crude oil, devastating a local community and sensitive environmental areas, and they do not have to fix all the anomalies in their pipeline? That concerns me to no end.

My concerns do not only extend to Enbridge's pipeline safety practices but also the company's practices with the spill claims process and labor practices at the oil spill clean-up site.

I have heard from citizens who were asked to sign waivers releasing Enbridge from any other liability in exchange for an air purifier – that, by the way, offers no protection from benzene.

Enbridge also had citizens sign waivers releasing all of their medical history to the company in return for medical treatment. This is outrageous and is a clear HIPAA violation. People should not have to sign away their rights to receive medical treatment or be reimbursed for a legitimate claim.

I also heard numerous concerns from community members whose businesses have been negatively impacted by the spill. Some citizens reported banks redlining people from buying their homes because it was in the vicinity of the oil spill. And numerous citizens are still concerned with the short-and long-term health impacts from the spill.

Additionally, there have been news reports of labor and worker safety issues with one of Enbridge's contractors, Hallmark Industrial LLC. One newspaper article reported Hallmark Industrial using illegal, undocumented workers to help work on the spill clean-up site. The article also reports that there were unsafe working conditions and workers who were not qualified with the proper certifications working on the spill clean-up.

This goes beyond media reports. Illegal workers bused in by an Enbridge subcontractor from Texas were actually arrested upon return to Texas.

This is wrong... and illegal. There are many qualified workers in my district that would love to have the opportunity to work on the oil spill clean-up. As a result of this article, Chairman Oberstar and I have asked for an investigation surrounding the labor, immigration, and safety issues involving Enbridge and Hallmark Industrial.

Just a few days ago, the same newspaper reported Enbridge was notified on August 23<sup>rd</sup> about the issues surrounding one of their contractors. Interestingly, Enbridge's spokesperson said that they examine the documents of all workers.

We need to look closely at all of the issues in regard to Enbridge's business practices and the oil spill.

Mr. Chairman, today we will hear from citizens in my district on how this spill has impacted their families, businesses, and daily lives and how, up until they were on the list to testify here today, Enbridge denied some or all of their claims for restitution. Enbridge has offered most of the witnesses here settlements over the last 72 hours. Mr. Chairman, perhaps we should hold three additional hearings so the other citizens from my district impacted in this spill that have been denied claims by Enbridge will too be able to get the damage reimbursement they deserve.

The citizens in my district deserve to be treated fairly by the company and to be reimbursed for all of the damages they have already incurred and will continue to incur in the future.

They deserve to have Enbridge held accountable for this oil spill and the safety of this pipeline.

Thank you, Mr. Chairman, for holding this important hearing and allowing the citizens of my district to be able to voice their concerns. I would like to thank all of the people from my district for taking the time out of their busy schedules to come and testify today before our committee.

**Statement of Michelle BarlundSmith  
Resident, Baker Mobile Home Estates, Battle Creek, Michigan  
Before the Committee on Transportation and Infrastructure,  
U.S. House of Representatives  
September 15, 2010**

**Mr. Chairman, Members of the Committee:** Thank you for the opportunity to speak to you regarding the Enbridge Oil Spill and its devastating effects on me and my neighbors. My name is Michelle BarlundSmith. I reside at Baker Mobile home Estates in Battle Creek, Michigan. We are approximately 6 miles from the spill sight or 13.5 by canoe. The park that we live in is a former campground turned into a mobile home park. The park is surrounded on 3 sides by the river. I have lived there for 3 years and am 200 to 300 feet from the river. My parents lived there for the 10 years prior to my husband and I moving in.

I first noticed the smell of oil Sunday night July 25, 2010 when my husband and I returned home late in the evening. The smell was so strong that at first I thought it was a gas leak and I walked around our home and both of my neighbors tried to determine where the smell was coming from. We determined that it was not a gas leak but we were not sure what or where the smell was coming from.

On Monday, July 26, 2010, I went to visit my 83 year old mother in Jackson, Michigan to take her to the dentist. When we returned that night we could still smell the scent and was informed by a neighbor of the spill. About 2 hours later we saw ambulances, fire trucks, and police stop outside our park. They said 2 men had fallen into the river and 1 was missing. Several of us grabbed flashlights and offered to help search and stood on the bridge shining lights down into the river. This was our first sight of how bad the oil spill was. Around 1:00 am it was discovered that the missing man was found after he had made it out of the river and made it to a neighbor's home. My husband and I returned home with headaches.

The next day I went down to the river to take my first photo of the devastation. It shocked me and upon returning I told my husband let's go take photos at Bridge Park. Bridge Park is the park where my husband and I take our dogs for walks 1 to 2 times a week and we do quite a bit of photography there. We pulled into the park's parking lot and noticed large trucks and equipment so I parked off to the side on a little side area. We walked down the side road and started taking photos. We were nowhere near the cleanup crews and equipment. After a few minutes we started towards the parking lot area and were met by 5 very polite police officers who told us we had to leave the park but could do photos from the bridge above, which we did. On the way home, my husband said we are in trouble... they need to evacuate us out of the park. We take more photos and my husband suggests that I upload them to CNN iReport. I continue to send iReports to CNN in the days after the spill, which are as follows.

**August 1 iReport:**

Today my husband and I stayed home. We went out late afternoon to pick up some groceries. On the way back I stopped at the mill pond down river. There were the booms and people

working. When we returned home, I watched the neighbors return and, after going to the bridge to take my evening photo, I ran into a neighbor who had surgery 2 days ago. I asked him how he was. He said he was more worried about his wife. She had just been transferred to Bronson Hospital from Battle Creek. Then 2 of the neighbors came up and said their children 3 and 8 year olds had been to the Battle Creek Hospital and they had been diagnosed with hydrocarbon poisoning... Enbridge: It's time to take care of the citizens of Battle Creek and those affected by your mistake. There is a meeting with the Health Department at 11:00 am at Baker Estates. Will Update...

Today has been an interesting day... with little sleep. At 9:30 am we handed flyers out to the residents of the park advising them of a meeting at 11:00 am with the Calhoun County Health Department. Enbridge and EPA did not make it. We are trying to find out why. We were told that they were in meetings.

At 11:00 we joined the small crowd of people at the front office of the park for a last minute planned meeting. About 40 people turned out. Some had gone to work or are still out of town. Some didn't care to join in. Fear is here among the residents.

The Health Department had questionnaires for us to fill out, which we all did. These will be counted and forward. Supposedly they will come back and question those that were not there. I videotaped 20 min of the meeting. The illnesses are rising. Last night we had 2 children and 1 adult. This morning, 2 more children and many more are feeling ill. I don't know if the survey will do any good, but I think the guys from the Calhoun County Health Department got the idea. People are getting sicker day by day, and it is time to start moving people out. They are sending bottled water and did advise us not to eat any garden produce... there went the tomatoes.

After the meeting, Channel 8 Wood TV showed up again. Reporter Joe Lafugey and his camera man Ron Swanson... 2nd time in 3 days... I think they are beginning to see the story too. They interviewed the mothers of the ill children - inhalation and ingestion of hydrocarbons... not a good thing. Ron the photographer checked out the wetlands and then went by the bridge. They see an oil covered turtle. My husband comes and tells me. I used to rescue sea turtles in the state of Florida many moons ago so we go to check. He is gone but there are 4 other black covered turtles on another log, but they are too far out. I would have to go into the river... So what's going on ... 3:00 pm press conference by Enbridge... and a meeting in Marshall tonight... ground zero of the disaster 7 miles away.

One pregnant woman on her way to Kalamazoo for a hotel... waiting to hear from the big guys... I e-mail my cousin to see if he has a tent... More later... Oh and Erin Brockovich ... if you are out there... give me a call.... I figure a week of inhaling fumes and chemicals can't be good. I am not a happy camper... besides the lady at the top of the hill - she lost a pet parakeet.(she is a breeder of birds.). I do not want to be the canary.

#### **August 5 iReport:**

Enbridge employees have finally started coming to the park to talk to residents. We are in the designated Red Zone. I met with 1 of the gentlemen Daryl yesterday. He apologizes and asked

us what we wanted. We told him we needed a hotel (in another city that would allow us to take our dogs and a gas card for coming back and checking on our home. No problem he replied: You book the hotel and I will put it on a credit card.

He asked what we wanted long term. We told him we were concerned about staying in the park but we need to clear our heads before making any decisions. (One of the problems with the fumes is you can't think straight or concentrate). We called him with the hotel confirmation phone number and information. He called back and said they were having problems with the credit card authorizations but that he would be back later with a check, we could take to bank and cash. He came back around 3:30 and gave us the check. He said the banks were having problems with getting information so we might not be able to cash it today. What the heck, we have been exposed for how many days at this point... fine. He tells us to wait until after 10:00 am. We go to a local park and take shots of some birds but first passed by the workers doing clean up down river... lots of booms and the crews really don't like having their photos taken. At the park, we notice the bird population has doubled. Some of the oiled birds have joined the long time residents.

Today we waited until 12:00 noon to try and cash the check - nope. Try back in 2 hours says the bank clerk. I ask her if they have had this problem before... yeah with several Enbridge checks. We get lunch at Denny's (trying to clear our heads) and go back at 2:00 pm - nope still will not clear... the bank clerk says try at 4:45pm.... we head home. I am really ticked off.... I tell one of the ladies who has been trying to help evacuate residents into hotels... she calls me and says they will be in the park later... ok....

Enbridge and police across the street. My husband starts taking photos. We get lots of glares but with our Nikon back and working he can use telephoto lenses. Daryl comes over and apologizes they are telling people to go downtown to their new Battle Creek Office they will cash the checks there. We park and go in. I show the nice polite young lady the check. She says to wait here we have to get that cleared by a specific person... when was it issued... yesterday, I reply.... Oh ok... We sit down in some seats across from some neighbors... they have been in and out of different hotels all week.

A gentleman appears and asks me to step into the hallway... we do... he apologizes and says he can't cash it... can we wait another day... I glance at the clock... the hotel holds the reservation until 6:00 PM... it's 5:45... he tells me it will be put into the system and we should be able to cash it after 10:00 am so we can go to the hotel. We leave.... The man we spoke to was the Vice President of Finance for Enbridge: Mike Maki. I call the hotel ... we are on first name basis by now... they rebook me for starting into the hotel tomorrow..... I tell her: what's another day of fumes, headaches, nausea, etc etc etc... I am too exhausted to drive anyway. To the CEO, VP's and Board of Enbridge: Your customer service is horrific. You destroyed the river, my home, my life, and maybe my health at this point. along with many of my neighbors. Why are we running around trying to accommodate you? I think it's supposed to be the other way around. To the gentleman from the great state of Michigan that stopped by to talk to me about the situation: I apologize. I will call tomorrow. I was on a wild, oily goose chase by Enbridge.

#### **August 10 iReport:**



My husband and I are in a hotel about 45 minutes from Battle Creek. When I get up in the morning to take the dogs out, the first thing I notice is the birds singing. We have not heard that sound in 10 days. Our Great Dane, Thor (a puppy at 5 months), and Athena, the purebred mongrel, is feeling better. It is nice to see them do something instead of just laying around sick. My husband and I try to eat breakfast but our appetites are not there. We put the stuff in a mini fridge for later.

My husband had spoken to the company representative that owns the park the night before and asked if we needed to pay rent...of course... we debate on paying but decide to drive back to Battle Creek. When we hit exit 124 we smell the oil fumes... and as we get closer to home ... exit 100... it is just stronger.

We pay rent and I ask the Park Manager to bill the late fee to next month's bill. She says they have agreed with Enbridge to waive it... We are in the park 20 min and the headache is back along with the nausea... we leave after snapping a photo of the clean up tents being set up. We go back to the hotel and sleep..

I wake up at 4:30 pm and check my email... 2 messages from neighbors.... First, they are going to spray for mosquitoes. Second message is that the public health department is returning at 6:00 PM. The park put out the flyer at 3:30pm... I wake my husband up ... So is this an evacuation? We return to Battle Creek... they show up at 6:30, park outside the park in a big van that is for disaster incidents. One of my neighbors says the park owners have banned Enbridge from coming into the park along with media and various public officials. Jim Rutherford (Calhoun County Health Dept), Dr. Wells (Michigan Department of Community Health Department) and Emmet Township Supervisor Gene Adkins with 20 employees tell us they are going to do a door to door survey... They do not know why people are sick and feel this may help tell them. They say that it is a voluntary evacuation. They have set up kennels and places for pets to stay. We wait for the team to reach us. I talk to the lady and guy first, then my husband. We load the dogs back up and get ready to take off. The couple from up the hill return. She was back in the hospital; now on a nebulizer machine. The doctors are saying she may need to go on oxygen permanently. They are going back to the hotel... just checking on the dogs... They have missed the survey... We head back to the hotel feeling bad that some of the neighbors are still there. My husband reminds me people have to make their own decisions.

Again, the previous sections are from my iReports on CNN. In the days since, we along with our neighbors have been through hell. We would be evacuated, returned home, and then evacuated again. Some were sent to hotels right across from the river down town. I have never seen a company handle a situation so poorly. We are told one thing by the company and they do the opposite. We have had people hospitalized 3 and 4 times. We cannot go out of our homes for long periods of times. Many of us have watched our health worsen day by day... Those of us told our homes would be purchased... now ignored or told that we are no longer in the purchase areas. Many of us have had to hire attorneys due to the lack of response from Enbridge.

I come from the airline industry. We are regulated by the Department of Transportation, Federal Aviation Administration, etc etc etc... Why? Because of safety. Please do something

regarding this industry.

Some of the questions and comments of my fellow residents:

1. Why are we allowing the ones who CAUSED THE DISASTER to decide medical, emergency procedures? Why are they controlling the state, county, township, and medical procedures? Why are they controlling agencies like DNR, REPORTING PROCEDURES AND 800 NUMBERS? WHY ARE THEY CONTROLLING THE CLEAN UP?
2. Why no standard procedures ON MEDICAL TESTING FOR RESIDENTS THERE IS ONE FOR EMPLOYEES?
3. WHY NO STANDARD ON EVACUATIONS? Why not use national guard or military assistance if state or areas have no funds?
4. Require the companies to set up escrow accounts for disasters and contribute yearly or quarterly.
5. Kellogg's and Post Cereal had to shut down for hours. Businesses and Farmers need to be advised and reimbursed by the companies. They have been told they are behind home owners in the restitution process.
6. Why do you not require quicker reporting?
7. Why no declaration of federal disaster area? What constitutes a federal disaster area? A spill of major magnitude should automatically be a federal disaster area due to all of the chemicals.
8. We need stiffer regulations, enforcement of regulations, and higher fines for failure to follow up. This company has known about the faults of this pipeline and did nothing for a minimum of 3 years. Freeze their assets or shut down the pipeline until it is brought up to date. If this line had broken in Detroit, you would be cleaning up 2 of the Great Lakes (affecting millions) instead of just a 30 mile stretch of river.
9. This is not a Democrat vs. Republican issue... this is a issue of protecting your constituents lives, health, and way of life. Ours has been destroyed. Our health hangs in the balance, And if the scientists are correct and this is effecting our DNA and future generation's DNA... you are protecting the future generations of humans.
10. More research on tar sand oil and the transportation along with the effects on the environment, animals and humans should be funded by the oil companies conducted by a 3<sup>rd</sup> party research team.

**In conclusion:** You as our elected representatives are placed here to make changes, write new laws, and protect this country. We are asking you to do that. Oil companies must not be allowed to dictate their own rules and regulations as they have clearly shown that they have

no intention of protecting the environment, animals, or even human lives in their pursuit of the almighty dollar. Therefore you as our representatives must step in and regulate, and enforce those regulations. To protect us.

Thank you for the opportunity to speak to you.



**Testimony of the National Wildlife Federation, Great Lakes Regional Center  
House Transportation and Infrastructure Committee  
Hearing On Enbridge Pipeline Oil Spill: Marshall, Michigan**

Andy Buchsbaum, Director, National Wildlife Federation Great Lakes Regional Center  
Beth Wallace, Great Lakes Oil Spill Response Coordinator

September 15, 2010

Mr. Chairman, members of the Committee, thank you for the opportunity to testify before you today regarding the worst oil spill in Midwest history. On behalf of the National Wildlife Federation (NWF), the nation's largest conservation advocacy and education organization, and our more than four million members and supporters, we thank you for the opportunity to provide our first-hand observations, comments and recommendations on the Enbridge pipeline oil spill in Marshall, Michigan. The National Wildlife Federation's mission is to inspire Americans to protect wildlife and the habitat they depend on, like the Great Lakes and their tributaries, for our children's future. Our Great Lakes Regional Center, located in Ann Arbor, Michigan, focuses on wildlife and habitat in the Great Lakes region.

Your hearing today is vitally important because we have witnessed an economically and environmentally fragile region being devastated by an oil spill that never should have occurred and which was likely made worse by delays in reporting and response. But this is not just a 'local' or 'regional' issue. The decisions made today have the power to better protect every American.

Before getting into the details of our testimony, we would like to extend our sincere condolences to the families who have already lost homes, pets, or health, or have been indefinitely displaced due to this disaster. Those lives have been severely disrupted and for many, those disruptions will continue for months, years, and in some situations, forever. We share their frustration and anger over Enbridge's failure to maintain its pipeline adequately and the government's failure to make sure that the company conducted adequate maintenance.

In our testimony today, we will focus on the Enbridge oil spill's impacts on wildlife and on the local community. We will also provide recommendations to address those impacts and help reduce the chances that such a spill could happen in the future - here, or anywhere else. We have documented these impacts through first hand observation,

through conversations with residents and responders, and through reviews of reports and studies.

NWF's Great Lakes office in Ann Arbor had multiple staff at the site within 48 hours of the pipeline rupture. During the overnight hours of July 29, NWF staff alongside Talmadge Creek and the Kalamazoo River witnessed dozens of tanker trucks rumbling in and out of what would become "Division A" south of Marshall, Michigan. Oil strainers worked either side of Division Drive, just steps away from the pavement. Bright, piercing industrial spotlights illuminated efforts to lay boom and demarcate oil soaked lawns of private homes. Oiled and dying geese, turtles and muskrats were already showing up on the banks with no rescue efforts in sight. And this was just the beginning. That night and over the course of the next 10 days, NWF made repeated stops in Comstock, Morrow Pond, Galesburg, Fort Custer State Park, Battle Creek, Ceresco and various sites in and around Marshall. We made observations, took photos, talked to residents, and interviewed emergency personnel (volunteers and government) on the scene. The images and stories were heartbreaking. Out of respect for both space and time, this testimony includes only a fraction of those.

We can draw several conclusions from what we saw, what we heard, and what we have read and learned since:

- The Enbridge pipeline rupture never should have happened. Enbridge failed to adequately monitor and maintain its pipeline, and the federal agency charged with overseeing pipeline operations did not require Enbridge to take the actions that were necessary.
- Within days of the official 'acknowledgment' by the company of the spill, it became very clear the company was grossly under-resourced and unprepared to handle or manage the rapidly growing disaster.
- Public safety authorities within the affected communities did not have adequate knowledge of the pipeline. During early detection of the spill, this lack of knowledge and understanding lead to confusion and delays in discovering the disaster at hand thus adding to the delay in response.
- Many of the people and wildlife near the thirty miles of rivers that have been contaminated have suffered devastating (and in the case of wildlife, fatal) impacts and those impacts are likely to continue.
- Ineffective and delayed communications and lack of organization by Enbridge and many of the agencies have significantly increased public frustration and anger over the spill. Lack of transparency and the inability to obtain basic information – a problem that continues even today for some areas – has enraged local citizens and made it impossible to assess how bad the damage really is.
- Changes in procedures and policy reforms can help remedy these impacts and prevent many spills (and we discuss them below), but as long as our nation remains so dependent on oil and other fossil fuels for energy, pipeline disasters are bound to occur. Unfortunately, the Enbridge oil spill on July 26 was not a unique or isolated occurrence – even for Enbridge. Just last week, another

Enbridge pipeline near Chicago ruptured, spewing almost as much oil onto land and into the sewer system. An Enbridge pipeline rupture in Minnesota caused an explosion that killed two workers in 2007. As an NWF report documents, in the past decade there have been over 2,554 “significant incidents” from pipeline accidents, 161 fatalities, and 576 injuries in the United States.<sup>1</sup> Our nation needs to end subsidies to these dirty energy sources and embrace, promote and fund clean energy – energy sources that do not emit pollution and that do not require pipelines to transport dangerous materials.

### **Background**

The Kalamazoo River watershed is located in the southwest portion of Michigan's Lower Peninsula and drains about 2,020 square miles from 10 counties including Allegan, Barry, Calhoun, Eaton, Hillsdale, Jackson, Kalamazoo, Kent, Ottawa, and Van Buren. The watershed is approximately 162 miles long and varies in width. There are approximately 400,000 watershed residents across 19 cities, 11 villages, and 107 townships between Hillsdale County and the City of Saugatuck. Communities in the watershed are connected by human infrastructure, green infrastructure, surface water, and groundwater.

For more than 100 years, the Kalamazoo River has played an historic role in highlighting the need for greater environmental stewardship to better protect public health. The river's first hydroelectric dam, actually providing power to nearby residents, went online in 1900. More hydroelectric dams were built, which attracted industrial development, including paper mills. Most factories and city sewer systems simply dumped their waste into the Kalamazoo, which led to severe habitat degradation and devastating effects on wildlife. As the Kalamazoo Watershed Council points out, in 1953, *Life Magazine* put a picture of a massive fish kill on its cover. The public reaction contributed to the awakening of the U.S. environmental movement, and led to state and federal legislation culminating in stretches of the Kalamazoo River being listed as a U.S. EPA Superfund site. Despite some progress in cleaning it up, PCB contamination remains in the river and removal activities continue to this day.

### **The Oil Spill**

On July 26, 2010, Enbridge Energy Partners L.P. reported that an oil spill had occurred and had reached Talmadge Creek, a tributary of the Kalamazoo River, near Marshall, Michigan. We now know that around 12 hours earlier there had been 911 calls complaining about odors likely caused by the spill. Those calls confused officials and residents as the source could not be determined until mid day, on July 26, when a Consumers Energy employee notified Enbridge of contamination in the area. But by that time around one million gallons of oil had spilled into the Creek.

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<sup>1</sup> See *Assault on America: A Decade of Petroleum Company Disaster, Pollution and Profit*, National Wildlife Federation 2010, page 3

That same day, oil from the rupture reached the Kalamazoo River. A wide, thick and dense plume flowed down the river, accelerated by heavy rains that day and the day before. The oil blew by the booms set to capture it, eventually reaching 30 miles downstream before it was stopped by booms just before it reached Marrow Lake near the city of Kalamazoo.

The swollen waters of the river washed the viscous oil high up on the shoreline, coating trees, wetlands and other vegetation along with the turtles, frogs, birds and other wildlife that were present. The fumes from the oil were physically overpowering, making your eyes water and your nose burn, even a quarter mile or more from the river. The fumes forced nearby residents to evacuate and impaired the efforts of first responders.

### **Community Impacts**

Community members who braved the fumes collected on bridges and shorelines to witness the devastation of the river that is an intimate part of their lives. We saw many tears on the faces of mothers and fathers who several days earlier had been playing with their kids in the river, taken them fishing, or walked along the shoreline. And we saw those tears turn to frustration and anger when many of them were forced to leave their homes.

Our first interactions with the impacted community members quickly showed us that even the basic information was not being communicated properly or in a timely way. Residents were unsure if it was safe to breathe the air in and around their homes or drink the water. As a result basic health and safety needs were not being met.

In the days and weeks to follow, frustrations reached an unbearable level as the affected communities scrambled to cope with the severity of the situation. Homes and places of business, front and back lawns became parking lots for tankers and pumpers and work trucks. What was once a flower garden is now a pile of oil booms and pads and mountains of toxic waste bags. All up and down the 35 miles of destroyed river there are stories - and families whose concerns and needs are not being met.

In the early days of the disaster, and even today, state and federal officials continue to defer to Enbridge for most, if not all, decision making. When asked who was 'in charge' the answer was always the same, 'The oil company, Enbridge.' When residents and local animal rescue groups tried to take matters into their own hands, Enbridge followed with legal warnings and threats of suit. Retired Red Cross nurses and licensed and certified volunteer wildlife rescue and rehabilitation groups from across the state were told their services were not wanted or needed.

And for some, the help that Enbridge did offer came with unacceptable strings attached. In exchange for clean drinking water and respirators, Enbridge reportedly required some residents to waive their legal rights for any additional relief. Low-income families in many of the trailer parks that dot the banks of the river in the affected area were offered checks to cover relocating their families to a motel. In doing so they were asked to 'sign

away<sup>7</sup> any future rights - in exchange for a motel room and a hot meal for their family because they lacked any other resources or options.

Hunting and fishing along the river and adjacent millponds in Battle Creek provides an important alternative food source for many families especially as incomes continue to be cut. According to the Bureau of Labor Statistics, the City of Battle Creek currently has a 13 percent unemployment rate. Just in the past week local homeless shelters have seen a spike in the number of homeless experiencing symptoms from exposure to toxic benzene. The homeless camps in this area are under the overpasses and along the river. They fish the river for food. They use it to drink and bathe. And now many of them are very ill.<sup>2</sup>

And now waterfowl hunting season has started. Many families in the area depend upon the harvest of geese and venison for food. It's not uncommon to see elderly, retired gentlemen along with many young kids fishing off the Riverside Bridge every day - rain or shine. They do it because it brings them pleasure, and in some cases it puts food on the table. While traveling to the Marshall Public Speaks meeting, we noticed a young man fishing just a few hundred yards upstream from where Talmadge Creek and the river connect. When asked how he felt about his fishing hole being closed to recreation, he politely expressed his frustrations but made note that he will continue to catch and release until the fish advisory has been lifted, even if it takes years.

On September 5<sup>th</sup>, just over a month after the spill was reported and weeks after the EPA reported the river mostly free of oil, Tim Havlock of Galesburg, Michigan was interviewed describing his riverfront home by Chris Killian of the *Kalamazoo Gazette*. Here is an excerpt from that story:

Oiled vegetation and trees sit in a wooded area just upstream of his property. Wildlife would use the area for cover, but they haven't been seen for some time, Havlock said.

"The ground here is absolutely polluted," he said. "And it's going to be here to stay."

Havlock, 50, said that workers with the U.S. Environmental Protection Agency told him that his land would likely not be cleaned up.

"They said that Mother Nature would take care of it".

Now oil has returned to the stretch of river as it passes his property. Behind an orange containment boom tied to a tree in his backyard and stretching across the river, ribbons of oil can plainly be seen.

Once in a while, the smell of oil wafts into the air.

<sup>2</sup> B.C. homeless suffer oil effects  
<http://www.battlecreekenquirer.com/article/20100813/OILSPILL/8130312/B-C-homeless-suffer-oil-effects>



...  
“They’re leaving us stretched out in the cold,” he said.

Enbridge has offered twice to purchase Havlock’s home at its appraised value. He declined both times.

“I’ve lived here for over 20 years,” he said. “I hunt here, I fish here. I feel like I’ve lost my river but I’m not moving away.”<sup>3</sup>

Mr. Havlock’s story is not uncommon. In conversations with residents and response officials over the past six weeks, we have heard many of the same frustrations. Enbridge’s ‘solution’ of acquiring the properties of local residents is, for many, part of the problem. Enbridge has already purchased a handful of homes, is in the final stages of purchasing around a dozen others and is appraising around 50 other properties. But many residents want the river cleaned up so they can stay in their homes; they do not want to move away.

#### **Wildlife Impacts**

We do not know the full magnitude of impacts the Enbridge oil spill has had or will have on fish and wildlife. Even today, we do not know how many birds or turtles or frogs or muskrats or fish have already died, or even how many have been reported as impacted or dead. The lack of reliable information from Enbridge and the federal agencies has been a source of frustration for residents who see and report injured or dead wildlife and for organizations like the National Wildlife Federation, who are trying to assess the magnitude of the impacts and the effectiveness of the response.

The reports we receive from the U.S. Fish and Wildlife Service and from other government agencies are only what Enbridge has provided them. Enbridge is in charge of the wildlife rescue and rehabilitation efforts. It has hired a private firm, Focus Wildlife, to run the operations. All calls from residents reporting wildlife problems go to Enbridge’s toll-free number – the same toll-free number that residents call when they report any problem or have any question about any topic, such as evacuations, response actions, and public health issues. Enbridge says it routes these calls to the appropriate agency, but it claims that it does not keep track of how many calls it receives on any issue or whether there is an adequate response to those calls.

We do know that the number of deaths of fish, birds and other animals that Enbridge has reported to the agencies are much lower than have occurred, and that there has been far more damage than has been reported. Our staff attempted to report several personal interactions with oiled wildlife and experienced firsthand the lack of response and confusion regarding emergency contacts, or lack thereof. They reported seeing many

<sup>3</sup> For Galesburg man, Kalamazoo River oil spill is all too real:  
[http://www.mlive.com/news/kalamazoo/index.ssf/2010/09/for\\_galesburg\\_man\\_kalamazoo\\_river.html](http://www.mlive.com/news/kalamazoo/index.ssf/2010/09/for_galesburg_man_kalamazoo_river.html)

oiled turtles, birds and an oiled muskrats that returned to the river or hid on the shoreline. These animals were never delivered to Enbridge and so would not be part of their "count."

So it is with some skepticism we provide the numbers Enbridge reported to the U.S. Fish and Wildlife Service as of September 11, 2010:

Animals that died in care: 22  
Animals that were euthanized: 17  
Animals that were dead on arrival: 38, plus 16 fish  
Animals released after cleaning: 897  
Animals still in care: 269

The number of animals that were cleaned and released is certainly good news. By far the largest population of animals recovered is turtles. Snakes, muskrats, beaver, Canadian geese, mallards, and great blue herons also were also rescued.

Beyond the many roadblocks in trying to determine how many animals have died or are damaged, the wildlife recovery efforts have been challenging. Many private citizens and public agencies are working to identify and collect damaged wildlife, but the oily waters make such efforts difficult and sometimes hazardous, and we have seen a lack of organization by Enbridge that further hurts the effort.

The following first-hand account by Jason Dinsmore, a wildlife specialist with National Wildlife Federation's Great Lakes office, illustrates the difficulties in recovering wildlife:

On August 6 I had the opportunity to accompany a team of biologists and technicians from Michigan's Department of Natural Resources and Environment (DNRE) on one of their daily animal rescue operations on the Kalamazoo River. The exercise was a heroic one, but in the end it could only be described as frustrating and inefficient. The DNRE staff was professional in every manner and took to their duties with all the dedication that one would expect of civil servants. However, inefficiencies in their available methods of rescuing the oiled turtles led to more than a little bit of frustration on the boat.

Enbridge, the company responsible for the nearly one million gallons of oil that spilled into the river the last week of July, had officially claimed that the main channel of the river was "clean" of oil earlier in the week. However, there was still enough oil in the main channel to make it unsafe for teams charged with recovering oiled wildlife to enter the water. How a company can say that the water is clear of oil while it is still too oiled to allow for remediation and recovery teams to enter it is beyond my abilities to comprehend. With this limitation at hand, teams attempting to recover oiled turtles were required to use speed and a fair amount of agility to attempt to net the turtles with ten foot pole nets while they were on logs or resting at the surface.

The circus acts necessary to rescue the oiled wildlife were nothing short of impressive. The “netter” at the bow of the boat was required to be sure footed as the boat was thrust toward shore at the resting turtle. Once the turtle was within reach the netter would attempt to scoop the turtle into the net while simultaneously bracing himself for either a full reversal of the boat to keep from colliding with the log the turtle was previously resting on or the boat running up onto the shore. Either way, without a wide and balanced stance, one could easily find himself getting wet. Once the turtle was caught (yes, we did catch a few), GPS coordinates and the turtle’s measurements and species were logged into a data card for each turtle rescued.

Many turtles were sighted along the stretch of river assigned to the team that I was shadowing, but only a few made it into the boats collection buckets. Once the river is cleared for wading, collection efficiency should improve with the ability to use seine and hoop nets to retrieve turtles attempting to escape into the muddy waters.

The sight of so many oiled turtles was disturbing, but I was similarly concerned regarding the amount of oil that I could still see floating down the channel and mired in the many snags and stumps found in the river channel. One would hope that this is not indicative of what those charged with cleaning up the river in the aftermath of the state’s worst oil spill consider to be “clear of oil.”

Our staff also observed public confusion about wildlife rescue and response protocols in the days immediately following the spill. Well over a week passed before Enbridge’s animal rescue efforts were fully up and running. Although Enbridge and state and federal officials publicized a toll-free rescue phone number to report oiled wildlife, the phone went unanswered, or calls were sent to voicemail. To our knowledge, Enbridge and the agencies did not return or acknowledge those calls to the callers. During those first few weeks, wildlife was going unrescued, unreported, suffering and dying.

That confusion persisted for several weeks, at least. The media reported on the efforts of a private non-profit, Circle-D, to rescue and clean animals. The combined Enbridge-FWS Wildlife Rescue Facility did not clean its first goose until almost two weeks after the spill occurred. NWF staff gave business cards to people we encountered during the first week after the oil spill, asking that if injured or oiled wildlife were discovered to contact us. Three separate calls came into our Ann Arbor office, which promptly alerted both Circle-D and the Enbridge wildlife telephone hotlines and by e-mail. Repeated inbound calls were received by NWF about Canadian geese in Battle Creek. Circle-D took 10 days to acknowledge the receipt of NWF’s email communication, and Enbridge never acknowledged those calls and emails.

Just as with response actions and community impacts, the problems with disorganization, lack of response, and secrecy stem primarily from the designation of Enbridge as the entity in charge of wildlife rescue, rehabilitation and reporting. Enbridge should certainly pay for the wildlife response activities, and under proper supervision, should be able to

hire the contractors (like Focus Wildlife) who rehabilitate the wildlife. But the government delegated too much control to Enbridge. Enbridge should not direct the wildlife recovery efforts; it should not be the point of contact for the public; it should not control the information that the agencies and the public receive. Because Enbridge caused the disaster, it has strong incentives to downplay bad news – especially wildlife death and damage. The government agencies – the U.S. Fish and Wildlife Service or the state Department of Natural Resources and Environment – need to take a much more active role.

Government leadership will be even more important going forward. It is clear from extensive studies from previous spills that the wildlife impacts have the potential to be far-reaching and last for decades. For example, more than 20 years after the Exxon Valdez spill, oil can still be found on Alaska's beaches, and many species have not completely recovered. The pigeon guillemot (a pelagic bird) has shown few signs of recovery, in part because of lingering oil in habitats used by the bird. The once abundant herring population, an important link in the food chain that previously supported a commercial fishing industry in the area, has also not recovered. While the oil spill is strongly implicated in the population crash, it is likely that multiple factors continue to stress the herring population, preventing its full recovery. Two orca (killer whale) pods affected by the Exxon Valdez lost 40 percent of their numbers and have not fully recovered; the pods reproductive success appears to have suffered long-term damage. Finally, although some species have demonstrated significant recovery, they are still not at pre-oil spill population levels. These include sea otters, clams, mussels, goldeneyes, black oystercatchers, and harlequin ducks.<sup>4</sup>

One reason for the lengthy period of damage from oil spills is the potential bioaccumulation by organisms of oil components. Oil is made up largely of hydrocarbons – some of the key chemicals of concern are lighter straight-chain hydrocarbons and some are polycyclic aromatic hydrocarbons (PAHs). As the oil weathers, the lighter components tend to evaporate and/or degrade more quickly, leaving the oil concentrated in the heavier (i.e., higher molecular weight) compounds – including PAHs – which in turn can dissolve to some extent in water. PAHs (and to a lesser extent some other oil components) can bioaccumulate in organisms over time. Once inside an organism, PAHs can cause toxicity in various ways, including through edema and deformities in embryos. Research has also shown that exposure to light can lead to the transformation of PAHs into chemicals that are even more toxic to organisms.

Birds that come into contact with oil can be damaged right away or over time. Birds that frequently land and float on the water can experience deadly hypothermia when oil destroys the insulating quality of their feathers. The birds natural line of defense is to desperately groom their feathers with their bills, consuming some oil, which may lead to serious effects, some of them delayed: ulcers, diarrhea, kidney and liver damage, anemia and even death. Breathing in oil can lead to pneumonia, neurological damage, and

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<sup>4</sup> 2008 Status of Injured Resources & Services. Exxon Valdez Oil Spill Trustee Council. [www.evostc.state.ak.us/Recovery/status.cfm](http://www.evostc.state.ak.us/Recovery/status.cfm)

eventually cancer. Furthermore, the toxic chemicals can accumulate in their bodies, weakening them and making them more prone to disease and predation. There is also evidence that even small quantities of residual oil can reduce the reproductive success of birds.

Finally, wildlife impacts translate into human impacts. The Kalamazoo River is a thriving area for fishing and hunting, as well as boating. But the Enbridge spill has put the river off-limits to both; just as the waterfowl hunting season begins. The state DNRE has advised hunters to stay away from the river and so far they have done so, although many waterfowl hunters are using nearby fields where birds fly over. The state also has issued fish consumption advisories warning people not to fish in the river and certainly not to eat any fish they catch of find. DNRE staff estimate that the fish advisories could be in place for up to a year.

### Recommendations

As noted above, changes in procedures and policy reforms can help remedy these impacts and prevent many spills. But more fundamentally, as long as our nation remains so dependent on oil and other fossil fuels for energy, pipeline disasters are bound to occur. Our nation needs to end subsidies to these dirty energy courses and embrace, promote and fund clean energy sources – energy sources that do not emit pollution and that do not require pipelines to transport dangerous materials.

We also need to continue overhauling the federal laws that govern pipeline safety, such as the Oil Pollution Act of 1990 and the Pipeline Inspection, Protection, Enforcement and Safety (PIPES) Act of 2006, which is now under consideration for reauthorization.

We also have several recommendations that apply specifically to the Enbridge pipeline rupture in Michigan:

1. Require more effective, monitoring, maintenance, and reporting on existing pipelines by companies like Enbridge. The law should require companies to assess the integrity of their pipelines every year via in-line means (e.g., cameras or “pigs”) and then conduct maintenance measures if anomalies are found. Such monitoring is required now only every five years, and then only in “high consequence areas” whose identities are secret. Federal standards for repairing pipelines should also be more protective; Enbridge’s own monitoring before the pipeline rupture revealed flaws in its pipeline near Marshall, but (according to the company) those flaws did not meet the federal threshold for repairs. Pipeline companies should report the results of this monitoring fully and quickly to federal *and* state agencies, and it should be available to the public. When incidents do occur, they should be reported immediately to federal and state agencies. The Department of Transportation should maintain a database of all reportable incidents that is searchable by operator.
2. The government- run oil spill command structure needs to be more directly engaged in the response and recovery efforts. The responsible party (here,

Enbridge) should pay for all the activities, but the company should not be in charge; that's too close to asking the fox to guard the henhouse. The designated government commander should not delegate too much control to Enbridge, as it has done here.

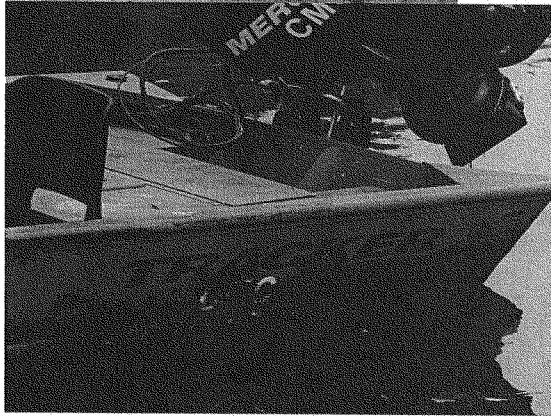
3. Establish a perpetual trust fund to pay for long-term damage to the river ecosystem and to wildlife: This is a different kind of trust fund. Enbridge by law is required to pay for immediate response costs through the Oil Spill Liability Trust Fund, and also to pay Natural Resource Damages through another federal account. Natural Resource Damages are set by an assessment by federal and state trustees and are used to implement a restoration plan developed by state and federal agencies. These payments are essential, but they are not enough. Much of the damage to wildlife and the habitat from the oil spill will unfold over a period of years, well after the immediate response actions and the restoration actions have ended. We need a trust fund to support the long term measures that will be necessary to bring wildlife and habitat in the area back to health. That trust fund should be administered by representatives of local communities, residents, and federal and state agencies, and should be funded so it can last for years. It should be financed by Enbridge and designed to act as a permanent foundation to support wildlife and habitat in the Kalamazoo River and Talmadge Creek watersheds affected by the oil spill. We have a model for such a fund in Michigan: the Great Lakes Fishery Trust, a \$20 million fund established by Consumers Energy to pay for damage to fish caused by its pumping station in Ludington, Michigan. Consumers Energy made an initial payment to the Trust and provides payments every year. The Trust is governed by independent agencies and organizations and relies on a science advisory team to recommend grants to people and organization working to repair or prevent damage to fish in Lake Michigan.
4. The Pipeline and Hazardous Materials Safety Administration (PHMSA) should not allow Enbridge to restart line 6B until all previously identified anomalies are addressed, and any necessary maintenance/upgrades are undertaken. In support of this assessment, PHMSA should verify that Enbridge has produced a thorough integrity verification and remedial work plan as requested by the agency in July.

We also have three broader recommendations on federal pipeline regulation with respect to Michigan and the Great Lakes more broadly:

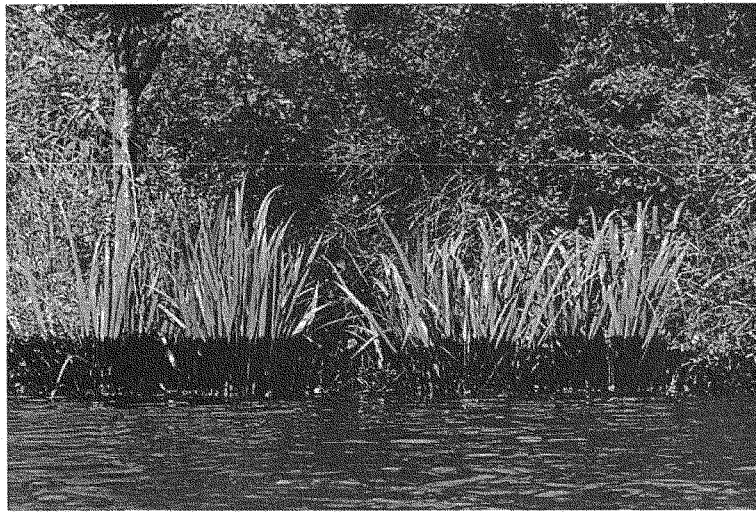
1. The regulations should be modified to redefine designation of "high volume areas," i.e. major rivers or other navigable waters with pipeline crossings for which more rapid response in case of worst case discharge is required (Appendix B of 49 CFR Part 194, on Response Plans for Onshore Oil Spills). The Maumee River is the only river in the Great Lakes region among the listed areas, and the listed areas do not include lakes, even though pipelines traverse the Great Lakes. Major Great Lakes tributaries and the lakes themselves should be included in this list.
2. PHMSA should publicly identify (both in the Great Lakes region and nationally) pipelines that traverse "high consequence areas" (as defined in 49 CFR Part 195.450). These are areas where there are additional protections from pipeline

- spills. Furthermore, PHMSA should publicly release risk analyses (including preventative and mitigative measures) completed by pipeline owners to protect high consequence areas.
3. Although there has been debate over whether the oil spilled into the Kalamazoo River was derived from tar sands, Enbridge pipelines are known to transport tar sands oil - and U.S. imports of Canadian oil will increasingly come from tar sands in the future. Inadequate information on the chemical characteristics tar sands oil and the diluents used for its transportation make it impossible to determine the effects on pipeline corrosion, as well as the impacts spilled tar sands oil would have on the aquatic environment. PHMSA should require companies transporting tar sands oil to do the analysis to provide this information, and implement additional safety measures if the results demonstrate they are needed.
  4. Congress should pass the Corporate Liability and Emergency Accident Notification (CLEAN) Act, (HR 6008), recently introduced by Congressman Schauer. This legislation would go a long way to ensuring that reporting of oil pipeline leaks and ruptures is prompt and accurate.

Photos from Great Lakes Regional Center (NWF) Staff:







**TESTIMONY OF SUSAN M. CONNOLLY**

428 North Mulberry Street  
Marshall, Michigan 49068-1020  
(269) 789-0984

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**BEFORE THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE  
REGARDING THE ENBRIDGE OIL SPILL  
MARSHALL, MICHIGAN  
HEARING HELD: SEPTEMBER 15, 2010**

**Introduction:**

I would like to thank the Chairman and the members for this opportunity. I come to you today as a concerned parent speaking on behalf of the children, families and staff of a day care center ("Center") located approximately six tenths of a mile from Talmadge Creek and the Kalamazoo River in Marshall. My husband and I have a two and a half year old daughter and a four-year-old son who are at the Center five days a week, from seven thirty in the morning until six o'clock in the evening.

On Monday, July 26, at seven twenty a.m., my husband and I dropped off our children at day care. Our home is about two miles north of Talmadge Creek. Driving just two blocks south from our home, I could smell a strong "odd" odor in the air. When we arrived at the Center, the odor was even stronger which is why I am before you today. As the weeks have passed, I have many concerns, questions and doubts. I would like to start with the following:

**Health – Symptoms:**

As of July 26, the following symptoms have been noted of some children, staff and/or the owners of the Center:

- Personal Experiences:
  - Our son vomited the night of July 26 and our daughter had a rash that appeared the second week of the spill and lasted about six days.
  - My husband and I have experienced at the Center:
    - Headaches, eye irritation, lethargy/tiredness, a burning sensation in the throat, nausea and/or a cough.
  - At our home on Saturday, July 31, our dog (a Boston terrier) was in the yard most of the day. Over the course of the night, he had diarrhea and vomited numerous times. I contacted our vet Monday morning and was told it, most likely, was a reaction to the Benzene or VOCs in the air.
  - At our home, there were times that we would not run our HVAC or open our windows due to the strong odor.
  - On Friday, August 28, I spent the day at the Center. I smelled a slight odor in the front entryway and in the staff lunchroom. I occasionally had a slight burning sensation in my throat and watery eyes. The following day I had a migraine as well. While I cannot verify my symptoms to the air quality, I note that I did not have those symptoms prior to the time at the Center.
  - In addition, in the first week or two of the spill the children at the Center were playing outdoors when an oil covered goose landed on the property. The Center called the Enbridge Hotline but it was several hours before there was a response and the animal had flown away.
- Other Children, Staff and the Owners:
  - Reported cases of vomiting, asthma, shortness of breath, lethargy, headaches, rashes, eye irritation, migraines and/or a sore/burning throat.
  - Several staff lost time from work due to their symptoms. A parent who I spoke to said when he went to the Center to withdraw his daughter, he was there 15 minutes and got a migraine immediately.

**Parent Meeting Held August 17 at the Center:**

The following representatives attended:

- Jim Rutherford of the Calhoun County Health Department;
- Two toxicologists on behalf of CTEH (one was Dr. Angela Harris);
- Two representatives for the EPA;
- Don DeBlasio of the EPA;
- Dr. Don Lou, an environmental hygienist for Enbridge; and
- Larry Springer, Senior Manager US Public Affairs for Enbridge.

The following statements were made:

- Jim Rutherford said, "The air quality has never been a problem at the Center." He "would have his own child stay at the Center without reservation." He stated, "No Benzene or VOCs have been detected at the Center."
- Dr. Angela Harris, CTEH toxicologist, stated that the positive Benzene reading seen on the data provided (See *Exh-015*) was "just a misread." Dr. Harris said that the "machine was not calibrated before coming to the Center and it was reading data from the last location tested."
- The two toxicologists from CTEH stated, "certain VOCs identified are the cleaning chemicals used to sanitize the machines or are the cleaning chemicals used by the owners of the Center."
- We were told that the "acceptable" levels of Benzene and/or VOCs are for infants, children and adults. There is no differential between infants and adults.

**Personal Conversation with Dr. Angela Harris, Toxicologist for CTEH on Thursday, September 2:**

When I arrived at the Center on September 2<sup>nd</sup>, I had a conversation with Dr. Harris. Here are a few of her comments:

- You know, "whether Benzene or VOCs have been detected, you would have to be exposed to these chemicals at a high level for a long period of time, I am talking exposure 24 hours a day / 365 days a year." She made no comment about "short term" health effects.
- "There is nothing detected here, you will need to get your own toxicologist." I explained to Dr. Harris that the Center could not afford a private toxicologist to perform tests. She chuckled and said, "I know, I know how much Enbridge is paying me every day."

- Dr. Harris, a toxicologist for Enbridge, told me that if I or anyone from the Center would be going to DC to testify: "What do you have to say? You are not a toxicologist. You have no experience or expertise in this. There is nothing you can validate. Why would they have you come there?"
- The answer is: I may not be a toxicologist, but I am a mother.

**The week following the Parent Meeting (August 24<sup>th</sup>) :**

- Four parents withdrew a total of six children due to short-term health concerns, uncertainty of the ongoing smell, air quality and potential long-term health effects. Many parents expressed concern of the truthfulness provided by the County Health Department, the EPA and Enbridge officials who attended the parent meeting. Parents felt they have been lied to.
- An employee who has been with the Center since it opened resigned September 3<sup>rd</sup> due to personal health problems since the spill and concerns of the air quality.

**Air Monitoring/Validity:**

The EPA and CTEH stated tests of the air at the Center were taken as of Wednesday, July 28 (See *Exh-009*). The first air test was not performed at the Center until Sunday, August 1 – **ONE WEEK AFTER THE SPILL!** (See *Exh-032*). On August 2, Benzene is reported at 4.5 and, on other dates, higher. I understand that 4.5 is well below the "accepted" level but this test is ONE WEEK AFTER THE SPILL and you must take into consideration the health, safety and well being of infants and children.

CTEH, the EPA and the County Health Department stated "NO BENZENE OR VOC DETECTIONS HAVE BEEN NOTED AT THIS LOCATION" (See *Exh-009 & 10*). When you review the reports, it shows otherwise! I know I am not a toxicologist but when you make a simple comparison of the data, they do not match! That raises suspicion and questions the validity of the results and data provided. As I previously stated, even if the levels of Benzene and/or VOCs were "below the MSDS level", why state "No Detections" when there absolutely were? How can you refer to the MSDS levels when they are for ADULTS not infants/children?

You will note that in the parent data provided by CTEH, certain tests are marked \* TIC (modified by validation). When you view the same report on the EPA/Enbridge sheet, \*TIC is not there, just the results. No modifications (See *Exh-013 through 029*).

**Request for Notice from the CCPHD/EPA:**

On Friday, August 28, I called Jim Rutherford and requested he and/or the EPA provide the Center a Notice certifying the air quality has been safe as of July 26. He said he would get something put together immediately as he was "sure the Center would have a claim against Enbridge so they should have something."

The first response I received from Mr. Rutherford was a week later, September 3<sup>rd</sup> at 4:50 p.m. by email stating it was "taking time as it has to go through several state and federal agencies" and "it should be ready by the middle of next week."

At noon on Sunday, September 12, I received an email from Mr. Rutherford attaching a letter dated September 8 from Linda Dykema ("Dykema") from the Department of Community Health. Dykema's letter is very well scripted and makes several accusations (*See Exh-036 through 041*):

- MDCH states the chemicals monitored at the Center could come from other sources than the spill. While I understand that accusation, children and staff were not stricken with the health effects prior to the Enbridge spill.
- It is stated, "acute health effects at levels lower than could be detected by the instruments used to monitor the air at the Center." I understand that tests more elaborate were performed closer to the spill site but you cannot rule out the effects of those at the Center.
- I also understand the Benzene level, if at or below 60 ppbv, no immediate evacuation was recommended. What is taken into consideration the first test at the Center was not until a week later and the Benzene and/or VOCs were effecting infants and children, not only adults. On page three of the letter it is stated "children are at greater risk of harm than adults from exposure to contaminants in the air."
- Dykema states no benzene was detected in samples taken from "*summa canisters*" between August 1 and August 15 (*See Exh-038 & 039*) but it should be acknowledged that Benzene (while at low levels) WAS DETECTED from "*Tedlar Bags*" on August 2, 3 and as late as August 18 (*See Exh-032 through 035*).
- Dykema comments on the health effects reported by staff. To state how the staff works closely together, are influenced by discussions or concerns, overstated reporting of symptoms related to publicity or legal issues is absurd and insulting.
- Not one MDCH staff member spoke to a single parent whose children were experiencing health concerns. Why?

- MDCH states the Center is not “expected to cause long-term harm.” I am thankful for that confirmation but that does not address the short-term effects to the children.
- The letter states at page five no Benzene was found in any air sample taken at the Center (*See Exh-040*). Again, while levels have been below the accepted level there were detections.
- MDCH also cannot determine in the days following the spill of the air effected short-term effects.

It has been almost seven weeks since the spill and the following questions remain:

1. Should the Center have been evacuated during the first two or three weeks since the spill considering infants/children were exposed to low levels of Benzene and VOCs?
2. The Material Safety Data Sheet for what was in Enbridge's line when the Marshall rupture occurred said a mandatory evacuation of at least 1000 feet on all sides of the river for large spills and 200 feet was established for ground water testing which Enbridge adopted for dealing with claims.
3. Why is Enbridge in control of air quality monitoring and posting the reports? Wasn't the EPA suppose to be in control of all monitoring? Why would you trust Enbridge in controlling the data against themselves?
4. If you view the air data on Google Earth for the Center, many do not appear on the EPA/Enbridge primary list (*See Exh-001*). Why?
5. What are the known short and long-term risks for infants and children subject to low levels of Benzene and/or VOCs? How can you rely of levels of that for an adult?
6. Will there be a long-term health study of those affected by the spill?
7. CTEH monitoring states testing was performed at the Center on 7/28, 7/30 and 7/31. Do they exist? (*See Exh-010*)
8. CTEH claims the indoor and outdoor air was monitored on Aug. 5 and “No VOCs or Benzene were detected.” (*See Exh-010*) When you view the August 5<sup>th</sup> reports, there was a low detection of Benzene and VOCs. (*See Exh-015 - 018*). Why not state the low detection?
9. The results provided by CTEH at the parent meeting on Aug. 17 shows “Modified by Validation” next to positive findings (*See Exh-013 through 029*). When you view the CTEH data chart posted by the EPA/Enbridge there is no “modification.” Why the discrepancies?
10. The data provided by Weston Solutions states ALL testing was provided in relation to the Center, yet reports are missing. Why?

11. Who will be held accountable in the future if our children develop leukemia, various cancers or other health problems? The argument made by Enbridge is you cannot prove their spill was the cause: . . . you cannot prove it is NOT:
12. It should be addressed that the Department of Transportation ("DOT") has been aware of Enbridge violations for, at least, eight years. Aside from Enbridge, shouldn't this tragedy be directed to the DOT for allowing Enbridge to continue the operation of the pipeline? Is the DOT going to admit their accountability?

I would like to thank you for your time. On behalf of my family and everyone at the childcare Center, we hope our voices will be heard and our questions answered. Thank you again.



**GOOGLE EARTH - AIR TESTING DATA  
FOR DAY CARE CENTER**

*I am unable to locate the highlighted  
reports on the EPA/Enbridge Data Sheet*

EOS	TB	B01	80210	T9a
EOS	TB	B01	80210	T3P
EOS	SC	B22	80210	
TEAM3			80210	PM-01
EOS	SC	B22	80210	
EOS	SC	B24	80210	
EOS	TB	B01	80310	T4P
EOS	TB	B01	80510	T9a
EOS	TB	C05	80510	T2P
EOS	TB	C04	80710	T2A
EOS	TB	B07	80710	T2P
EOS	TB	B20	80910	T2P
EOS	TB	B64	80910	T2P
EOS	TB	C14	81010	T2A
EOS	TB	B116	81010	T2A
EOS	TB	B144	81110	T2P
AST9			81110	AM-155
EOS	TB	B50	81110	T4A
EOS	TB	B190	81210	T2P
EOS	TB	B72	81210	T4A
EOS	TB	B220	81310	T2P
EOS	TB	B94	81310	T4A
EOS	TB	B145	81410	T4P
EOS	TB	B121	81410	AT4
EOS	TB	B180	81510	AT4
EOS	TB	B203	81510	T4P
EOS	TB	B237	81610	T4P
EOS	TB	B270	81710	AT4
EOS	TB	b310	81810	T4P
EOS	TB	B309	81810	AT4
eos	tb	b332	81910	at4
EOS	TB	B359	82010	AT4
EOS	TB	B385	82110	AT4
eos	tb	b436	82210	at4
EOS	TB	B456	82310	T4P
eos	tb	b465	82310	at4
EOS	TB	B494	82410	AT4
EOS	TB	B534	82510	T4P
EOS	TB	B527	82510	AT4
EOS	TB	B554	82610	AT4
EOS	TB	B581	82710	AT4

8/17/2010

[REDACTED] Center  
Air Monitoring & Sampling Update

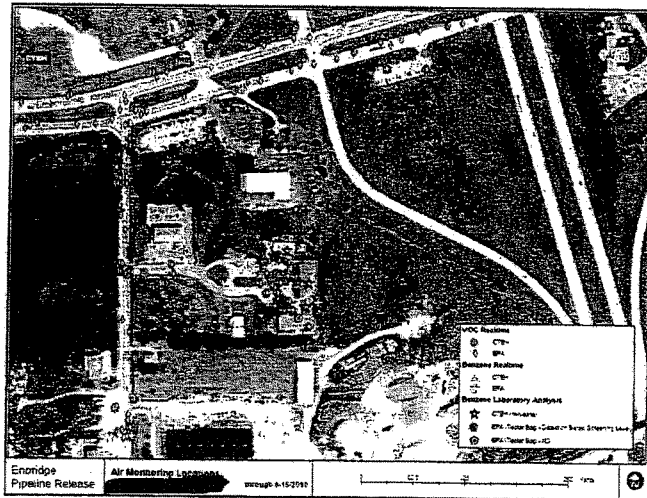
August 17, 2010



### Air Monitoring and Sampling Methods

- MultiRAE Plus
  - VOC (0.1 ppm DL)
  - H<sub>2</sub>S (1.0 ppm DL)
- UltraRAE – Benzene (0.05 - 0.1 ppm)
- Gastec (121L) – Benzene (0.05 ppm)
- Tedlar Bags – EPA (TO-15)
- Minicans – CTEH (TO-15)

8/17/2010



Compare these locations to Google Earth - they are not there.

8/17/2010



**Center CTEH Air Monitoring Results**  
**July 30 – August 16, 2010**

Analytes	Total Number of Readings	Number of Defects	Geometric Mean Concentration (ppm)	Maximum Concentration (ppm)	Geometric Mean Concentration of Defects
Benzene	36	0	<0.1	<0.1	<0.1
Volatile Organic Compounds (VOCs)	99	0	<0.1	<0.1	<0.1
<b>Total</b>	<b>135</b>	<b>0</b>			

CTEH - Zero  
EPA - 3 defects (where are they?)  
[See next page]

8/17/2010

**8/1/2010 – 8/14/2010**  
**Summary of Benzene Data from Air Sampling at [REDACTED]**

	Number of Samples	Number of Detects	Concentration Range of Detects (ppb)	Health Based Screening Level (ppb)
CTEH	15	0	–	6
EPA	26	3	2.0 – 5.1	6

**CTEH Analytical Results Summary**  
 August 1 - 14, 2010

Sample Date	Sample Time	Sample No.	Analyte	Result	Result Units	Lab Result	Location
8/1/2010	14:10	MAM10001AC019	ACETONE	13	PPBV		Outside
8/2/2010	16:55	MAM10002AC024	ACETONE	41	PPBV		Outside
8/2/2010	17:45	MAM10003AC023	ACETONE	11	PPBV		Outside
8/2/2010	17:56	MAM10004AC029	ACETONE	16	PPBV		Inside / Office
8/3/2010	17:51	MAM10005AC036	ACETONE	17	PPBV		Inside / Ed. Room
8/6/2010	16:00	MAM10006AC032	ACETONE	12	PPBV		Outside
8/7/2010	10:51	MAM10007AC033	ACETONE	26	PPBV		Inside / Ed. Room
8/7/2010	10:48	MAM10008AC034	ACETONE	21	PPBV		Inside / Office
8/7/2010	18:12	MAM10009AC035	ACETONE	17	PPBV		Outside
8/8/2010	18:13	MAM10010AC036	ACETONE	22	PPBV		Outside
8/6/2010	18:20	MAM10011AC037	ACETONE	18	PPBV		Outside
8/10/2010	18:15	MAM10012AC038	ACETONE	17	PPBV		Outside
8/11/2010	18:10	MAM10013AC039	ACETONE	13	PPBV		Outside
8/9/2010	14:10	MAM10014AC019	ISOPROPYL ALCOHOL	31	PPBV		Outside
8/3/2010	16:55	MAM10015AC024	ISOPROPYL ALCOHOL	250	PPBV		Outside
8/2/2010	17:50	MAM10016AC027	ISOPROPYL ALCOHOL	70	PPBV		Outside
8/2/2010	17:45	MAM10017AC028	ISOPROPYL ALCOHOL	26	PPBV		Outside
8/2/2010	17:56	MAM10018AC029	ISOPROPYL ALCOHOL	38	PPBV		Inside / Office
8/5/2010	17:51	MAM10019AC030	ISOPROPYL ALCOHOL	60	PPBV		Inside / Ed. Room
8/3/2010	18:00	MAM10020AC032	ISOPROPYL ALCOHOL	20	PPBV		Outside
8/7/2010	10:51	MAM10021AC033	ISOPROPYL ALCOHOL	22	PPBV		Inside / Ed. Room
8/7/2010	10:48	MAM10022AC034	ISOPROPYL ALCOHOL	12	PPBV		Inside / Office
8/7/2010	18:12	MAM10023AC035	ISOPROPYL ALCOHOL	29	PPBV		Outside
8/6/2010	18:15	MAM10024AC036	ISOPROPYL ALCOHOL	31	PPBV		Outside
8/9/2010	18:20	MAM10025AC037	ISOPROPYL ALCOHOL	51	PPBV		Outside
8/10/2010	18:15	MAM10026AC038	ISOPROPYL ALCOHOL	13	PPBV		Outside
8/11/2010	18:10	MAM10027AC039	ISOPROPYL ALCOHOL	15	PPBV		Outside
8/3/2010	17:50	MAM10028AC027	TOLUENE	5.0	PPBV		Outside
8/7/2010	10:48	MAM10029AC034	TOLUENE	1.5	PPBV		Inside / Office
8/3/2010	17:50	MAM10030AC027	ACETALDEHYDE	20	PPBV	NJ	Outside
8/7/2010	10:51	MAM10031AC033	ACETALDEHYDE	7.5	PPBV	NJ	Inside / Ed. Room

\*U - Tentatively identified compound, estimated concentration.

8/17/2010

[REDACTED]

**BTEH-Analytical Results Summary**  
August 1 - 11, 2010

SampleDate	SampleTime	Samp_No	Analyte	Result	Result Units	Lab	Reanal	Outlier	Location
8/5/2010	17:56	MAM0805MCC27	BENZENE+1,2-DIETHYL-	4.5	PPBV	NJ			Inside - Office
8/9/2010	19:20	MAM0805MCC27	BENZENE+1,2-DIETHYL-	6.7	PPBV	NJ			Outside
8/11/2010	19:10	MAM0805MCC29	BUTANAL	9.6	PPBV	NJ			Outside
8/5/2010	17:56	MAM0805MCC28	BUTANE	35	PPBV	NJ			Inside - Office
8/5/2010	17:51	MAM0805MCC30	BUTANE	37	PPBV	NJ			Inside - Ed. Room
8/5/2010	17:56	MAM0805MCC29	ETHYL ALCOHOL	77	PPBV	NJ			Inside - Office
8/5/2010	17:51	MAM0805MCC30	ETHYL ALCOHOL	80	PPBV	NJ			Inside - Ed. Room
8/7/2010	10:51	MAM0807MCC03	ETHYL ALCOHOL	66	PPBV	NJ			Inside - Ed. Room
8/7/2010	10:49	MAM0807MCC04	ETHYL ALCOHOL	20	PPBV	NJ			Inside - Office
8/7/2010	10:51	MAM0807MCC03	HEXANAL	6.6	PPBV	NJ			Inside - Ed. Room
8/6/2010	17:56	MAM0805MCC29	ISOBUTANE	35	PPBV	NJ			Inside - Office
8/6/2010	17:51	MAM0805MCC30	ISOBUTANE	26	PPBV	NJ			Inside - Ed. Room
8/7/2010	10:51	MAM0807MCC03	NONANAL	10	PPBV	NJ			Inside - Ed. Room
8/7/2010	18:15	MAM0807MCC05	NONANAL	6.5	PPBV	NJ			Outside
8/5/2010	17:51	MAM0805MCC30	PROPANE	6.3	PPBV	NJ			Inside - Ed. Room



Center for Toxicology and  
Environmental Health Studies

Figure 1

Location of VOC Monitoring at [redacted] (To date)



**Figure 2**  
**Location of Benzene Monitoring at [REDACTED] (To date)**







Center for Technology and Environmental Effects, LLC

**Summary of CTEH's Air Monitoring Activities for the [REDACTED]  
August 16, 2010**

**Summary of Real-Time Data**

CTEH performed air monitoring outside the [REDACTED] in response to concerns from the facility owner. Summaries of real-time readings for VOCs and benzene by day at the facility are shown in Tables 1 and 2, respectively. A summary of all real-time data to date is in Table 3. No benzene or VOC detections have been noted at this location.

**Table 1  
Summary of Outdoor Air VOC Data by Date**

Where are these tests?

Date	Total Number of Readings	Number of Detects	Geometric Mean of All Data (ppm)	Maximum Concentration (ppm)	Geometric Mean of Detects (ppm)
7/28/2010	3	0	<0.1	<0.1	<0.1
7/30/2010	4	0	<0.1	<0.1	<0.1
7/31/2010	7	0	<0.1	<0.1	<0.1
8/1/2010	4	0	<0.1	<0.1	<0.1
8/2/2010	9	0	<0.1	<0.1	<0.1
8/4/2010	2	0	<0.1	<0.1	<0.1
8/5/2010	4	0	<0.1	<0.1	<0.1
8/6/2010	5	0	<0.1	<0.1	<0.1
8/7/2010	4	0	<0.1	<0.1	<0.1
8/8/2010	5	0	<0.1	<0.1	<0.1
8/9/2010	4	0	<0.1	<0.1	<0.1
8/10/2010	6	0	<0.1	<0.1	<0.1
8/11/2010	5	0	<0.1	<0.1	<0.1
8/12/2010	8	0	<0.1	<0.1	<0.1
8/13/2010	9	0	<0.1	<0.1	<0.1
8/14/2010	5	0	<0.1	<0.1	<0.1
8/15/2010	8	0	<0.1	<0.1	<0.1
8/16/2010	7	0	<0.1	<0.1	<0.1

The first test was the well/water 7/31 and the first air result provided is dated 8/2, 8 days after spill.



Division for Toxicology and Environmental Health, L.L.C.

**Table 2**  
**Summary of Outdoor Air Benzene Data by Date**

Date	Total Number of Readings	Number of Detects	Geometric Mean of All Data (ppm)	Maximum Concentration (ppm)	Geometric Mean of Detects (ppm)
7/30/2010	3	0	<0.1	<0.1	<0.1
7/31/2010	3	0	<0.1	<0.1	<0.1
8/1/2010	3	0	<0.1	<0.1	<0.1
8/2/2010	10	0	<0.1	<0.1	<0.1
8/5/2010	2	0	<0.1	<0.1	<0.1
8/6/2010	2	0	<0.1	<0.1	<0.1
8/8/2010	2	0	<0.1	<0.1	<0.1
8/9/2010	2	0	<0.1	<0.1	<0.1
8/10/2010	1	0	<0.1	<0.1	<0.1
8/11/2010	1	0	<0.1	<0.1	<0.1
8/12/2010	1	0	<0.1	<0.1	<0.1
8/13/2010	4	0	<0.1	<0.1	<0.1
8/14/2010	0	0	<0.1	<0.1	<0.1
8/15/2010	0	0	<0.1	<0.1	<0.1
8/16/2010	2	0	<0.1	<0.1	<0.1

**Table 3**  
**Summary of All Outdoor Air Real-Time Data To Date**

Analytes	Total Number of Readings	Number of Detects	Geometric Mean Concentration (ppm)	Maximum Concentration (ppm)	Geometric Mean Concentration of Detects
Benzene	36	0	<0.1	<0.1	<0.1
Volatile Organic Compounds (VOCs)	99	0	<0.1	<0.1	<0.1
<b>Total</b>	<b>135</b>	<b>0</b>			

**Discussion**

No benzene or VOC detections have been noted at this location. In addition, a CTEH public health nurse, [redacted] monitored the air outside the facility for VOCs and benzene continuously for several hours on Thursday, August 5, 2010. No VOCs or benzene were detected. [redacted] also stayed in the front office area, where odors and symptoms had been reported by [redacted] most of the day on August 6, 2010. [redacted] reported that no unusual odors were detected, nor did she have any symptoms after being in the day care all day.

→ See Ex. 15-16. Test MAM10805MCO29 - Benzene 6 Butane 35, Isobutane 35. On sheet provided to parents marked "modified" on Enbridge report, no modification, merely confirmed (see next 2 pages)

EXH-010

DOCUMENTS PROVIDED BY CTEH AT PARENT MEETING AUG. 17 AT [REDACTED]

CTEH stated "NO BENZENE OR VOC DETECTIONS HAVE BEEN NOTED AT THIS LOCATION"

See the following reports:

- 8/3/2010
  - TOLUENE
  - ACETALDEHYDE
- 8/5/2010
  - BENZENE, 1,2 DIETHYL
  - BUTANE
  - ETHYL ALCOHOL
  - ISOBUTANE
  - PROPANE
- 8/7/2010
  - ACETALDEHYDE
  - ETHYL ALCOHOL
  - HEXANAL
  - NONANAL
  - TOLUENE
- 8/9/2010
  - BENZENE, 1,2 DIETHYL
- 8/11/2010
  - BUTANAL

*Provided at Parent meetings 8/17*

Samp No.	Location Description	Sample Date
MAMI0801MC019	Outside Fence	1-Aug-10
MAMI0803MC024	Outside Fence	2-Aug-10
MAMI0803MC027	Outside Fence	3-Aug-10
MAMI0807MC033	Education Room	7-Aug-10
MAMI0807MC034	Office	7-Aug-10
MAMI0807MC035	Outside Fence	7-Aug-10
MAMI0805MC029	Office	5-Aug-10
MAMI0805MC030	Education Room	5-Aug-10
MAMI0805MC031	Outside Fence	5-Aug-10
MAMI0806MC032	Outside Fence	6-Aug-10
MAMI0808MC036	Outside Fence	8-Aug-10
MAMI0809MC037	Outside Fence	9-Aug-10
MAMI0804MC028	Outside Fence	4-Aug-10
MAMI0810MC038	Outside Fence	10-Aug-10
MAMI0811MC039	Outside Fence	11-Aug-10

Form 1 Data Sheet - Volatiles

Enbridge Energy

SDG: L220450

Sample Name: ~~MM100803M/C027~~ Sample Matrix Code: A Total/Dissolved: T  
 Location ID: NA Sample Date: ~~8/3/2010~~ Lab: GALSON  
 Sample Type: Site Sample Analysis Date: 8/6/2010 2:40:00 PM  
 Lab Sample ID: L220450-18  
 Method: MET6772

GAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-6	STYRENE	1	5	5	U	5	U	PPBV
100-42-6	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
106-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
106-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-86-3	TOLUENE	1	5	5.9		5.9		PPBV
108-86-3	TOLUENE	1	0.018	0.022		0.022		MG/M3
156-60-6	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-6	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000075-07-0	<del>ACETALDEHYDE</del>	1		20		20	NJ	PPBV
000075-07-0	ACETALDEHYDE	1		0.036		0.036	NJ	MG/M3

TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 Modified by Validator

**DATApro** Environmental Data Professional, LLC



Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220688

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
106-42-6	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
109-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
109-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-88-3	TOLUENE	1	5	5	U	5	U	PPBV
108-88-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
78-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
78-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000135-01-3	BENZENE, 1,2-DIETHYL-	1	6	6	NJ	6	NJ	PPBV * TIC
000135-01-3	BENZENE, 1,2-DIETHYL-	1	0.033	0.033	NJ	0.033	NJ	MG/M3 * TIC
000106-97-6	BUTANE	1	35	35	NJ	35	NJ	PPBV * TIC
000106-97-6	BUTANE	1	0.084	0.084	NJ	0.084	NJ	MG/M3 * TIC
000064-17-5	ETHYL ALCOHOL	1	77	77	NJ	77	NJ	PPBV * TIC
000064-17-5	ETHYL ALCOHOL	1	0.14	0.14	NJ	0.14	NJ	MG/M3 * TIC
000075-28-5	ISOBUTANE	1	35	35	NJ	35	NJ	PPBV * TIC
000075-28-5	ISOBUTANE	1	0.082	0.082	NJ	0.082	NJ	MG/M3 * TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 = Modified by Validation







Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220688

Sample Name: MAMI0805MCO30 Sample Matrix Code: A Total Dissolved: T  
 Location ID: NA Sample Date: 8/9/2010 Lab: GALSON  
 Sample Type: Site Sample Analysis Date: 8/10/2010 10:23:00 PM  
 Lab Sample ID: L220688-2  
 Method: MET6772

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
109-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
109-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-98-3	TOLUENE	1	5	5	U	5	U	PPBV
108-98-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10081-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10081-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000106-97-8	BUTANE	1		27		27	NJ	PPBV * TIC
000106-97-8	BUTANE	1		0.063		0.063	NJ	MG/M3 * TIC
000064-17-5	ETHYL ALCOHOL	1		90		90	NJ	PPBV * TIC
000064-17-5	ETHYL ALCOHOL	1		0.17		0.17	NJ	MG/M3 * TIC
000075-28-5	ISOBUTANE	1		26		26	NJ	PPBV * TIC
000075-28-5	ISOBUTANE	1		0.062		0.062	NJ	MG/M3 * TIC
000074-98-6	PROPANE	1		6.3		6.3	NJ	PPBV * TIC
000074-98-6	PROPANE	1		0.011		0.011	NJ	MG/M3 * TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 \* = Modified by Validation

DATApro Environmental Data Professional, LLC



Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220685

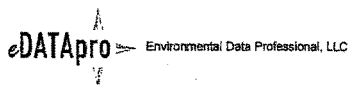
Sample Name: MAM10897MC033  
 Location ID: NA  
 Sample Type: Site Sample  
 Lab Sample ID: L220685-1  
 Method: MET6772

Sample Matrix Code: A  
 Sample Date: 8/7/2010  
 Analysis Date: 8/10/2010 3:16:00 PM

Total/Dissolved: T  
 Lab: GALSON

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver:Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
108-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
108-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-88-3	TOLUENE	1	5	5	U	5	U	PPBV
108-88-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
583-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
583-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000075-07-0	ACETALDEHYDE	1		7.5		7.5	NJ	PPBV * TIC
000075-07-0	ACETALDEHYDE	1		0.014		0.014	NJ	MG/M3 * TIC
000064-17-6	ETHYL ALCOHOL	1		58		58	NJ	PPBV * TIC
000064-17-6	ETHYL ALCOHOL	1		0.1		0.1	NJ	MG/M3 * TIC
000066-25-1	HEXANAL	1		8.5		8.5	NJ	PPBV * TIC
000066-25-1	HEXANAL	1		0.035		0.035	NJ	MG/M3 * TIC
000124-19-6	NONANAL	1		10		10	NJ	PPBV * TIC
000124-19-6	NONANAL	1		0.06		0.06	NJ	MG/M3 * TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 \* = Modified by Validation







At Sampling Location No. CI 0287010

8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,4-DICHLOROBENZENE	41.903302	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,2-DICHLOROBENZENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	BROMODIFORM	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	M-P-XYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	O-XYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1,2,2-TETRACHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	FREON 12	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CHLOROMETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	ETHYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	VINYL CHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1-DICHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	METHYLENE CHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	ALLYL CHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	BROMOMETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	VINYL BROMIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	FREON 11	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CARBON DIBLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	TRANS-1,2-DICHLOROETHENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	ETHYL ACETATE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1-DICHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1,1-TRICHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	TRICHLOROETHYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CARBON TETRACHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CIS-1,2-DICHLOROMETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	TRANS-1,2-DICHLOROETHENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1,2-TRICHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1,1,2-TETRACHLOROETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CHLOROBENZENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	ETHYLBENZENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	M-P-XYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	PROPYLENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CHLOROMETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	FREON 113	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,3,5-TRIFLUOROBENZENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	BROMOMETHANE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	VINYL BROMIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	FREON 113	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	CARBON DISULFIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	TRANS-1,2-DICHLOROETHENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	FREON 11	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	ISOPROPYL ALCOHOL	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	1,1-DICHLOROETHENE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	METHYLENE CHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	VINYL CHLORIDE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	VINYL ACETATE	42.236698	Final
8/7/2010	MAH0807AC003	18-18	MANICODOR0820	AN	METHYL ETHYL KETONE	42.236698	Final



EXH-021

Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220685

Sample Name: MAM10807MC034 Sample Matrix Code: A Total/Dissolved: T  
 Location ID: NA Sample Date: 8/7/2010 Lab: GALSON  
 Sample Type: Site Sample Analysis Date: 8/10/2010 4:00:00 PM  
 Lab Sample ID: L220685-2  
 Method: MET6772

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
105-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
105-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
105-98-3	TOLUENE	1	5	15	U	15	U	PPBV
105-98-3	TOLUENE	1	0.019	0.057	U	0.057	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
105-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
105-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000064-17-5	ETHYL ALCOHOL	1		20	U	20	NJ	PPBV
000064-17-5	ETHYL ALCOHOL	1		0.038	U	0.038	NJ	MG/M3

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 Modified by Validation







At Sampling Results As Of 06/26/2010



MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROBENZENE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BROMODICHLOROMETHANE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	CIS-1,3-DICHLOROPROPENE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1,2,2-TETRACHLOROETHANE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TETRAHYDROTHIOPHENE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	ETHYL BENZENE
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BROMOPHORM
MAN0807AC034	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	ETHYLACETAL
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	CHLOROBENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	FREON 114
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,3,5-TRIFLUOROBENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BROMOMETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	VINYL BROMIDE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	FREON 113
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TRANS-1,2-DICHLOROETHENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TRANS-1,2-DICHLOROBUTYL ETHER
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	VINYL ACETATE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	HEXANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	CYCLOHEXANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,4-DIOXANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,3-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TRANS-1,3-DICHLOROPROPENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1,2,2-TETRACHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	DIBROMODICHLOROMETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	METHYL ISOBUTYL KETONE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	ETHYLACETATE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	METHYL ETHYL KETONE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TETRAHYDROFURAN
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	HEPTANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DICHLOROPROPANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BROMODICHLOROMETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2-DIBROMOETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	TETRACHLOROETHYLENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,1-DICHLOROETHANE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	ETHYL BENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	4-ETHYL TOLUENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,2,4-TRIMETHYLBENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	1,3-DICHLOROBENZENE
MAN0807AC035	8/7/2010	15-15	MANIC000R0020	AL	5	PRIV	U	42.20695	-04.903352	FHM	1	BENZYL CHLORIDE



Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220685

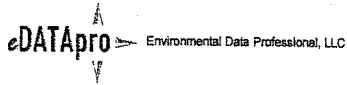
Sample Name: MAM0807MC036  
 Location ID: NA  
 Sample Type: Site Sample  
 Lab Sample ID: L220685-3  
 Method: MET6772

Sample Matrix Code: A  
 Sample Date: 8/7/2010  
 Analysis Date: 8/10/2010 4:44:00 PM

Total/Dissolved: T  
 Lab: GALSON

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
109-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
109-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
106-86-3	TOLUENE	1	5	5	U	5	U	PPBV
106-86-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-80-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-80-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-8	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-8	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
106-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
106-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000124-19-6	NONANAL	1		6.5		6.5	NJ	PPBV * TIC
000124-19-6	NONANAL	1		0.038		0.038	NJ	MG/M3 * TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 Modified by Validation





Form 1 Data Sheet - Volatiles

Enbridge

SDG: L220882

Sample Name: MAMI0809MCD37  
 Location ID: NA  
 Sample Type: Site Sample  
 Lab Sample ID: L220882-1  
 Method: MET5772

Sample Matrix Code: A  
 Sample Date: 8/9/2010  
 Analysis Date: 8/12/2010 3:50:00 PM

Total/Dissolved: T  
 Lab: GALSON

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver:Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
108-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
108-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-88-3	TOLUENE	1	5	5	U	5	U	PPBV
108-88-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10081-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10081-02-6	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
593-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
593-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000135-01-3	<del>BENZENE, 1,2-DIETHYL-</del>	1		6.7		6.7	NJ	PPBV
000135-01-3	BENZENE, 1,2-DIETHYL-	1		0.036		0.036	NJ	MG/M3 * TIC

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 \* = Modified by Validation





Form 1 Data Sheet - Volatiles

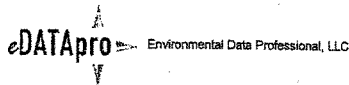
Enbridge

SDG: L221092

Sample Name: MAM10811MC039  
 Location ID: NA  
 Sample Type: Site Sample  
 Lab Sample ID: L221092-1  
 Method: MET677Z  
 Sample Matrix Code: A  
 Sample Date: 8/14/2010  
 Analysis Date: 8/14/2010 7:01:00 PM  
 Total/Dissolved: T  
 Lab: GALSON

CAS	Parameter Name	DF	RL	Lab Result	LabQual	Verified Result	Ver.Qual	Units
100-42-5	STYRENE	1	5	5	U	5	U	PPBV
100-42-5	STYRENE	1	0.021	0.021	U	0.021	U	MG/M3
127-18-4	TETRACHLOROETHYLENE	1	5	5	U	5	U	PPBV
127-18-4	TETRACHLOROETHYLENE	1	0.034	0.034	U	0.034	U	MG/M3
109-99-9	TETRAHYDROFURAN	1	5	5	U	5	U	PPBV
109-99-9	TETRAHYDROFURAN	1	0.015	0.015	U	0.015	U	MG/M3
108-88-3	TOLUENE	1	5	5	U	5	U	PPBV
108-88-3	TOLUENE	1	0.019	0.019	U	0.019	U	MG/M3
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	U	5	U	PPBV
156-60-5	TRANS-1,2-DICHLOROETHENE	1	0.02	0.02	U	0.02	U	MG/M3
10061-02-8	TRANS-1,3-DICHLOROPROPENE	1	5	5	U	5	U	PPBV
10061-02-8	TRANS-1,3-DICHLOROPROPENE	1	0.023	0.023	U	0.023	U	MG/M3
79-01-6	TRICHLOROETHYLENE	1	5	5	U	5	U	PPBV
79-01-6	TRICHLOROETHYLENE	1	0.027	0.027	U	0.027	U	MG/M3
108-05-4	VINYL ACETATE	1	5	5	U	5	U	PPBV
108-05-4	VINYL ACETATE	1	0.018	0.018	U	0.018	U	MG/M3
583-60-2	VINYL BROMIDE	1	5	5	U	5	U	PPBV
583-60-2	VINYL BROMIDE	1	0.022	0.022	U	0.022	U	MG/M3
75-01-4	VINYL CHLORIDE	1	5	5	U	5	U	PPBV
75-01-4	VINYL CHLORIDE	1	0.013	0.013	U	0.013	U	MG/M3
000123-72-8	BUTANAL	1		9.6		9.6	NJ	PPBV
000123-72-8	BUTANAL	1		0.028		0.028	NJ	MG/M3

DF = Dilution Factor  
 RL = Reporting Limit  
 U = Non-Detect  
 J = Estimated  
 R = Rejected  
 N = Presumptive evidence  
 Modified by Validation



**From:** Graan, Thomas P. <Thomas.Graan@WestonSolutions.com>  
**To:** Susan Connolly, Marshall, MI [REDACTED]  
**Cc:** DeBlasio.Don@epamail.epa.gov <DeBlasio.Don@epamail.epa.gov>  
**Subject:** RE: Request for detailed air quality results - [REDACTED]  
**Date:** Fri, Aug 27, 2010 7:44 am

**Attachments:** [REDACTED]

Ms. Connolly,  
Attached is an Excel spreadsheet with all of the chemical data to date for samples collected at [REDACTED]. It includes results from air samples and a potable water sample. If you have any further questions please contact Don DeBlasio or me.

Tom Graan

*Thomas Graan  
Weston Solutions, Inc  
email: [Thomas.Graan@westonsolutions.com](mailto:Thomas.Graan@westonsolutions.com)  
phone: 847-918-4142  
fax: 847-918-4055*

---

**From:** Susan Connolly, Marshall, MI [REDACTED]  
**Sent:** Thursday, August 26, 2010 4:29 PM  
**To:** DeBlasio.Don@epamail.epa.gov; Graan, Thomas P.  
**Cc:** [REDACTED]; [svandorsten@calhouncountymi.gov](mailto:svandorsten@calhouncountymi.gov); [Pastor.Susan@epamail.epa.gov](mailto:Pastor.Susan@epamail.epa.gov)  
**Subject:** Re: Request for detailed air quality results - [REDACTED]

Messers DeBlasio and Graan:

Thank you so much for responding to my message(s) today.

Mr. Graan: Please let me know at your earliest convenience when we can expect receipt of the reports and how they will be delivered (via email or mail). If you have any questions please do not hesitate to call or email.

Susan Connolly  
[REDACTED]

-----Original Message-----

**From:** DeBlasio.Don@epamail.epa.gov  
**To:** Susan Connolly, Marshall, MI [REDACTED]  
**Cc:** [jlstacho@cablespeed.com](mailto:jlstacho@cablespeed.com); [svandorsten@calhouncountymi.gov](mailto:svandorsten@calhouncountymi.gov); [Thomas.Graan@WestonSolutions.com](mailto:Thomas.Graan@WestonSolutions.com); [Pastor.Susan@epamail.epa.gov](mailto:Pastor.Susan@epamail.epa.gov)  
**Sent:** Thu, Aug 26, 2010 4:20 pm  
**Subject:** Re: Request for detailed air quality results - [REDACTED]

We think we have the information you are looking for.

One of our contractors, Tom Graan, is collecting it and will be sending it to you [ he is cc'd on this message].

If we didn't get you what you want, send me another message and we'll try again.

-----"Susan Connolly, Marshall, MI" [REDACTED]-----

To: Don Deblasio/R5/USEPA/US@EPA  
From: "Susan Connolly, Marshall, MI" [REDACTED]  
Date: 08/25/2010 12:58PM  
cc: jlstacho@cablespeed.com, svandorsten@calhouncountymi.gov  
Subject: Request for detailed air quality results [REDACTED]

Mr. Deblasio:

Good afternoon. This email is in follow up to our meeting of Tuesday, August 17 and our telephone conversation of Wednesday, August 18.

Kindly advise as to the status of the "complete" air quality tests performed by ALL entities (i.e. EPA, C-TEH, etc.) as of July 28 to the present at [REDACTED] located at [REDACTED] Marshall. We request detailed testing reports reflecting all VOC's, not just Benzene results, including testing performed by all companies, not just C-TEH both outdoors and indoors.

I have viewed the air quality testing reports on Google Earth and they are very confusing to track to say the least. Many of the references [REDACTED] either do not allow you to open any report or you can only view Benzene results.

I can print/view the detailed chart/results from the EPA site - if you could provide the location description(s) for [REDACTED] then I will see if they have been posted.

As of our conversation last week you indicated that the tests were "misplaced" or documented incorrectly and they would have to be "tracked down".

Please contact me at your earliest possible convenience as to the reports. Thank you in advance for your time and continued courtesies in this regard.

Susan Connolly  
[REDACTED]

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*Hill Top  
show  
contacts*

Local ID	Matrix Analyte	Detector	Result	Unit	Lab	QA	Cor	Samples	SIT	Sample	Sample	Collection
	Ground Benzene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Toluene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Ethylbenzene	N	2 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground p-Xylene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground m-Xylene	N	2 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground 1,2,4-Trimethylbenzene	N	2 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground 1,2,4,6-Tetramethylbenzene	N	5 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Naphthalene	N	100 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground 2-Methylnaphthalene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Total Purgeable Organics	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Naphthalene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground 2-Methylnaphthalene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Acenaphthylene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Acenaphthene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Fluorene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Phenanthrene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Anthracene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Fluoranthene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Pyrene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Benzo (a) anthracene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Chrysene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Benzo (b) fluoranthene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Benzo (k) fluoranthene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Benzo (a) pyrene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Indeno (1,2,3-cd) pyrene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Dibenzo (a,h) anthracene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Benzo (g,h,i) perylene	N	1 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
	Ground Total Extractable Organics	N	100 ug/L	U	Final			CTEL_40005	WP07311055RFB1	Potable Water	Grab	7/31/2010 10:55
Air	BENZENE	Prelim	2 ppbv					EPA_EOS	EOS-TB-501-060210-T-91	Tedlar Bag	Grab	8/22/2010 16:42
Air	BENZENE	Final	4.5 ppbv					EPA_EOS	EOS-TB-501-060210-T-91	Tedlar Bag	Grab	8/22/2010 20:59
Air	Dichlorodifluoromethane	N	0.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	Benzyl chloride	N	0.84 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2,4-Trichlorobenzene	N	2.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	Hexachloro-1,3-butadiene	N	1.5 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	Methyl ethyl chloride	N	1.8 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	Acetone	N	5.1 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,1,2,2-Tetrachloroethane	N	1.8 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,1,2,2-Tetrachloroethane	N	2.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,1,2-Trichloroethane	N	1.8 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,1-Dichloroethane	N	1.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,1-Dichloroethane	N	1.4 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2,4-Trimethylbenzene	N	2.3 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2-Dibromethane	N	1.8 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2-Dichloro-1,1,2,2-Tetrafluoroethane	N	1.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2-Dichloroethane	N	1.2 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01
Air	1,2-Dichloropropane	N	1.4 ug/m3	U	Final			EPA_EOS	EOS-SC-B22-080210	Summa Canister	24 HOUR	8/22/2010 23:01



Air	1,3,5-Trimethylbenzene	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	1,3-Butadiene	N	0.65 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	1,3-Dichlorobenzene	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	1,4-Dichlorobenzene	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	2,2,4-Trimethylpentane	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	2-Chloro-1,3-butadiene	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Acrylonitrile	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Benzene	N	1.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Bromochloromethane	N	1.5 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Bromodichloromethane	N	3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Bromotrichloromethane	N	1.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Carbon tetrachloride	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Chlorobenzene	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Chloroform	N	0.77 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Chloromethane	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	cis-1,2-Dichloroethylene	N	0.61 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	cis-1,3-Dichloropropylene	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Dibromochloromethane	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Ethylbenzene	N	2.5 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Hexane	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	m & p - Xylene	N	3.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Methyl ethyl ketone	N	3.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Methyl isobutyl ketone	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Methyl tert-butyl ether	N	4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	o-Xylene	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Styrene	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Tetrachloroethylene	N	1.8 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Toluene	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	trans-1,2-Dichloroethylene	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	trans-1,3-Dichloropropylene	N	2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Trichloroethylene	N	1.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Trichlorofluoromethane	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	Vinyl chloride	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	o-Xylene	N	1.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B22-060210	8/2/2010 23:01	Summa Canister	24 HOUR
Air	BENZENE	Y	5.3 ppbv	U	Final	EPA_EOS	EOS-TB-B01-060310-AB72a	8/2/2010 23:01	Summa Canister	24 HOUR
Air	BENZENE	Y	1 ppbv	U	Final	EPA_EOS	EOS-TB-B01-060310-74p	8/2/2010 20:28	Tedlar Bag	8 HOUR
Air	Benzonitrile	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,2,4-Trichlorobenzene	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	Hexachloro-1,3-butadiene	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	Chloroethane	Y	0.65 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	Dichlorodifluoromethane	Y	1.7 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	Methylene chloride	Y	2.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	Acetonitrile	Y	4.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1,2,2-Tetrachloroethane	N	2.1 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1,2-Trichloro-1,2,2-trifluoroethane	N	2.3 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1,2-Trichloroethane	N	1.4 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1-Dichloroethane	N	2.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1-Dichloroethylene	N	1.2 ug/m3	U	FINAL	EPA_EOS	EOS-SC-B24-060210	8/2/2010 07:30	Summa Canister	8 HOUR

Air	1,2,4-Trimethylbenzene	N	1.6 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	2-Chloro-1,3-butadiene	N	2.3 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Acrylonitrile	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Benzene	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Bromodichloromethane	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Bromomethane	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Carbon tetrachloride	N	0.95 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Chlorobenzene	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Chloroethane	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Chloroform	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	cis-1,2-Dichloroethylene	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	cis-1,3-Dichloropropylene	N	1.1 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Dibromochloromethane	N	0.94 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Ethylbenzene	N	1.5 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Hexane	N	3 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	m & p - Xylene	N	1.1 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Methyl ethyl ketone	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Methyl isobutyl ketone	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Methyltertiarybutylether	N	0.77 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	o-Xylene	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Styrene	N	0.81 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Tetrachloroethylene	N	1.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Toluene	N	1.3 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	trans-1,2-Dichloroethylene	N	2.5 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	trans-1,3-Dichloropropylene	N	1.5 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Trichloroethylene	N	1.3 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Trichlorofluoromethane	N	3.1 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Vinyl chloride	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,1,1-Trichloroethane	N	1.3 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,2-Dibromomethane	N	2.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,2-Dichlorobenzene	N	1.8 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,2-Dichloroethane	N	2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,2-Dibromopropane	N	2.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,3,5-Triethylbenzene	N	1.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,3-Butadiene	N	1.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,3-Dichlorobenzene	N	2.2 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	1,4-Dichlorobenzene	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	2,2,4-Trimethylpentane	N	2.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	Acetone	N	1.4 ug/m3	U	FINAL	EPA, EOS	EOS-SC-B24-080210	9/2/2010 07:30	Summa Canister	8 HOUR
Air	BENZENE	N	1 pptbv	U	Prelimin	EPA, EOS	EOS-TB-B01-080910-T2A	9/2/2010 14:34	Teacher Bag	8 HOUR
Air	BENZENE	N	1 pptbv	U	Prelimin	EPA, EOS	EOS-TB-B01-080910-T2P	9/2/2010 21:41	Teacher Bag	8 HOUR
Air	BENZENE	N	1 pptbv	U	Prelimin	EPA, EOS	EOS-TB-B01-080910-T2A	9/2/2010 09:05	Teacher Bag	8 HOUR
Air	BENZENE	N	1 pptbv	U	Prelimin	EPA, EOS	EOS-TB-C04-080410-T2A	9/2/2010 16:57	Teacher Bag	8 HOUR
Air	BENZENE	N	0.5 pptbv	U	Final	EPA, EOS	EOS-TB-C04-080410-T2A	9/7/2010 13:48	Teacher Bag	8 HOUR
Air	BENZENE	N	0.5 pptbv	U	Final	EPA, EOS	EOS-TB-B07-080710-T2P	9/7/2010 20:42	Teacher Bag	8 HOUR
Air	BENZENE	N	0.5 pptbv	U	Final	EPA, EOS	EOS-TB-B20-080910-T2P	9/2/2010 00:40	Teacher Bag	8 HOUR
Air	BENZENE	N	0.5 pptbv	U	Final	EPA, EOS	EOS-TB-B65-080910-T2A	9/2/2010 16:33	Teacher Bag	8 HOUR

Air	BENZENE	N	0.5	ppbv	U	Final	EPA_EOS	EOS-TB-B94-080910-T2P	8/9/2010 21:05	Tedlar Bag
Air	BENZENE	N	0.5	ppbv	U	Final	EPA_EOS	EOS-TB-B176-081010-T2A	8/10/2010 11:30	Tedlar Bag
Air	BENZENE	N	0.5	ppbv	U	Final	EPA_EOS	EOS-TB-B144-081110-T2P	8/11/2010 00:50	Tedlar Bag
Air	BENZENE	N	0.5	ppbv	U	Final	EPA_EOS	EOS-TB-B50-081110-T4A	8/11/2010 18:04	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Final	EPA_EOS	EOS-TB-B72-081210-T4A	8/12/2010 15:42	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Final	EPA_EOS	EOS-TB-B190-081210-T2P	8/12/2010 19:32	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelimin	EPA_EOS	EOS-TB-B94-081310-T4A	8/13/2010 11:08	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Final	EPA_EOS	EOS-TB-B220-081310-T2P	8/14/2010 22:58	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Final	EPA_EOS	EOS-TB-B121-081410-AT4	8/14/2010 12:37	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Final	EPA_EOS	EOS-TB-B145-081410-T4P	8/14/2010 22:00	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B160-081510-AT4	8/15/2010 10:07	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B203-081510-T4P	8/15/2010 11:54	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B237-081610-T4	8/16/2010 10:51	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B270-081710-AT4	8/17/2010 13:40	Tedlar Bag
Air	BENZENE	Y	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B209-081810-AT4	8/18/2010 13:13	Tedlar Bag
C	BENZENE	N	1.7	ppbv	U	Prelims	EPA_EOS	EOS-TB-B310-081810-T4P	8/18/2010 17:13	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B332-081910-AT4	8/19/2010 13:50	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B369-082010-AT4	8/20/2010 11:50	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B385-082110-AT4	8/21/2010 09:25	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B420-082110-T4P	8/21/2010 20:20	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B436-082210-AT4	8/22/2010 10:20	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B456-082310-T4P	8/23/2010 01:00	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B465-082310-AT4	8/23/2010 11:15	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B472-082310-T4P	8/23/2010 19:45	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B484-082410-AT4	8/24/2010 11:30	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B510-082410-T4P	8/24/2010 21:15	Tedlar Bag
Air	BENZENE	N	1	ppbv	U	Prelims	EPA_EOS	EOS-TB-B527-082510-AT4	8/25/2010 11:14	Tedlar Bag



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF COMMUNITY HEALTH  
LANSING

JANET OLSZEWSKI  
DIRECTOR

September 8, 2010

Mr. James Rutherford, Health Officer  
Calhoun County Public Health Department  
190 East Michigan Avenue  
Battle Creek, Michigan 49014

Mr. Rutherford:

At the request of the Calhoun County Public Health Department (CCPHD), I have reviewed the environmental data for air and well water samples collected at the [REDACTED] Marshall, Michigan. My comments and recommendations are provided below.

#### Background

On July 26, 2010, Enbridge Energy Partners, LLP (Enbridge) reported the break of a 30-inch pipeline near the city of Marshall, Calhoun County, Michigan. The break resulted in the spill of more than 800,000 gallons of crude oil into Talmadge Creek, which is a tributary of the Kalamazoo River (see attached figure).<sup>1</sup> The United States Environmental Protection Agency (EPA) established a Unified Command to contain the oil, remediate the contamination, and monitor environmental levels of oil-related contaminants. Members of the Unified Command included federal, state and local agencies, and Enbridge representatives.

The [REDACTED] is located in the city of Marshall, about eight tenths of a mile northeast of the confluence of Talmadge Creek and the Kalamazoo River. The [REDACTED] provides day care services for up to 128 children from birth to 12 years of age. Following the pipeline break, the owners of [REDACTED] reported smelling strong odors and that several staff had become ill as a result. The owners also expressed concern for the safety and well-being of the children in their care.

#### Discussion

The oil product spilled from the Enbridge pipeline is composed of petroleum hydrocarbons, which are a broad family of chemical compounds that include:

- short, straight chain molecules with nine or fewer carbons referred to as gasoline range organics (GRO),
- longer, sometimes branched molecules with 10 to 28 carbons referred to as diesel range organics (DRO),
- semivolatile organic hydrocarbons, including polycyclic aromatic hydrocarbons (PAHs), and
- volatile organic hydrocarbons (VOCs) such as benzene, toluene, ethylbenzene, and xylene.

These chemicals are present in many products that are used in homes and businesses. They are also emitted in automobile exhaust and from many industrial processes. Therefore, it is possible that levels of these chemicals monitored in air near the PLC could come from sources other than the Enbridge

<sup>1</sup> "EPA's Response to the Enbridge Oil Spill." 2010. available at <http://www.epa.gov/enbridgespill>.

oil spill. People can smell these chemicals at levels lower than those that would be expected to cause harm to human health.

#### Air Data

Soon after the oil spill was reported, EPA emergency response personnel began "real-time" air monitoring near the spill site and along Talmadge Creek and the Kalamazoo River. EPA focused this monitoring on locations where people could be exposed to spill-related air contaminants in their homes and businesses. Enbridge also employed a contractor, the Center for Toxicology and Environmental Health (CTEH), to conduct additional air monitoring. Real-time air monitoring is conducted with a hand held instrument that gives an immediate readout of a contaminant concentration in air in units of parts per million and also continuously records all the readings. For consistency, I have converted all air concentrations to units of parts per billion (one part per million is equal to 1000 parts per billion). Table 1 shows the levels of contaminants found during air monitoring conducted at the [REDACTED]

Table 1. Levels of air contaminants monitored by the U.S. Environmental Protection Agency at [REDACTED] Marshall, Michigan from August 2, 2010 to August 27, 2010.

Chemical	Total Number of Samples	Number of Detections	Range of Concentrations (ppb)
Benzene	77	0	<50
Carbon monoxide	55	6	<1,000 to 2,000
Hydrogen sulfide	72	0	<1,000
Total VOCs	74	6	<100 to 500

ppb = parts per billion

VOCs = volatile organic hydrocarbons

Hydrogen sulfide can cause acute health effects at levels lower than could be detected by the MultiRAE instrument used to monitor the air at the [REDACTED]. However, monitoring was also conducted at the oil release site (see attached figure) with a more sensitive Interscan instrument, which can detect hydrogen sulfide at 10 ppb. Levels of hydrogen sulfide at the oil spill site, which is more than two miles from the [REDACTED] did not exceed values protective of human health for exposures lasting up to two weeks.<sup>2</sup>

CTEH also conducted additional real-time monitoring for benzene and total VOCs at the PCLC from July 27, 2010 to August 29, 2010 (latest data available at the time of this writing). CTEH did not detect levels of either benzene or VOCs above the instrument detection limit of 100 ppb.<sup>3</sup>

Benzene is the chemical in the oil that public health officials are most concerned about for potential harm to human health. Working with the EPA and the CCPHD, toxicologists from the Michigan Department of Community Health (MDCH) Toxicology and Response Section and the Agency for Toxic Substances and Disease Registry (ATSDR) Region 5 office developed a decision tree to support decisions that are protective of human health.<sup>4</sup> When measured benzene levels were at or below 60 ppbv, no immediate action such as an evacuation was recommended. However, where any level of benzene was found or where there was greater concern for human exposure, EPA would conduct

<sup>2</sup> "EPA's Response to the Enbridge Oil Spill." 2010. available at <http://www.epa.gov/enbridgespill>.

<sup>3</sup> Center for Toxicology and Environmental Health. Daily Report for [REDACTED] August 28, 2010.

<sup>4</sup> "EPA's Response to the Enbridge Oil Spill." 2010. available at <http://www.epa.gov/enbridgespill>.

additional monitoring. Because children are at greater risk of harm than adults from exposure to contaminants in air, and at the request of the [REDACTED] owners, additional air sampling was conducted by both the EPA and CTEH.

The EPA and CTEH collected air samples in tedlar bags and in summa canisters for more extensive laboratory analysis. Tedlar bags are used to collect "grab samples" of air that can be quickly analyzed in an on-site mobile laboratory. The laboratory analysis of the tedlar bag samples provides a more accurate and sensitive measurements of benzene in air than the monitoring instruments. The concentration of the detected chemicals are expressed in units of parts per billion by volume of air (ppbv). Levels of benzene in air that are at or below 6 ppbv for up to one year are not expected to cause harm to human health.<sup>5</sup>

Table 2. Levels of benzene measured by the U.S. Environmental Protection Agency in tedlar bag samples at the [REDACTED] Marshall, Michigan from August 2, 2010 to August 27, 2010.<sup>6</sup>

Chemical	Total Number of Samples	Number of Detections	Range of Concentrations (ppbv)
Benzene	47	9	<0.5 to 5.3

ppbv = parts per billion by volume

VOCs = volatile organic hydrocarbons

*(while low - it was higher than 5.3)*

Summa canisters are used to collect samples that represent a time-weighted average (a few minutes or for up to 24 hours), to get a better understanding of exposure over the course of a full day. The canisters are sent to a laboratory for more extensive analysis for more than one hundred separate volatile chemicals. Table 3 shows five chemicals that were found in air samples collected from outside the PCLC on August 2, 2010 (24 hours) and August 3, 2010 (8 hours). No other chemicals, including benzene, were detected in the EPA summa canister samples. None of the chemicals found in the EPA summa canister samples are either associated with crude oil or exceeded health based screening levels.

Table 3. Levels of air contaminants measured by the U.S. Environmental Protection Agency in summa canister samples taken at the [REDACTED] Marshall, Michigan on August 2 and August 3, 2010.

Chemical	Total Number of Summa Samples	Number of Detections	Range of Concentrations (ppbv)	Screening Level <sup>7</sup> (ppbv)
Acetone	2	2	0.5 to 1.0	13,000
Acetonitrile	2	2	2.5 to 3.0	38
Chloromethane	2	1	0.4 to 0.7	200
Dichlorodifluoromethane	2	2	0.24 to 0.34	42
Methylene chloride	2	2	0.46 to 0.81	300

ppbv = parts per billion by volume

VOCs = volatile organic hydrocarbons

<sup>5</sup> Agency for Toxic Substances and Disease Registry. 2007. Toxicological Profile for Benzene. Available at <http://www.atsdr.cdc.gov/ToxProfiles>.

<sup>6</sup> "EPA's Response to the Enbridge Oil Spill." 2010. available at <http://www.epa.gov/enbridgespill>.

<sup>7</sup> "EPA's Response to the Enbridge Oil Spill." 2010. available at <http://www.epa.gov/enbridgespill>.

CTEH reports that it collected 15 summa canister samples at the [REDACTED] between August 1 and August 11, 2010, some of which were taken from inside the building office and in one of the educational rooms. No benzene was detected in any of these samples. Table 4 shows the chemicals that were verified as detected in both indoor and outdoor samples

Table 4. Levels of air contaminants measured by Center for Toxicology and Environmental Health in summa canister samples taken at the [REDACTED] Marshall, Michigan between August 1 and August 11, 2010.

Chemical	Total Number of Summa Samples	Number of Detections	Range of Concentrations (ppbv)	Screening Level (ppbv)
Acetone	15	13	11 to 44	13,000
Isopropyl Alcohol	15	14	12 to 250	90
Toluene	15	2	5.9 to 15	1,000

ppbv = parts per billion by volume  
VOCs = volatile organic hydrocarbons

Several other chemicals such as acetaldehyde (7.5-20 ppbv), butanal (9.6 ppbv), butane (27-35 ppbv), 1,2-diethyl-benzene (6-6.7 ppbv), ethyl alcohol (20-90 ppbv), hexanal (8.5 ppbv), isobutane (26-35 ppbv), nonanal (6.5 ppbv), and propane (6.3 ppbv) were tentatively identified in the CTEH summa samples at very low levels that would not be expected to cause human health effects.

Only isopropyl alcohol exceeds a health based screening level developed by the Michigan Department of Natural Resources and Environment, Air Quality Division. Isopropyl alcohol is also known as rubbing alcohol and has many common uses in homes and businesses for medicinal purposes, as a solvent for glues in arts and crafts, and as a cleaning and disinfecting agent. Isopropyl alcohol is not a component in crude oil.

On August 5, 2010, a public health nurse employed by CTEH monitored outside air at the [REDACTED] for several hours. No benzene was detected in any of these monitoring events. On August 6, 2010, the public health nurse spent several hours inside the [REDACTED] main office where odors and symptoms had been reported by the owners. The nurse reported no unusual odors or health symptoms after spending the day in the [REDACTED].

#### Drinking Water Data

The CCPHD collected a drinking water sample from the [REDACTED] private well on August 2, 2010. The sample was analyzed for a target list of 59 VOCs including benzene and other chemicals that may have been in the crude oil. No chemicals were detected in the drinking water sample.

*It's to  
soon to  
test wells*

#### Odors and Health Concerns

Between August 10 and 13, 2010, MDCH epidemiology staff interviewed all the employees at the [REDACTED] regarding health effects that may have been associated with exposure to odors from the spill. Questions were asked in an open-ended format about whether employees had noticed any odors since the Enbridge oil spill, if they had chronic or pre-existing health conditions that made them sensitive to odors, and if they had developed any new health symptoms or a worsening of pre-existing symptoms after the spill. A summary of the results follows:

- All the employees (100%) noted the odor. Many noted that the worst days for odor were early in the first week following the oil spill (the week of July 26).
- Most of the employees (92%) said they still smelled the odor when they were interviewed (the second week after the spill).
- Some of the employees (33%) noted that they had pre-existing chronic health conditions that made them sensitive to fumes or odors.
- Most of the employees (92%) noted a variety of new onset or worsened symptoms after the spill, including: headache (92%); respiratory symptoms (33%), dizziness (50%); gastrointestinal symptoms (33%); fatigue (33%); eye, nose, throat irritation (75%), and anxiety (42%).
- Some of the employees (17%) noted that they were planning to see a physician for these symptoms. MDCH has no evidence to conclude whether any PCLC workers sought medical attention.

These reported symptoms are consistent with the known acute symptoms of exposure to crude oil. However, it cannot be determined if workers at the [redacted] experienced these symptoms as a result of exposure related to the Enbridge oil spill.

*No complaint prior*

These results should be interpreted with caution. First, this was a survey of a very small group of individuals, thus subject to the instability of small numbers. Second, there are a number of factors that could have contributed to recall bias, resulting in over- or under-reporting of symptoms. Because these individuals worked closely together, individual responses could have been influenced by prior discussions and concerns about the spill. Further, overstated reporting of symptoms could have resulted from the considerable publicity surrounding the event and attendant legal issues.

On the other hand, the open-ended format of the questions, rather than a structured list of possible responses, could have meant that individuals were less likely to remember and report on specific types of symptoms. Although self-reported health surveys have been found to be less accurate than studies using clinical records, they still have been found to be reliable sources of information and are widely used.

**Conclusions**

MDCH concludes that breathing the air near and in the [redacted] is not expected to cause long-term harm to people's health, including children. No benzene was found in any air sample taken at [redacted]. No chemical found in the air samples exceeded health based screening levels with the exception of isopropyl alcohol, which is used for many common purposes in the home and in businesses.

MDCH concludes that drinking the water at the [redacted] is not expected to cause harm to people's health, including children. No chemical contaminants were found in the drinking water at [redacted].

\* MDCH cannot determine if breathing the air near and in the [redacted] in the days following the Enbridge oil spill could have caused short term effects to employees' health. In the days following the Enbridge oil spill, employees at the [redacted] reported a variety of symptoms, similar to those that have been associated with exposure to crude oil vapors and odors. However, extensive sampling of ambient and indoor air at [redacted] has not confirmed the presence of chemicals at levels that would explain these symptoms. Since no children were interviewed, MDCH

*(or children)*

*Why not check parents?*



Rutherford

Page 6 of 6

September 8, 2010

cannot determine if children experienced similar symptoms. As a result, we do not have an explanation for the symptoms experienced by the [REDACTED] employees.

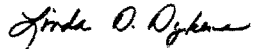
**Recommendations**

- MDCH recommends that air monitoring for benzene and VOCs be conducted at the [REDACTED] if clean up activities on the Kalamazoo River occur in close proximity to the [REDACTED]. Clean up activities may release these contaminants to the air as the oil is removed from vegetation along the river or when absorbent and containment booms are retrieved.
- MDCH recommends that drinking water be periodically sampled and analyzed to ensure that oil related contaminants do not impact the private well at the [REDACTED].
- MDCH recommends that employees and others at the [REDACTED] who experience health effects consult with their private physician for appropriate treatment.

**Public Health Action Plan**

- The EPA will provide oversight to Enbridge and their contractors to ensure that air monitoring is conducted where cleanup activities are on-going.
- The CCPHD, the EPA and the Michigan Department of Natural Resources and Environment will review and approve long-term sampling plans to ensure that drinking water is not impacted by oil spill related contaminants.
- The MDCH will remain available to review all environmental data resulting from on-going environmental monitoring and sampling related to the Enbridge oil spill. MDCH will make recommendations for actions to protect public health as appropriate.

Sincerely,



Linda D. Dykema, Ph.D., Manager  
Toxicology and Response Section

Attachment

cc: Mark Johnson, Ph.D., ATSDR Region 5 Office  
Martha Stanbury, MDCH

Prepared Statement

of

Patrick D. Daniel  
President and Chief Executive Officer  
Enbridge Inc.

3000 Fifth Avenue Place  
Calgary, Alberta  
Canada  
(403) 231 3900

Before the

House Transportation and Infrastructure Committee  
U.S. House of Representatives

September 15, 2010

Mr. Chairman, Ranking Member Mica, and Members of the Committee:

Thank you for the opportunity to appear before you today to discuss the rupture on Enbridge Energy, Limited Partnership's Line 6B near Marshall, Michigan.

I and the entire Enbridge team remain deeply concerned by the incident. I have been based in Marshall since shortly after the spill. In the past seven weeks, I have met with hundreds of residents, local workers, first responders, and government officials. I want to assure you, as I have assured them, that we have taken full responsibility to address the impacts of the spill on the environment and on individuals and businesses in Marshall, Battle Creek, and the surrounding area.

Given the dedication of our employees, the experience of our pre-identified emergency crews, the approximately 500 Michigan residents we employed, and the local, state, and federal officials who worked with us, I am pleased to report that the spill was quickly contained and that we had succeeded in removing most of the released oil off the Kalamazoo River within a week. By the end of August, we met the Unified Command's goal of cleanup at the leak site and along Talmadge Creek. By the end of September, we will have succeeded in completing the bulk of the clean up. We are now in the process of completing our remediation efforts, working with the Environmental Protection Agency (EPA), the Michigan Department of Natural Resources and Environment, and other officials to restore the affected areas and to establish a long-term monitoring plan.

Before sharing more with you about our response to the spill, I want to put in context the scope of our North American operations, our overriding commitment to safety, and our exceptional environmental record. In particular, I want to share with you the extensive pipeline integrity program we have developed and other measures we have implemented in order to create systems for continual improvements and to meet the high standards we have set for ourselves.

For Enbridge, no spill is acceptable. We are committed to upholding the highest standards for pipeline safety and integrity. We will continue to invest heavily in pipeline safety through our preventative maintenance program, routine inspections, well-qualified workforce, and pipeline integrity program. We want to be as confident as we can be that our pipeline networks have the strength and operating fitness to perform safely, reliably, and in an environmentally responsible manner.

Once the investigations into this incident have been completed, Enbridge is fully committed to addressing whatever changes might need to be implemented so that we and others in the industry can avoid a repeat of this incident. We intend to work with you to ensure that the Committee's concerns and those of the communities in which we operate are fully addressed.

#### *Background on Enbridge*

Enbridge wants to be the leading energy delivery company in North America. We integrate our core values into our daily activities, helping us work toward achieving our collective vision. Our values guide the way we make decisions and conduct our business. We operate with integrity, honesty, and transparency. We operate to the highest ethical standards with our customers, investors, employees, partners, and regulators, and in the communities through which our facilities cross. And we aim to ensure compliance with all the laws in every jurisdiction in which we operate, including adhering to the tougher of the two when we are confronted with overlapping regulations from two different jurisdictions. As we hope you will find today and as we have sought to demonstrate in Marshall, Battle Creek, and the surrounding area, we communicate openly and honestly.

By pursuing these core values, we have grown our business substantially over the past 60 years. Today, our company operates the world's longest petroleum liquids pipeline system, serving customers throughout Canada and the United States. I am proud to say that we have approximately 2,200 employees in the United States. Last year, we delivered approximately two million barrels per day of oil to markets throughout North America. In fact, Enbridge transports to the United States more crude oil needed by refineries than any other company in the world. At present, we deliver approximately 12 percent of the total daily imports of crude oil into the United States.

As the operator of North America's largest crude oil pipeline system, Enbridge prides itself on safely and reliably delivering energy to people across the continent. We also are proud of our green energy portfolio, which is the fastest growing portion of our business, as we continue to invest more each year in renewable energy projects. In everything we do, we place the highest possible priority on protecting the safety of the communities in which we operate, the lands through which our pipelines traverse, and the people who live and work along our system.

Our goal is to have no leaks or spills, ever. That is why we invested nearly \$150 million last year alone on our pipeline integrity programs. And that is why we have a very significant compliance program in place, one that is intended to ensure our employees meet the highest standards for delivering product safely to market. For example, our management scorecard includes safety performance in a manager's performance ratings. We seek to continually improve our performance, to learn from our mistakes, and to achieve our safety objectives.

The substantial sums we spend annually on our pipeline integrity programs support activities such as corrosion control, monitoring, and advanced inline inspection technology that provide a millimeter-by-millimeter view of the pipeline. We also run regular ground and aerial pipeline patrols, and maintain a comprehensive program of digs to test the integrity of our pipelines. In addition, we have developed strong public awareness programs. We will continue to invest in these kinds of initiatives in the future to assure ourselves that we are able to maintain the integrity and reliability of our pipeline network.

Our record demonstrates our ability to translate positive ideals into positive outcomes. For instance, we have made considerable progress in reducing the number and magnitude of incidents over time caused by corrosion or third-party excavation. As a result, our underground system largely receives little notice in the communities through which our lines cross.

To put our safety record in perspective, our level of spills is about 40 percent of the industry average. Based on the miles of pipeline we operate, our line break rate is roughly half of the industry average. Between 2002 and 2009, for example, we reported only 0.451 incidents per 1,000 miles of pipelines—well below the 0.786 incidents per 1,000 miles of pipelines reported by all other pipeline operators, as reported to the U.S. Department of Transportation.

#### *Response to the Rupture*

Line 6B is a 30-inch pipe that runs from Griffith, Indiana, to Sarnia, Ontario. Constructed in 1969, it has an average daily capacity of 283,000 barrels. The line generally carries light synthetics and heavy and medium crude oil, supplying refineries in Ohio, Michigan, Pennsylvania, and eastern Canada. Initial estimates indicated that approximately 19,500 barrels of crude spilled as a result of the rupture. No one was hurt. A portion of the oil entered Talmadge Creek and from there entered the Kalamazoo River; the rest remained in the vicinity of the rupture.

Under the oversight of a host of federal, state, and local agencies, Enbridge implemented a swift and expansive response to the Line 6B rupture. Along with a team from our regional offices throughout North America, I arrived on scene on July 26th and have been based in Marshall since then.

Upon first notification of the release of oil, the pipeline was further isolated, having already been shut down for a planned delivery. That day, crews began installing containment boom that had been pre-positioned in Marshall. The initial focus was collection of oil off the river during the first week and then recovery of free oil from the immediate ground around the leak site. As a result of this swift and intensive intervention, the oil did not reach Morrow Lake. As of September 5, the EPA reported that 141,586 feet of boom had been deployed and 25 containment locations had been established. In addition, EPA reported that 8,434,487 gallons of oil/water, 12,726 cubic yards of debris, and 30,657 cubic yards of soil had been shipped off-site.

To address the needs of the local communities and to make information available as quickly and reliably as possible, we began making contact with residents in the areas of greatest direct impact along Talmadge Creek on July 26. By 9:45 p.m. that day, we had set up a hotline and provided the number to the local media to publicize. (As of last week, we have received approximately 9,400 calls from local residents on the hotline.) We also quickly published a website for the incident—[www.response.enbridgeus.com](http://www.response.enbridgeus.com)—where area residents could find up-to-date information on the spill,

could measure our response to it, and could submit comments or questions. As of last week, we had received approximately 550 comments through the website; every one of those has received a response.

Within two weeks of the spill, we had opened two community centers. As of last week, those two centers had hosted approximately 2,500 visitors. We have a team of employees at each community center to work directly with residents to provide appropriate assistance. We know we will have ongoing questions from residents and we will be there to answer them and address any issues that need to be resolved.

Since arriving on scene on July 26, I made it a point to meet with as many people as possible, often in their homes, so that they could share their concerns directly with me and so that we as an organization could respond as quickly as possible to address their concerns. We mobilized a team as quickly as we could so that anyone affected would have housing and the medical care they deserved as promptly as possible, as well as to address their financial needs.

We established processes that provided direct assistance for pre-paid hotel stays, equipment, and services; reimbursement for cost of living expenses and other qualified expenses incurred directly as a result of the leak, voluntary evacuation, and clean-up activities; a home purchase program in response to potential impacts on home values; procedures for processing claims for property and personal damages (such as business interruption, nuisance and inconvenience, and temporary land access and use); and payment of medical expenses for those individuals without insurance or a primary care physician.

We sought to establish a fair, reasonable, and efficient process with as little bureaucracy as possible. As I have said many times, no one need sue Enbridge to be made whole from this incident. As questions have arisen about aspects of our initiatives, we have sought to remedy them as quickly as possible. For example, where releases were obtained in situations in which only documented expenses were reimbursed or the claimant received something other than a cash payment, we corrected those situations by making clear that we would pay any future claim that is documented, non-fraudulent, and non-duplicative.

Even though we believe the processes we put in place were and are fair, we recently decided to bring in former Michigan Supreme Court Justice Dennis W. Archer, an esteemed jurist, to conduct a review of the claims process and, if necessary, recommend ways to improve that process to assure its fairness and privacy protections.

We developed a plan to purchase homes from adversely affected individuals. For those residents who own property within 200 feet of the river—and who had put their homes up for sale before the spill—we will buy those homes at the full list price. For residents who own homes within that area and are concerned about a reduction in value or simply want to move, we will purchase their home at the pre-spill appraisal value. As of last week, we had purchased 4 properties and have an additional 14 homes in the final stages of purchase. An additional 59 appraisals have been completed or are now underway. Residents will have one year from the spill date to decide if they want to proceed with the sale option. We are hopeful that this voluntary home purchase program, with transactions occurring at full list or appraisal value, will provide buoyancy to the local real estate market.

We also made a point of working to bring as many people from the community as possible to help with the clean up and remediation effort. Our contractors are contractually required to comply with all laws, and that includes that their workers are fully documented and qualified. When allegations were made about the use of undocumented workers, we contacted the affected contractor and advised it of the allegations and asked it to review the situation with its subcontractor whose workers were being questioned. The contractor subsequently decided to terminate the subcontractor.

Effective August 10, the Environmental Protection Agency announced that the emergency phase of the incident was over. The agency has approved a long-term restoration and monitoring plan. Approximately 17,000 barrels of oil had been recovered by August 31. By September 27, our plan is to have completed removal of all residual oil, soil, and oiled vegetation from the banks of the Kalamazoo River.

There has been significant progress in removing oiled soil around the site, removing oiled vegetation, and cleaning up residual oil on the creek bank and river bank. In addition to the many thousands of air and water samples taken by EPA, as of September 6 Enbridge had taken close to 49,000 air samples and 2,000 water samples, a process that continues today. At the beginning of the month, we had approximately 1,800 employees and contractors working on cleanup and remediation. As of late last week, given the progress to date, we had reduced the scope of our effort but still had over 1,400 individuals engaged in the clean up effort. We are now focused principally on remediation.

Finally, Enbridge has been working with Focus Wildlife, the Michigan Department of Natural Resources and Environment, and the U.S. Fish & Wildlife Service to minimize the impact on wildlife in the area. We established a temporary wildlife rehabilitation center in Marshall to help animals affected by the leak. We have encouraged the public to call our toll-free number to report any wildlife affected by the leak or to register as a potential volunteer. A daily report on the number of wildlife in care and released is available on the U.S. Fish and Wildlife Web site.

#### *Line 6B Pipeline Integrity Program*

Because our pipelines are a very important asset and the safety of our operations is of the utmost importance, we pay very close attention to the integrity and reliability of our pipelines, starting with design, operations, inspections, and maintenance. On Line 6B, a comprehensive integrity assessment, testing, and remediation program has been underway for many years. In fact, it had been underway even before we completed in 2004 the baseline integrity assessment test required under the applicable integrity management rules for liquid petroleum pipelines established by PHMSA's Office of Pipeline Safety. Our management program includes efforts to identify, monitor, repair, mitigate, and replace sections of pipe based on the results of our frequent internal inspections. In addition to routine inspections and maintenance, the pipeline has been inspected with various internal inspection tools in recent years, exceeding the requirements set out in applicable pipeline safety rules. In 2005, for example, we undertook the first of three "geometry" runs. In October 2007, we undertook a corrosion inspection using magnetic flux leakage technology. In June 2009, the line was tested for corrosion through the use of ultrasonic technology. That test measures, among other things, pipe wall thickness and thus allows calculations to determine the strength of the steel when spots along the pipeline show even early signs of potential corrosion or

other potential defects. These inspections were conducted along the entire line, rather than just in the high consequence areas as currently required.

Since then, our inspection program has been ongoing. In fact, at the time of the rupture, we had just inserted a crack inspection tool in the pipeline at Griffith. We hope to complete that testing soon.

As with most underground pipelines, corrosion is an ongoing risk that must be managed and ultimately prevented. We carefully maintain our cathodic protection system and internally inspect the lines to monitor for early signs of corrosion. When internal inspections indicate that corrosion is light enough not to be a near-term concern, Enbridge has a program in place to continue assessing, monitoring, repairing, and prioritizing repairs. When more serious signs of corrosion are found, we have a program to excavate and stop the corrosion and replace the protective coating, to install a repair sleeve, or to replace a segment so that the potential risk of a leak is avoided. Repair or replacements have the common goal of returning an affected pipe segment to full strength and full operating conditions.

As part of our pipeline integrity program, we conduct weekly checks and maintenance inspections. In fact, we already had planned to undertake two additional internal inspection runs in 2011 on Line 6B. We want to be certain that the conditions identified in the runs in 2007 and 2009 have been appropriately addressed, and that we are able to confirm the schedule for planned repairs or identify any new conditions that may have emerged since those internal assessments were completed. While I believe that our current integrity methods are state of the art and are consistent with or exceed regulatory obligations, we also intend to learn from this event and, where needed, develop new measures that will help us and the industry assure that accidents like this one are prevented.

#### *St. Clair River Dent*

When we identify a feature in a line that may threaten the strength of the steel under maximum operating pressures, we investigate it. An internal inspection in August 2009 indicated the existence of a dent in Line 6B where it crosses under the St. Clair River. Following that discovery, we notified the Pipeline and Hazardous Materials Safety Administration.

We fully appreciate the concerns of the potentially affected communities. Because the site is very difficult to access, we immediately lowered operating pressure to 50% of maximum allowed to be conservative while we completed an underwater inspection of the river bed over the pipe and launched a comprehensive engineering assessment.

The dent is a smooth one without evidence of corrosion or sharp features. Given its characteristics, the dent has most likely been there since the pipe was installed over 40 years ago. The dent is near the top of the pipe. The pipe has a wall thickness of 0.500" and is coated with 3 inches of concrete and covered with a layer of engineered protective gravel. The location is approximately 15 feet under the river bed. The depth of water at that location is approximately 30 feet.

In accord with federal pipeline safety rules, we have since filed a written technical and engineering assessment report with the regulators. While the probability that the dent will cause a

leak is very remote, Enbridge has committed to replacing or repairing this segment of Line 6B so as to allay any remaining concerns.

*Strong Environmental Record*

As part of our commitment to undertake socially responsible operations throughout North America, we not only value a clean and healthy environment, but also have undertaken extensive efforts to implement them. At Enbridge's Annual General Meeting in Toronto in May, 2009, I announced an ambitious plan to stabilize Enbridge's environmental footprint. The Neutral Footprint Initiative, which is the result of that vision, is designed to mitigate Enbridge's environmental impact where it is felt most: on the trees we remove, the natural habitat we permanently alter, and the energy we use to power our operations.

It is our responsibility to take a balanced approach to development. Enbridge has begun to plant a tree for every tree we remove to create safe right of way, to conserve an acre of land for every acre of natural habitat we permanently impact, and to generate a kilowatt of renewable energy for every kilowatt our operations consume. Through these and other ongoing initiatives, we have committed to stabilizing our environmental footprint at January 2009 levels.

We also recognize that our relationship with fossil fuels comes with great responsibility. To that end, Enbridge is now investing heavily in renewable and alternative energy technologies, including seven wind farms, North America's largest photovoltaic solar facility, a hybrid-fuel cell system, a geothermal energy project, and waste heat recovery technologies. I am proud to report that this is the fastest-growing portion of our business. With our investment in more than 800 megawatts of green power capacity, we now can supply more than 270,000 homes with energy. These investments prevent 1.5 million tons of greenhouse gas emissions annually. But this is just a start. We are committed to growing our renewable and alternative energy technologies over time.

*Conclusion*

As I said at the outset, no spill is acceptable. Since Day 1, we have taken responsibility for cleaning up the spill, addressing the needs of the individuals and businesses in Marshall, Battle Creek, and the surrounding area, and remediating affected areas. We are cooperating fully with the pending NTSB and Office of Pipeline Safety investigations. We hope to learn from their findings and from our own review of the incident. We have committed to the people and communities affected by the rupture that we will make things right. We intend to work with you to ensure that the Committee's concerns and those of the communities in which we operate are fully addressed.

Thank you again for providing us with this opportunity to share our perspective.



**National Transportation Safety Board**  
490 L'Enfant Plaza, SW  
Washington, D.C. 20594  
(202) 314-6000



**Deborah A.P. Hersman**  
**Chairman**

**Testimony of the Honorable Deborah A.P. Hersman  
Chairman  
National Transportation Safety Board  
Before the  
Committee on Transportation and Infrastructure  
United States House of Representatives  
Hearing on  
Enbridge Pipeline Oil Spill in Marshall, MI  
Washington, DC  
September 15, 2010**

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Chairman Oberstar, Ranking Member Mica, members of the House Committee on Transportation and Infrastructure, thank you for inviting me to appear before you today.

As you know, the National Transportation Safety Board is charged with determining the probable cause of transportation accidents and making recommendations to help prevent similar accidents from occurring in the future. These are the goals for our ongoing investigation into the recent pipeline rupture and oil spill near Marshall, Michigan.

The accident pipeline – line 6B -- is owned and operated by Enbridge Energy Partners. It extends approximately 300 miles from Griffith, Indiana to Sarnia, Ontario, Canada. Line 6B is a portion of Enbridge's 1,900 mile Lakehead System pipeline. Enbridge's operational control center for line 6B and its other pipeline systems is located in Edmonton, Alberta.

First, I would like to comment about the events beginning in the late afternoon of Sunday, July 25. Enbridge scheduled to take the thirty-inch diameter pipeline offline (stop pumping oil through the pipeline) at 6 pm on July 25, and planned to restart the pipeline at 4 am on Monday, July 26. Enbridge scheduled the 10-hour shutdown due to delivery schedules that precluded certain facilities on the system from accepting oil.

At 5:58 pm on Sunday, July 25, the pipeline controller in Edmonton was in the process of taking the pipeline offline and had stopped the pumps at four pump stations from Griffith, the pipeline origin, through Mendon, about 30 miles upstream from the Marshall pump station. Also at 5:58 pm, an alarm was triggered by an abrupt drop in pressure in the pipeline at the Marshall pump station, and as a result, the pumps at Marshall were automatically stopped.

At 6:03 pm, the Edmonton control center received a volume balance alarm indicating a discrepancy between the volume of oil entering the pipeline and the volume of oil exiting the pipeline. Control room analysts believed volume balance alarms to be caused by "column separation," which indicates a space between two batches or columns of crude oil within the pipeline. (For optimum operation of the pipeline, the controllers strive to maintain a continuous flow of product through the entire pipeline.) Controllers and analysts at the control center believed the column separation condition would be present until the pipeline was restarted at 4 am.

At 9:25 pm, on Sunday, July 25, the first 9-1-1 call arrived at the Calhoun County Dispatch Center with complaints of a strong odor of natural gas or crude oil. Between 9:25 pm and 11:33 pm, three additional 9-1-1 calls were received reporting natural gas fumes, propane gas odors, and a natural gas leak. Fire fighters were dispatched, but found no natural gas leaks. Michigan Gas also dispatched a service technician during this time to a residence to investigate complaints of natural gas odors. The Michigan Gas technician found no leaks of natural gas but noted on his service report that he smelled petroleum odors.

During the early morning hours of Monday, July 26<sup>th</sup>, Line 6B was restarted and shut down twice. Following the scheduled start-up of the pipeline at 4 am and a second start-up at 7:10 am, controllers received multiple volume balance alarms. By 7:55 am, the pipeline was stopped for the final time after controllers and analysts at the Enbridge control center were unable to resolve the volume balance alarms.

At 9:49 am, the control center directed a technician onsite in Marshall to inspect the Marshall pump station and general vicinity for leaks. The technician went to the enclosed pump station facility, found no leaks, and did not investigate further. He detected no odors, including driving to and from the pump station. (He stated that he kept the windows in his truck closed.) About an hour and a half later, at 11:18 am, the Edmonton control center received a call from a Consumers Energy service technician who was responding to reports of natural gas odors in the vicinity. The Consumers Energy technician reported an oil leak, which was confirmed by a second Enbridge onsite technician at 11:45 am. At 1:29 pm, the National Response Center reported an oil release.

National Transportation Safety Board investigators arrived on scene the next day, Tuesday, July 27<sup>th</sup>. They found an extremely challenging investigative terrain. The section of pipeline that ruptured was located in a swampy, wetland area, which was further saturated by the volume of oil that had spilled. As a result, the process of excavating the ruptured pipeline took nearly two weeks. However, the NTSB was ultimately able to transport 2 sections of pipe, each exceeding 20 feet in length, from the accident site to our Training Center in Ashburn, Virginia. The pipe sections arrived at the Training Center on August 8<sup>th</sup>.

We are still in the very early stages of our investigation. However, I am able to report that we are making significant progress. So far, the NTSB investigators have:

- completed documentation of the coating system on the ruptured pipe piece and second pipe piece;
- removed the coating and documented the corrosion on the exterior surface of the accident pipe piece and the second pipe piece;
- prepared selected areas of the exterior surface of the ruptured and second pipe pieces for nondestructive testing;
- completed nondestructive testing of the ruptured pipe piece and found surface cracks and indications of corrosion;

- conducted additional nondestructive testing on the ruptured pipe piece and the second pipe piece, and
- taken four samples from the ruptured pipe and one sample from the second pipe and transported these to the NTSB Headquarters Materials Laboratory.

During the week of September 7, an NTSB metallurgist prepared the samples for further examination and testing. The Materials group will begin its work at the NTSB Materials Laboratory next week to (1) conduct optical and scanning electron microscope analyses of the fracture surfaces of the rupture, (2) document the microstructure of the pipe metal, and (3) document the features of the surface cracks.

As is the case in all of our investigations, the NTSB will continue investigating the accident in order to provide a full report on the causes and actionable recommendations that will help prevent future similar accidents from taking place.

Although we have just begun our work in this pipeline rupture, we expect the investigation to focus on the following areas:

- **Supervisory Control and Data Acquisition (SCADA) data.** In 2005, the NTSB conducted a safety study on SCADA in Liquid Pipelines. Following this report, the Board issued Safety Recommendations P-05-1 through -3, which called on PHMSA to:
  - (1) require hazardous liquid pipeline operators to follow the American Petroleum Institute's recommended practice for the use of graphics on SCADA computer screens,
  - (2) require pipeline companies to have a policy for the review and audit of SCADA alarms, and
  - (3) require training for pipeline controllers to include simulator or non-computerized simulations for controller recognition of abnormal operating conditions, particularly leak events.

These three recommendations were also incorporated directly into the PIPES Act. PHMSA published a final rule on December 4, 2009 that included the recommended requirements and applied them to all pipeline systems. The control room operational data is complex and requires a thorough review for these requirements, especially on data from July 25 and 26.
- **Pipeline controller performance.** NTSB investigators are examining the work experience, health, work/rest schedule, qualification, training, and activities of each control room operator involved in the accident.
- **Operator notification and spill response.** The NTSB is gathering and evaluating information from interviews and electronic sources to further determine the timeline of events. This information will accurately reflect when the spill occurred, when notification was made, and how the operator responded.

- **Responses to 9-1-1 calls.** The team will review 9-1-1 records from Calhoun County and phone call records from local utilities and evaluate the response by first responders and local utilities to residents' complaints.
- **Inspection and Maintenance History.** The NTSB will review and evaluate the inspection and maintenance history of the operator, including but not limited to integrity management plans, risk-based programs, and cleaning history.
- **PHMSA Oversight Activities and Actions.** PHMSA, as the regulator, has a role in overseeing the integrity of the pipeline system and ensuring the safety of our national pipeline system. The NTSB will evaluate PHMSA's oversight of line 6B and this operator.

Naturally, we will allow the facts of our investigation to lead us to other areas if necessary; however, this should give the Committee a clear indication of our ongoing efforts.

Although many aspects of NTSB investigations are technical in nature, we are ever-cognizant of the collateral cost of accidents such as this. It is estimated that between 800,000 and 1 million gallons of oil spilled as a result of the Marshall pipeline rupture. The economic and environmental consequences of a spill of this magnitude are significant. Although we can't prevent accidents that have already occurred, by investing the time and resources to learn from what went wrong, we can help stop future accidents from ever taking place.

This concludes my testimony and I would be happy to answer any questions you may have.

**Testimony of Lisa P. Jackson, Administrator  
U.S. Environmental Protection Agency  
before the  
House Committee on Transportation and Infrastructure  
Enbridge Pipeline Oil Spill near Marshall, Michigan  
September 15, 2010**

Chairman Oberstar, Ranking Member Mica, and members of the Committee, thank you for the opportunity to testify on the response of the U.S. Environmental Protection Agency (EPA) to the Enbridge Pipeline Oil Spill near Marshall, Michigan. My testimony will provide you with an overview of EPA's response following the pipeline release reported on July 26, 2010. I will also discuss future response activities.

**Notification and Response**

On July 26, 2010, at 1:33 p.m. Eastern time, Enbridge notified the National Response Center, which in turn notified EPA, that a pipeline release totaling an estimated 819,000 gallons of oil had occurred near Marshall, Michigan. The oil entered Talmadge Creek and flowed into the Kalamazoo River, a Lake Michigan tributary. Heavy rains caused the river to overtop existing dams and carried oil 30 miles downstream. In the end, the spill was contained approximately 80 river miles from Lake Michigan.

**Federal Oil Spill Responsibilities**

Under federal law, EPA is the lead agency for response to inland oil spills – like the Enbridge Marshall, Michigan, spill. The U.S. Coast Guard (Coast Guard) is the lead agency for spills that occur along the coast or in a coastal zone. The exact lines between the inland and

coastal zones are established by Memoranda of Agreement between regional EPA and Coast Guard offices. In this instance, if the Enbridge spill had occurred within 12 miles of Lake Michigan, the Coast Guard would have taken the lead. Regardless of where a spill occurs EPA and the Coast Guard have a strong relationship and work closely on oil spill response activities.

#### **Response to the Enbridge Spill**

As the federal agency in charge of the response to the Enbridge spill, EPA assumed a leadership role in the Unified Command and mobilized an Incident Management Team made up of federal, state, and local agencies. Members of the Unified Command include EPA, Calhoun County, Kalamazoo County, the City of Battle Creek, the Michigan Department of Natural Resources and Environment (MDNR), the Michigan State Police, and Enbridge. Key federal assisting and cooperating agencies include the U.S. Fish and Wildlife Service, the Coast Guard, the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, the Department of Transportation, the Occupational Safety and Health Administration, and the Agency for Toxic Substances Disease Registry. By working together toward a common goal, EPA and its partners have been able to respond both to the oil spill and to the varied needs of the surrounding communities.

As the Unified Command was being set up, EPA began:

- monitoring the air for volatile organic compounds to protect public health;
- overseeing and providing technical expertise to Enbridge's cleanup effort;
- assessing water quality and sediment through visual and analytical methods; and

- evaluating more than 30 miles of contaminated shoreline, flood plain, and wetland areas through land, boat, and air surveys.

On July 27, 2010, the day after the spill was reported, EPA issued an Order under Section 311(c) of the Clean Water Act, directing Enbridge to conduct removal actions. The Order requires Enbridge to deploy appropriate oil recovery and containment equipment, perform air monitoring and sampling, perform water and sediment sampling of impacted areas, clean up all impacted areas, and properly dispose of all wastes. Section 311(b) authorizes the assessment of civil penalties of up to \$37,500 per day that Enbridge fails to comply with the Order or an amount up to three times the cost incurred by the Oil Spill Liability Trust Fund as a result of such failure. EPA also directed Enbridge to produce documents and information relevant to EPA's investigation into the source, extent, and nature of the oil spill, pursuant to EPA's authority under Sections 308 and 311 of the Clean Water Act.

Pursuant to the Order, on July 28, 2010, Enbridge notified EPA that the release was contained and no more oil was flowing from the release area to Talmadge Creek and the Kalamazoo River. The release was contained by mobilizing hundreds of response personnel and heavy equipment. Spill control structures such as soil berms, underflow dams, and containment boom were installed in Talmadge Creek and along the Kalamazoo River.

Over the next several weeks, both EPA and Enbridge continued to add response personnel and equipment to contain the movement of oil and to remove contamination from affected areas. EPA observed significant progress during this time. In less than one week, response efforts



reduced heavy oil to a sheen over the majority of the creek and parts of the river. After an additional week, the sheen was visible only intermittently along the waterway.

On August 10, 2010, EPA and its partners in the Unified Command transitioned from the initial emergency response phase of the removal action into the longer-term phases of the removal action, which include clean up, remediation, and restoration activities. At this point, containment structures had stabilized oil movement in the creek and river.

Today work continues along Talmadge Creek and the Kalamazoo River to remove oil on streambanks, in flood plains, and in river sediments. More than 1,400 people continue to work on this response. The majority of cleanup efforts are currently focused on a 15-mile stretch of the most contaminated areas of the Kalamazoo River, removing contaminated vegetation, conducting mechanical cleanup of contaminated shoreline, and cleaning up pooled oil in the flood plain areas. Using Shoreline Cleanup Assessment Teams (SCAT) EPA continues to assess the impacted areas as the cleanup progresses. In addition, EPA and its partners are using SCAT teams to document progress along the shorelines and in flood plains, and make recommendations for additional cleanup activities.

During the course of the response, as much as 175,000 feet (33 miles) of absorbent and containment boom were deployed on a single day. A total cumulative amount of almost 450,000 feet (85 miles) of absorbent boom has been deployed. No dispersants of any kind were used during the response. As of September 9, 2010, the amount of soil and debris shipped off-site totals nearly 45,000 cubic yards and is being sent to licensed landfills for final disposal. More

than 9.5 million gallons of oil and water mixture have been collected from the spill site, creek and river. More than 200 boats currently are deployed on the river system for booming, skimming, and shuttling personnel and equipment. Total personnel onsite ranges on any given day from 1,300 to 1,800 workers. To date, EPA's costs for responding to the spill total \$17 million, which includes \$1.1 million in Pollution Removal Funding Authority agreements that EPA has entered into with assisting agencies. While we expect that total to rise during the coming months as clean up continues, I assure you that we will work to ensure that EPA's costs are recovered from Enbridge.

#### **Communications and Outreach**

In order to keep the community up-to-date on the status of response efforts, EPA organized public meetings in Marshall, Battle Creek, and Kalamazoo. At these public meetings, EPA and its partners discussed ongoing efforts to clean up the oil spill. EPA also held informal sessions so that the public could meet one-on-one with staff from EPA and other agencies. Additionally, EPA attended other community meetings to make sure that people are informed and could ask questions about our response efforts. Furthermore, during the first weeks following the spill, EPA held daily conference calls for members of Congress, congressional staff, state and local officials, and the media. These briefings are now held weekly.

#### **Next Steps**

Several critical deadlines are approaching, and EPA will monitor Enbridge's progress closely. Enbridge is required to clean up all contaminated areas along Talmadge Creek and the Kalamazoo River (including shoreline) by September 27, 2010. On November 27, 2010,

Enbridge must submit a final report to EPA. This report must detail all work completed, including monitoring and analytical data, disposal records, and all documentation related to the response.

We expect the environmental restoration work to extend into next year which will include restoring (i.e., backfilling, grading, and seeding) and monitoring all areas impacted by the release. The U.S. Fish & Wildlife Service is currently collecting data to inform future natural resource damage assessments. EPA will continue to lead the Unified Command and will oversee Enbridge's efforts to ensure that all necessary cleanup work gets done. In the coming months, long term restoration and monitoring oversight will transition over to MDNRE. EPA will work with MDNRE to oversee long-term monitoring to protect public health and the environment. EPA, in coordination with our federal, state, and local partners, is committed to protecting Michigan communities from any long-term environmental effects of the spill.

**Conclusion**

Thank you again for the opportunity to testify. I welcome any questions you may have.

**Before the Chairman and Members  
Of the Transportation and Infrastructure Committee**

**Hearing September 15<sup>th</sup>, 2010**

**On the Enbridge Oil Spill in**

**Marshall, Michigan**

**Written Testimony**

**James Alan Lee**

**Marshall, Michigan**

Mr. Chairman and Members of the Transportation and Infrastructure Committee, I want to thank-you for allowing me to be here today. I hope my testimony will aid you in getting a better understanding of what our life is like outside the "Red Zone" and 200ft from the Kalamazoo River. I will be informing you about our first few days of the oil spill, the progression of my wife's illness, meetings we attended, information we received from various agencies and the feeling of abandonment from a Company that said they were at fault and they would make it right.

**Monday July 26<sup>th</sup> 2010:** I was at work for a normal Monday. I received a call from my now wife (Michelle Walters-Lee) at 10:40ish am. She was somewhat panicked. She said she could smell gas and she couldn't find where it was coming from. I left work and on my way home I have to go over a bridge on the Kalamazoo River. I had my window down and kept getting smells of what I thought was tar or asphalt. We live close to the road commission and thought they may be asphaltting or laying pea gravel down close by. They have done this in our area the past few years. When I got home I checked the water heater, furnace and the gas grill in the back yard. I did get smells of gas when I was in the back yard. At this point it wasn't the overwhelming smell we got later. I told Mickey (nickname for Michelle) that I would call consumers energy when I got back to work. I only live 3 miles from work. When I got back to work, I was informed from a co-worker that it is an oil spill. I called home to inform Mickey and she was watching the news about the spill. She said she could smell it in the house so she shut the windows and started the A/C. She just forgot about the windows in the basement. We had those open to get some fresh air the night before and save on our energy bill because they were getting high from the A/C. I got off work at 6 that night and came straight home. I couldn't believe how much stronger the smell was. We had dinner and decided to go down to the park in our neighborhood that is right on the river. The stench and the site of the oil in our river was a sick feeling. I took some pictures with my Iphone and still have them with area pin dropped. We came back and I had some yard work to do in the back yard. I looked up and saw our neighbor girl and her friend covered in a shiny black substance up to their upper thigh. I made a joke about Halloween is a long way off and they started saying it was oil. I came up to them and immediately could smell the stench. They started complaining that it was stinging and she yelled for her mom. I told her not to go into the house and that I would get something to help get it off. I got Mickey and told her to help them clean it off. We had some towels we were going to donate to the Humane Society so I went and got those and Mickey started cleaning off the oil. I have a picture of the girls on my digital camera. The friend of our neighbor ended up going to the Hospital with skin irritations (putting it lightly). When we went downstairs to go to bed, we could smell the oil and noticed the windows were open. I shut those (3 of them) and turned on our vent fan in bathroom and my fan in the bedroom. I remember lying in bed thinking how bad is this really going to be? Not knowing the damage of toxic chemicals in the air.

**Tuesday July 27<sup>th</sup> 2010:** I left for work at my usual time (8:15ish am). I got outside and the smell of oil was very strong. I normally keep my windows open while driving but couldn't stand the smell. Once again I live 3 miles from work and when I got there I could smell it there. Even some of my co-workers commented on the smell. This day is more about my wife because I was at work until 6 again. She received a message on her Facebook account that some people wanted volunteers to help with the animals. That's all she needed to hear. Mickey has a genuine love for animals. She called and signed up

our whole family. She went down to the neighborhood park to see if any animals were in need of help. She witnessed a duck or goose, she couldn't tell which because it was covered in oil. She came home to call the 800 number to get it some help. A deputy sheriff was driving by and she took him down to the park to show him the animal. Mickey was back and forth to the park that morning and witnessed a muskrat lying there covered in oil. We found out later via news that it had died. Around 1pm Mickey started feeling sick. She had a headache and felt sick to her stomach. She called me and decided to lie down for awhile to see if it would get better. I got home from work a little after 6 and she felt like she was getting worse. I decided to call the 800 number Enbridge set up to ask them if it was safe to stay. The lady on the other end said she is not telling us to leave but she is not making us stay. I found that odd and side stepping the question. I informed her that my fiancé is feeling sick and she said to go get a hotel room and keep all the receipts and mail them in for reimbursement. I told her that we're are on a week to week life style and asked how long it would take for reimbursement. She wasn't sure. We checked on rooms and had to stay in Coldwater at the Hampton Inn which is 23 miles away. The hotel informed us that they didn't have any rooms available for Wednesday night. We had to make arrangements for Mickey's 80 year old grandmother to stay elsewhere. She is handicapped and a hotel would not be a good accommodation for her. **We packed up and left our home.**

**Wednesday July 28<sup>th</sup> 2010:** This morning we had to check out and drive back home. I got ready and left for work and Mickey and her 13 year old daughter Morgan (who I am adopting) had to stay home because of nowhere to go. Mickey decided to get some things done at the house even though she didn't feel up to it. She called me throughout the day and was noticing that she hasn't seen many bugs or birds. She has a butterfly garden that is 3 years old and in full bloom. She didn't see any butterflies that day. She enjoys watching them fly all over her garden. Not sure if that is because of oil spill or not but thought that was eerie seeing we watch them all the time. Mickey started feeling worse as the day went on and tried staying in the house but the stench was very strong. We turned our A/C off the night before because we were not going to be home. She said it smelled like a diesel truck parked in our house and revved its engine. We talked throughout the day and with money tight thought we will just tough it out for a night. I got in touch with Steve Sachs today and informed him of our situation. He got us in touch with an Enbridge official. I drove over to the donation site to meet him. We dropped off some old sheets and towels. I don't remember the name of the official, but he did say that a local church is donating money and up fronting money for people that can't afford to be reimbursed for a hotel room. I did call the church and the pastor came to my work and dropped off a letter stating to bill them for the room and gave us a \$100 gas card. I went from driving less than 6 miles round trip to work to around 50 miles. At this point, though we didn't like the oil spill, we did feel that Enbridge is living up to their end. We did incur some expenses while at our stay at the Hampton Inn in Coldwater Michigan. We called Enbridge and now they said that we can send in our receipts and it would be 2 to 3 days and they would mail out a check. We made copies of our receipts and mailed them out Friday July 29<sup>th</sup>. The amount of the receipts we mailed totaled up to \$225. Two weeks later it took 2 tries to the community center to get reimbursed. The first try Mickey went to the Battle Creek Center on Aug. 6<sup>th</sup> and they were now saying that we live outside the Red Zone and more than 200ft from the Kalamazoo River. Mickey got upset with the guy filing her claim (his name is Dustin Lovely) and told him that Enbridge people informed us to send in receipts for reimbursement. He got on his computer and from our front door to

the Kalamazoo River is 708ft. He said we can file a claim but because they didn't tell us to leave we won't be reimbursed. Mickey told him that her next filing would be with our attorney. A lady by the name of Marcie instantly stepped in and took over. She cut a check for the receipts we had in hand and will check on the ones we mailed in. About 10 days later we didn't hear anything back so I decided to take charge and go to the Marshall Community Center. I spoke with a man named Sandy and informed him of the situation. He got on his computer and made sure they didn't send a check to us already. They cut me a check for the \$225 and wanted me to sign two separate receipt forms. He said he would give me a copy of the one form but the other one he couldn't. I informed him that I am a Finance Manager at a car dealership and I want a copy of anything I sign. I informed him that it is illegal to have me sign a document and not produce a copy for my records. I made notes of the form and read it to make sure it didn't say I am giving up my rights to sue later. I think it's odd now because I have been going through our notes and Mickey got a copy of the same exact form from her visit to the Battle Creek Community Center weeks earlier. It just seems their policies and procedures are depending on who you talk with.

**Thursday July 29<sup>th</sup>:** I had to work as usual. Mickey was already not feeling well and I almost called in to take the day off work. Mickey tried to stay inside as much as possible with the A/C on. We booked our room for the next 5 nights. When I got home Mickey was in bed and again not feeling well. So I hurried up and got packed and off to Coldwater to stay at the Hampton Inn. We stayed at the hotel until Tuesday August 3<sup>rd</sup>. During our stay Mickey had symptoms the whole time. We thought being away from the smell would help her feel better. That was not the case. By the time I got there from work every day, Mickey already wanted to go to sleep because of not feeling well.

Now, I have set the tone for worse to come. Some parts of my writing will show some anger I felt during some unbelievable events to come. Mickey and I did attend the town hall meeting on August 2nd, which seemed to be more show and tell. We were looking more for answers to how safe are we? Mickey was feeling sick and we wanted answers. After the show and tell part was over I was exhausted and not looking forward to driving to Coldwater to stay at the hotel. We decided not to get in the long lines to talk to the individuals they set up. It was already late and we had to pick up the kids and head to Coldwater. During this meeting we did discover that the EPA took over the cleanup process. That was not a surprise to me because of the extent of the spill. I welcomed any agency that could help the process go faster. That night was the start of feeling uncomfortable with Enbridge. Just gut feelings I get and I told Mickey that something isn't right. Enbridge came out and said it was their fault. **I have a few quotes from Pat Daniel CEO and President for Enbridge, "I'm not going to be happy until everyone is back to normal and happy. We've been in this community for 41 years and we plan to be here 41 years from now, so absolutely I can give that commitment."** (see copy of article from channel 3 news website). Looking back at this quote and knowing what I know now, I feel this was just to make the community feel at ease if possible. This gut feeling will be proved later in my testimony. He also said **"We will pay for and relocate anyone that feels uncomfortable for as long as they need to be relocated"**. That is a huge quote and to take on that kind of responsibility speaks volumes. If it holds up? (see copy of article from Battle Creek Enquirer.com)

On August 5<sup>th</sup>, we had to call an ambulance for Mickey's grandmother. She couldn't breathe very well and her upper back hurt. I thought maybe a blood clot in the lungs because I had the same symptoms and it was clots in my lungs. The result of the visit was chronic lung disease. Her oxygen level was at 94%. Mickey brought her home later that day and called Enbridge. She told them about her grandmother and of her symptoms. They did agree to deliver an air purifier and delivered it later that night. I was surprised but my wife can be very stubborn and demanding at times. That would be the last time Enbridge tried to help.

The next few days Mickey's was feeling worse and extremely lethargic. Couldn't get any school work done because of the way she felt. By the way, she was taking classes to finish her degree online with Phoenix. She made the Dean's list in July. She is majoring in Hospital Administration for Ethics. I think that is ironic that she loves ethic courses. Since she has been sick, she had to take a medical leave and we don't know how that will end up.

On August 8<sup>th</sup> Mickey and I woke up at 7am. She told me she wasn't feeling right. She was weak, dizzy and confused. She stayed up until 1 that afternoon and was just felt exhausted and weak. She decided to lie down and take a nap. When she woke up her face was numb and drooping on the left side. It scared me to death. I thought she may have had a stroke. I asked her how she was feeling and she complained that she felt her face was swollen and she didn't have feeling on the left side of her face. I wasn't sure what to do. She felt tired and she stayed in bed the rest of the night. The next day her symptoms didn't go away. Her grandmother had an appointment with her doctor and Mickey called and asked if the doctor could see her as well. They go to the same office. Mickey was seen by Hope Howard the P.A. for Dr. Liston. Hope ordered blood tests and an inhaler because Mickey's pulse oxygen was at 94%. She stated that she suspected toxin poisoning and Bell's palsy and contacted Oaklawn Hospital for a list of toxins and issues related to poisoning. She also ordered a toxin screen which we haven't received back yet. I am finding that very odd seeing they said it would only take a week. Hope also prescribed steroids. As Mickey was leaving Hope received a fax from Oaklawn and told Mickey to go have her eyes checked and to go to the dentist to see if there is any problems with her teeth. The blood tests came back negative for any brain problems or any infections. Hope recommended that Mickey should come back and see Dr. Liston. On Aug 12<sup>th</sup> Mickey was still not good and got an appt. to see Dr Liston. Dr Liston stated she thought Mickey looked red and prescribed a stronger dosage of steroid and antiviral. All this time Mickey was hoping she would get better and that the medication would start helping or cure her. After a few more days of misery she decided to go see her Chiropractor Dr. Knight. He used a pro adjuster on her face and back. Mickey has had 3 lower back surgeries. After leaving the chiropractor's office her face and jaw was very sore. On Aug 20<sup>th</sup> Mickey went back to Dr Liston and was prescribed an antibiotic. The next day I took her to an optometrist in the Battle Creek Walmart. He spent almost an hour on her exam and said everything looks normal and no issues found. A few days later she went to her Dentist Dr. Heidenreich. He found no problems with her teeth, gums or sinus passage. We were told there is no diagnosis for toxin poisoning. We just have to test for everything else and rule them out. What's left is what it is. That same day her steroid dosage was upped again by Dr Liston. She was now taking 40mg a day. Dr Liston is telling us that being on steroids is not good to be on for a long period of time.



I have spent a little over 3 weeks now watching Mickey get worse and feeling helpless. I spent numerous hours on our laptop searching for answers to help. I researched Benzene and other toxic compounds. I did extensive searches on Bell's Palsy. The helpless feeling goes against everything I was brought up to be. I am a helper with disregard to myself.

**August 26<sup>th</sup> 2010:** I hear of the Meeting that Congressman Mark Schauer called at the Marshall Middle School. He was in attendance along with the EPA and Jim Rutherford from the Calhoun County Health Department. Mickey did not feel like going. I told her I wasn't going to miss this one. I was impressed with Congressman Schauer for his strive to keep Enbridge honest. The meeting opened with a power point presentation that had information I was unaware of. I know you have the facts and figures and probably more, but I just want to reiterate them to you.

- Published version of first warnings of low pressure in oil line 6B 5:58pm 7/25/2010
- 11:18 Consumer Energy field tech discovers oil spill 7/26/2010
- 1:33 Enbridge reports spill (over 2 hour limit) 07/26/2010
- Ban on contact with Creek/River 07/27/2010 **(shouldn't that have been on day 1, no warnings to stay away!**
- 13 hours of warnings going off at the Edmonton, Alberta pipeline control room
- Voluntary evacuation 07/29/2010
- Free evacuation lifted by Enbridge **(outside red zone or 200ft from river)** Enbridge decides to limit responsibility after all. 08/04/2010
- 140 defects on line 6B requiring repair within 180 days, Enbridge only fixed 26. Oct 2007
- 250 more defects requiring repair within 180 days on line 6B, Enbridge only fixed 35 June 2009
- 390 defects, 61 repairs(16%)= another state of emergency oil spill in my opinion
- 80 pipeline incidents since 2002. That's 10 a year. Almost 1 every month. Is this the norm for oil and pipeline companies?
- Fined \$2.4 million for violations in Minnesota resulting in 2 deaths. (DEATH? Should have been \$240 million.)
- Warned in January 2010 for disconnection of five corrosion control monitors on line 6B (WARNED? Is there any legislation to do more than warn? We need to feel safe living around this pipeline. Accountability and strict cooperation with rules and regulations.)
- They want to restart this thing up already? 15 days later? Stockholders and greed!

Needless to say, I kept looking at my wife who was not feeling good at all. I was appalled and enraged!!! She can't even smile at me. One side of her lips will form a smile and the other just stays put. Picture you are in our shoes. Middle class, nice home life in a quiet, safe neighborhood. Spending it with someone you love dearly. Picture it!!! Seems almost a perfect American setting. It just tears my heart out when I have to see her like this. You just wouldn't think that this family could take much more. I am stressed because I am the main support of this family. I feel I need to be at home taking care of my wife. Making sure all the little things around the house gets done. The kids are stressed worrying about their mom. Of course Mickey is scared of what could happen to her. She is so worried about Leukemia later down the short road. I told her not to do any more research because she couldn't take it anymore.

OK back to the meeting. I listened to the speakers they had that night and also to some of the questions posed to the panel. After a several questions were asked by the community in attendance, I raised my hand. A few more questions were asked then Mr. Schauer came to me. I stood up and introduced myself. I informed them that I had two questions. I had one for the EPA and one for Mr. Rutherford from the County Health Dept. The first "When was the first air readings done and why wasn't there any warnings right away to stay away." I felt that was important because my wife had no idea that we are breathing in deadly toxins. I let the whole room know that my girlfriend is sick and has Bell's palsy and neuro damage. The crowd gasped. I was talking very sternly. I actually heard the gasp from the community even though I was extremely angry and talking at a higher level. The second "Mr. Rutherford, I was here a few weeks back and posed a question about shallow wells in the Squaw Creek Neighborhood. When you found out about the wells you had no idea they were shallow because you had no records of them. You mentioned that Squaw Creek wasn't a concern for water because all the wells are over a 100 foot and below the clay shelf. When you found this out it was a big deal that night and you said you would come out and test that area. I'm here tonight saying you haven't been there yet and wondered if you are coming or not?" Mr. Rutherford said and I quote "Those wells are not safe without the oil spill." That pissed me off. Sorry but it did. Every time a house is sold in that neighborhood a home inspection is mandatory if there is going to be a mortgage on it. Why is the Health Department signing off that the wells are ok? Mr. Rutherford told me he would come out personally to take a water sample the next day. I let him know that was unnecessary for him to come out. I told him to just send someone. The previous meeting I am talking about with Mr. Rutherford was held at the Marshall Middle School as well. It was strictly for the residents of Squaw Creek. I apologize I do not have the exact date. The panel consisted of a local attorney, 2 real estate agents and a representative from the local credit union(Marshall Community). We were informed that night by the Credit Union Rep. that our neighborhood has been blacklisted and that there will be no loans for the Squaw Creek neighborhood. She also said that she talked with other lending institutions and they are not lending in our area as well. I have not checked since that night about loans in our area due to priorities to my wife. The real estate agents discussed our property values and said they couldn't give any figures to what our houses are worth. We did see a power point presentation showing it may be year 2023 before our values would be back to 100%. Not sure how those figures were composed, but scary to say the least.

Mickey sent an email to the EPA and asked if eating vegetables out of our garden is safe. Also, she asked if swimming in our pool was safe. The EPA responded by saying yes they are safe. After some of the events we no longer trusted the EPA or the Calhoun County Health Department, so Mickey called the poison control number and they said that it is not safe. We believe them now because some of the local farmers got a letter stating they can't sell their crops. I have drained our pool once I found that information.

The next few days Mickey started getting even worse. She was drooling when she drank or just from the saliva in her mouth. She could barely speak at times and mostly it was with a lisp. She has been experiencing tingling twitches on the left side of her face, arm and leg. On August 31<sup>st</sup> she called me panicking saying she thinks she just had a seizure. She was on the phone with her son's step mom when she couldn't hold the phone and she just locked up for 5 to 10 seconds. She had little feeling in her left hand, arm and the left side of her face. I left work in a rush and she called the doctor and they said if someone can't take you then they are calling an ambulance for her. I got there in 5 minutes. She couldn't move very fast and off to the emergency room. The emergency doctor saw her and immediately noticed that her face was not right. She had a Cat scan, MRI, blood tests and spinal tap. All came back negative. Dr. Yoder the neurologist came to see her early Wednesday Morning September 1<sup>st</sup>. I got there too late for him because I had to pack up some things for Mickey and didn't get there till 9. She was in the CCU. The neurologist told her that he thinks it is poisoning from the oil spill and wrote a script that she isn't allowed to stay in our home or be in the vicinity of the oil spill. He said he wants to take her on as a patient. She was not feeling well and we had a few visitors that day and some gave us some information. We were informed that if something was to happen to Mickey that I wouldn't be able to make any decisions for her or have any legal rights to Morgan her 13yr old. We talked about it for awhile and I asked her to marry me. She said yes!! I left and went to the County Building here in Marshall to get a Marriage license. I didn't have all Mickey's information so I came back to the hospital. A social worker was there because Mickey is the caretaker of her grandmother and she can't be there for her right now. We also talked about the hospital bill and she informed us that she is going to call Enbridge and inform them of the situation and to see if they would put Mickey's grandmother in Tender Care a local nursing home. She also asked them about putting us up somewhere if and when she gets out. **Enbridge informed her that we are outside the 200ft and the red zone so they won't help.** Again, they got me ticked. I called our attorney (Bill Mayhall) we hired toward the end of August. I Can't remember what date. He said he had an appointment with Enbridge Lawyers on Thursday and said he would talk with them and see what they would do. Well, Mickey's dad and some of her friends and I scrambled around making arrangements to get married in the chapel at the hospital at 8:30 that night. It definitely wasn't the setting we had talked about, but she was beautiful. Mickey got to wear a dress as long as one of the nurses was present. That was a good thing because at the end of the ceremony, Mickey started twitching again and she said it feels like something is pulling her to the left. I held her up and the nurse came over and took her back to her room. Everyone was kind of nervous.

Thursday morning....I'm a married man. Happily!!! Got a call from our attorney and Enbridge rescheduled the meeting for Friday at 2pm. Mickey was not feeling well and tired of not getting any answers on what to do or what the doctors are going to do. One of the nurses mentioned that they may send her to U of M Ann Arbor for further testing and see a toxicologist. My nerves are just shot. I can't take much more of not knowing what's going on. Is she going to get better? How am I going to pay for all the tests and hospital bill? Mickey is unemployed and was in school and she doesn't have health insurance. Mickey was getting frustrated. I grabbed the laptop and went straight to Congressman Mark Schauer's web site. This is a cut and paste from my original email:

Good Morning Mr Schauer,

My name is James Lee from Marshall. We got to meet last Thursday at the meeting at the Marshall Middle School last Thursday Aug 26th. I addressed the EPA and Mr Rutherford with the Calhoun County Health Dept. I was the one that my Fiance (now wife) has been diagnosed with Bells Palsy, which now has progressed further to her 7th cranial nerve and beyond. Since last Tuesday she has been hospitalized with nerve issues and possible seizures. The neurologist will not let her come home especially our home in Squaw Creek. He has wrote a script for that. She has been on max dosage of seizure medicine and steroids. They may transfer her to U of M Ann Arbor to see a toxicologist. The social worker here has contacted Enbridge to see if they would help out and get her somewhere to stay if and when she gets released. They of course said "no" because we are outside the infamous 200ft boundry. My opinion that is their collateral damage threshold. We have consulted an attorney! and he is holding a meeting with Enbridge Attorneys today at 2:00 to see if they have different feelings than their claim dept. If they are unwilling to help, then we are going full-court press. My wife and I have turned down several interview requests from Jared Werksma from channel 3. Well, I told my attorney that if they don't help we will request and interview and go public with our situation. I personally have gained alot of respect for you and your actions against this morrally questionable company. I would be honored to stand side by side with you against this company. They may have billions of dollars at their exposal but we will have the backing of the people and of course YOU. I would be more than happy to have you by our side as I am preparing to take on this monster for our rights and the rights of the people beyond the "red zone".

Just to let you know, because of her sickness, we had to get married here at the hospital in their chapel. also, just to let you know her Dr's do think it is neurological poisoning from the oil spill. We live 700 ft from the river and 1.5 miles(as a crow flies) or less from the site of the broken pipe. She has had a MRI, Catscan, numerous blood draws, Spinal tap, eye doctor exam, dental exam and all has come back negative for anything else that could cause this. Her latest test was an EEG that we haven't got results back yet.

We did receive information on air-test readings and one compound really stands out and that is N-Hexane. I have a copy of the readings and it said on July 30th that is was 5400 ppb. This toxin when exposed hits the periphrial and central nervous systems.

My wife was a healthy 36 year old woman. Other than 3 back surgueories(sp).

Please contact me if you can!!

Your friend and follower,

James Lee  
269-753-9915

I wrote this in a matter of minutes. Of course within a few seconds of hitting send I received an auto response stating it may take awhile to get back to me because of the amount of emails they get.

That is my testimony. Today Mickey is still feeling the symptoms and she is on her down dosing of steroids again and already getting worse.

The statements made by Pat Daniel have not held true. Please look at this company and create some type of legislation to halt them from restarting the oil line until it is free from any defects. They have only fixed approximately 16% of the defects on this line. I'm not sure levels of warnings or extensions on fixing or replacing defects won't result in another state of emergency.

**Also, we need a better warning system to innocent people that do not know how dangerous and hazardous these chemicals are. Our attorney has air readings and one of the toxins called N-Hexane was at 5400ppb. That reading was from July 30<sup>th</sup>, 5 days later. I did some research on this chemical and it attacks the peripheral and central nervous systems. We have contacted the Mayo Clinic in Minnesota and they have started a file for her. They said either get a referral from your doctor or just come out and we will treat you. They said because she doesn't have insurance they may require up to \$1000 deposit. The rest of the bill will be set up on a payment plan if need be. We are not in the position to pay \$1000 for a deposit or have means to get her there. If we do come up with that, she will be alone with no family support. We need help and our community needs answers.**

In closing, but no closure, we are now in a living situation that is very complicated. Since Mickey cannot come home, we are living at her parents house on Lake Nottawa in Tekonsha. It sounds great and is a beautiful atmosphere, but it is a 1 bedroom 1 bathroom loft with no privacy. We have 3 kids, 7 dogs between us, 1 bunny, 1 cat, Mickey's grandmother and her parents. We couldn't find a hotel room available and frankly couldn't afford to pay for an unknown stay. We are sleeping on an air mattress on the floor and the kids are sleeping on the couch and chairs. This a major inconvenience for us and to Mickey's parents. They go to bed much earlier than we do so we keep them up, and they get up at 4 in the morning to get ready for work and that wakes us up. I have been getting up at 4:15 every morning and not getting to sleep until 11 or 12 most nights. Last night I stayed up until 1:30am writing this testimony and was up again by 4:15. I am extremely exhausted and work 10.5 hrs a day in a stressful commissioned position.

James A. Lee

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**148 River Park Rd**

**Marshall, Michigan 49068**

**Statement for the Committee on Transportation and Infrastructure  
U.S. House of Representatives  
15 September 2010**

**Statement of Scott Masten, Ph.D.  
Staff Scientist, National Toxicology Program  
National Institute of Environmental Health Sciences  
National Institutes of Health  
U.S. Department of Health and Human Services**

Chairman Oberstar, Ranking Member Mica, and members of the Committee, thank you for the opportunity to provide information about the potential human health issues associated with oil spills. My name is Scott Masten, and I am a staff scientist at the National Institute of Environmental Health Sciences (NIEHS), one of the Institutes of the National Institutes of Health (NIH), an agency of the Department of Health and Human Services (HHS). My work supports the National Toxicology Program, an interagency program that is administratively housed at the NIEHS, whose mission is to evaluate agents of public health concern by developing and applying tools of modern toxicology and molecular biology. The program maintains an objective, science-based approach in dealing with critical issues in toxicology and is committed to using the best science available to prioritize, design, conduct, and interpret its studies.

I am testifying today on behalf of NIH, and I shall present a brief overview of our current understanding of possible human health effects of exposures related to oil spills, along with a preview of some of our research efforts aimed at increasing our understanding of and hopefully preventing adverse health impacts among oil spill response workers and exposed communities.

**Chemical nature of crude oil**

Crude oil is a complex combination of chemicals consisting predominantly of carbon and hydrogen, known collectively as hydrocarbons. These elements are predominantly present in straight chains or in a variety of cyclic configurations. Oil may also contain small amounts of nitrogen, oxygen, and sulfur compounds and trace amounts of metals. Crude oils are broadly categorized as light, medium, or heavy depending on the relative proportion of different sized hydrocarbons. A light crude oil has a higher proportion of smaller, more volatile hydrocarbons. The chemical composition of crude oils can vary substantially from different geographic regions and even within a particular geological formation.<sup>1</sup> It is worth noting that the crude oil released from the Deepwater Horizon rig in the Gulf of Mexico is a light crude, while the oil spilled from the Enbridge pipeline in Michigan is a heavy crude oil.

There are hundreds if not thousands of chemicals in crude oil, and we have incomplete knowledge of the toxicity of many of them. We are most concerned about a particular class of hydrocarbons, known as aromatic hydrocarbons as well as other volatile organic compounds (VOCs), such as benzene, naphthalene and polycyclic aromatic hydrocarbons (PAHs). Sulfur compounds, such as hydrogen sulfide, and heavy metals such as aluminum, lead, nickel and vanadium can also be present to varying degrees in crude oil. These substances may also be of concern depending on their level in the crude oil. From studies of these chemicals individually, we know quite a bit about their hazardous properties and we believe these are some of the chemicals most likely to be encountered in air, sediment or water subsequent to an oil spill. The composition of spilled oil changes over time, and the oil nearest the

<sup>1</sup> National Library of Medicine, 2010. Hazardous Substances Data Bank record for Crude Oil.

source of a spill contains higher levels of some of the more volatile hazardous components. Oil that has been exposed to air and water for a period of time, so-called "weathered oil", has lost most of these volatile components. Nonetheless, weathered oil still contains less volatile hazardous chemicals, and therefore skin contact should be limited. If aerosolized by wind or physical disturbance, weathered oil also could be taken into the body through respiration. It is critically important to note that the specific risks of developing adverse health effects are dependent on many factors, but most importantly, risks increase with prolonged exposures to higher concentrations of the chemicals. Protective equipment can be effective at reducing exposures and thereby reducing risks.

#### Effects on human health from oil spills

Determination of actual exposure and risk for any hazardous chemical release is not a trivial task. Given the chemicals present in crude oil, the potential for human health effects exists; however, understanding and quantifying these effects requires further study. There has been relatively little long-term research into the human health effects from oil spills, although between 1970 and 2009 there were 356 accidental spills of more than 700 metric tons from oil tankers worldwide, with approximately 38 of those spills affecting coastal populations. In a recent article in the *Journal of Applied Toxicology*, the authors reviewed the results of studies of human health effects related to oil tanker spills as reported in 34 publications.<sup>2</sup> The clearest conclusion from the examination of these studies is that we have very little data; followup of exposed people has occurred only for a handful of the tanker spill incidents from the past several decades. The few studies that have evaluated the human health consequences of oil spills have primarily focused on acute physical effects and psychological sequelae. Historically, the workers involved in cleanup have reported the highest levels of exposure and the most acute symptoms, when compared to subjects exposed in different ways, as seen in the reporting of higher levels of lower respiratory tract symptoms in fishermen who participated in cleanup following the *Prestige* tanker accident off the coast of Spain. Studies have examined the *Exxon Valdez* (Alaska, 1989), *Braer* (Shetland Islands, UK, 1993), *Sea Empress* (Wales, UK, 1996), *Nakhodka* (Oki Islands, Japan, 1997), *Erika* (Brittany, France, 1999), *Prestige* (Galicia, Spain, 2002) and *Tasman Spirit* (Karachi, Pakistan, 2003) oil tanker spills. A number of the studies reported respiratory symptoms, including cough and shortness of breath<sup>3</sup> and decreased lung function<sup>4</sup>, among workers involved in cleanup operations. Other commonly reported symptoms in these studies include itchy eyes, nausea/vomiting, dizziness,

<sup>2</sup> International Tanker Owners Pollution Federation Limited (ITOPF) 2009. Oil Tanker Spill Statistics: 2009 London: International Tanker Owners Pollution Federation Limited; Aguilera F, Mendez J, Pasaro E, Laffon B. 2010. Review on the effects of exposure to spilled oils on human health. *J Appl Toxicol* 30: 291-301.

<sup>3</sup> Carrasco JM, Lope V, Perez-Gomez B, Aragones N, Suarez B, Lopez-Abente G, Rodriguez-Artalejo F, Pollan M. 2006. Association between health information, use of protective devices and occurrence of acute health problems in the *Prestige* oil spill clean-up in Asturias and Cantabria (Spain): a cross-sectional study. *BMC Public Health* 6: 1; Janjua NZ, Kasi PM, Nawaz H, Farooqui SZ, Khuwaja UB, Najam ul H, Jafri SN, Lutfi SA, Kadir MM, Sathiakumar N. 2006. Acute health effects of the *Tasman Spirit* oil spill on residents of Karachi, Pakistan. *BMC Public Health* 6: 84; Meo SA, Al-Drees AM, Rasheed S, Meo IM, Al-Saadi MM, Ghani HA, Alkandari JR. 2009. Health complaints among subjects involved in oil cleanup operations during oil spillage from a Greek tanker "*Tasman Spirit*". *Int J Occup Med Environ Health* 22: 143-148; Sim MS, Jo JJ, Song HG. 2010. Acute health problems related to the operation mounted to clean the *Hebei Spirit* oil spill in Taean, Korea. *Mar Pollut Bull* 60: 51-57; Zock JP, Rodriguez-Trigo G, Pozo-Rodriguez F, Barbera JA, Bouso L, Torralba Y, Anto JM, Gomez FP, Fuster C, Vereza H. 2007. Prolonged respiratory symptoms in clean-up workers of the *Prestige* oil spill. *Am J Respir Crit Care Med* 176: 610-616.

<sup>4</sup> Meo SA, Al-Drees AM, Meo IM, Al-Saadi MM, Azeem MA. 2008. Lung function in subjects exposed to crude oil spill into sea water. *Mar Pollut Bull* 56: 88-94.



headaches, and skin irritation/dermatitis.<sup>5</sup> Additionally, several studies of *Prestige* oil spill clean-up workers have found evidence of genetic and endocrine effects in exposed individuals. Findings include increased DNA damage and chromosomal alterations in white blood cells and decreases in blood prolactin and cortisol levels.<sup>6</sup> Other studies have looked at psychological effects of spills, both among workers and in affected communities; follow-up studies of affected populations from the *Exxon Valdez* spill, for example, reported higher levels of generalized anxiety disorder, post-traumatic stress disorder, and depressive symptoms approximately one year after the spill occurred.<sup>7</sup> Similar patterns of higher anxiety and depression were observed among communities near the *Sea Empress* spill.<sup>8</sup> The *Braer* spill was associated with increased anxiety and insomnia<sup>9</sup>, and lower levels of mental health were related to proximity to the *Prestige* spill.<sup>10</sup> Such research findings remind us of the importance of keeping longer-term, less obvious sequelae in mind, not just the immediate toxicity effects, when considering the overall human health impact of this type of disaster.

#### NIH-Funded Research

The NIH is using a variety of funding mechanisms and programs to carry out important research related to the human health impacts of oil spills. We expect this research to provide useful information for policy makers, health care providers, and the public.

The NIEHS, through the NTP, has completed important steps in identifying knowledge gaps for oil spill-related exposures of concern. The NTP has reached out to key agency partners to assess ongoing research activities within the federal government and to begin compiling common toxicology research needs. Initial NTP research efforts are focused on chemical characterization of oil and dispersant samples collected in the Gulf region to gain a better understanding of the physical and chemical changes associated with weathering and biodegradation. The NTP has also partnered with the National Institute for Occupational Safety and Health (NIOSH) within HHS's Centers for Disease Control and Prevention to provide analytical chemistry support for NIOSH's planned toxicology studies. The output from these various chemistry analyses will guide the development and conduct of additional toxicological studies to

<sup>5</sup> Campbell D, Cox D, Crum J, Foster K, Christie P, Brewster D. 1993. Initial effects of the grounding of the tanker *Braer* on health in Shetland. The Shetland Health Study Group. *BMJ* 307: 1251-1255; Janjua NZ, Kasi PM, Nawaz H, Farooqui SZ, Khuwaja UB, Najam ul H, Jafri SN, Lutfi SA, Kadir MM, Sathiakumar N. 2006. Acute health effects of the *Tasman Spirit* oil spill on residents of Karachi, Pakistan. *BMC Public Health* 6: 84; Lyons RA, Temple JM, Evans D, Fone DL, Palmer SR. 1999. Acute health effects of the *Sea Empress* oil spill. *J Epidemiol Community Health* 53: 306-310; Morita A, Kusaka Y, Deguchi Y, Moriuchi A, Nakanaga Y, Iki M, Miyazaki S, Kawahara K. 1999. Acute health problems among the people engaged in the cleanup of the *Nakhodka* oil spill. *Environ Res* 81: 185-194; Sim MS, Jo IJ, Song HG. 2010. Acute health problems related to the operation mounted to clean the *Hebei Spirit* oil spill in Taean, Korea. *Mar Pollut Bull* 60: 51-57.

<sup>6</sup> Laffon B, Fraga-Iriso R, Perez-Cadahia B, Mendez J. 2006. Genotoxicity associated to exposure to *Prestige* oil during autopsies and cleaning of oil-contaminated birds. *Food Chem Toxicol* 44: 1714-1723; Perez-Cadahia B, Laffon B, Pasaro E, Mendez J. 2006. Genetic damage induced by accidental environmental pollutants. *ScientificWorldJournal* 6: 1221-1237; Perez-Cadahia B, Lafuente A, Cabaleiro T, Pasaro E, Mendez J, Laffon B. 2007. Initial study on the effects of *Prestige* oil on human health. *Environ Int* 33: 176-185.

<sup>7</sup> Palinkas LA, Petterson JS, Russell J, Downs MA. 1993. Community patterns of psychiatric disorders after the *Exxon Valdez* oil spill. *Am J Psychiatry* 150: 1517-1523.

<sup>8</sup> Lyons RA, Temple JM, Evans D, Fone DL, Palmer SR. 1999. Acute health effects of the *Sea Empress* oil spill. *J Epidemiol Community Health* 53: 306-310.

<sup>9</sup> Campbell D, Cox D, Crum J, Foster K, Riley A. 1994. Later effects of grounding of tanker *Braer* on health in Shetland. *BMJ* 309: 773-774.

<sup>10</sup> Sabucedo JM, Arce C, Senra C, Seoane G, Vazquez I. 2010. Symptomatic profile and health-related quality of life of persons affected by the *Prestige* catastrophe. *Disasters* 34: 809-820.

identify important biological and tissue targets for the mixed exposure encountered during oil spills. The NTP toxicology studies will be aimed at characterizing long-term health hazards of exposures that are relevant to oil spill response workers and seafood consumers.

In June, NIH Director Francis Collins announced that the NIH will devote at least \$10 million to support NTP studies and initial stages of an NIEHS-led large prospective health study of oil spill clean-up workers and volunteers, termed the "Gulf Worker Study". In addition, BP has contributed \$10 million through its Gulf of Mexico Research Initiative (GRI) to help fund the Gulf Worker Study.<sup>11</sup>

The Gulf Worker Study will focus on exposure to oil and potential health consequences such as respiratory, neurobehavioral, carcinogenic, and immunological conditions. The study plan also includes evaluation of mental health concerns and other oil spill-related stressors such as job loss, family disruption, and financial uncertainties. A draft protocol for this study was published on the NIEHS website last week<sup>12</sup> and will be reviewed at an Institute of Medicine workshop in Tampa, Florida on September 22, 2010.<sup>13</sup> The study plan will be updated as comments and suggestions are received from the Gulf communities and scientific experts via a series of NIEHS-sponsored meetings, community fora, and webinars.

In addition, the NIEHS has a grants program for time-sensitive research and community education. We are using this program to fund research on the public health impact of the oil spill in the Gulf region. Topics considered for funding include environmental monitoring and characterization related to the Gulf oil spill; toxicity testing of complex mixtures using high-throughput techniques and innovative statistical approaches; exposure assessment for individuals and populations; and research on various health effects, including understanding the unique risks of vulnerable populations, such as children, pregnant women, the elderly, and people with chronic health problems.

Although the above mentioned research activities are focused on the Gulf region, our expectation is that the research results will have widespread applicability to future public health activities relating to oil spills.

#### **Conclusion**

It is clear from our current and ongoing review of the available research studies regarding human health effects of spilled crude oil that there is a need for additional health monitoring and research. Follow-up of exposed people has only occurred for a handful of the tanker spill incidents from the past several decades. These incidents involved exposure to different types of crude oil and in some cases refined petroleum products. Historically, cleanup workers have reported the highest levels of exposure, although for most of these studies, there is a lack of quantitative exposure information. Human health impacts are dependent on the scale of the release and on our ability to minimize exposure through proper safety precautions, training and spill containment. Ongoing and planned research in the Gulf by NIH and others will increase our collective understanding and provide a better foundation for making public health decisions for future oil related incidents.

Thank you. I am happy to answer any questions.

<sup>11</sup> <http://www.niehs.nih.gov/news/releases/2010/gulf-study.cfm>

<sup>12</sup> <http://www.niehs.nih.gov/about/od/programs/gulfworkerstudy.cfm>

<sup>13</sup> <http://www.lom.edu/Activities/PublicHealth/FedResponseOilSpill>

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United States House of Representatives  
Committee on Transportation and Infrastructure

Hearing on:  
Impact of the July 25, 2010 Enbridge Pipeline Oil Spill  
In Marshall, Michigan

Mrs. Debra L. Miller  
Small Business Owner and Resident  
170 S. Main  
Ceresco, Michigan 49033  
(269) 979-9633

On Sunday, July 25, 2010, a pipeline owned by Enbridge broke and over 840,000 gallons of heavy crude oil began spilling, first into a swamp area, then into a small country creek, known as Talmage Creek, and continued into the Kalamazoo River and flowed some thirty miles downstream through Marshall Township, Ceresco, Battle Creek and Augusta. This spill has not only changed our lives and the lives of our neighbors and friends, but has changed the look and feel of our quaint village community of approximately 70 homes, and it has changed our beloved Kalamazoo River for years to come- maybe forever. The impact of this spill has been monumental... from individuals who had no thoughts of selling their homes, but now have been forced to do so because their properties are contaminated, those who had to temporarily leave their homes because of mandatory or advised evacuations or those who left for health reasons, those of us who stayed but suffered constant headaches, diarrhea, burning eyes and throats for weeks - and often still do from the intense smell of oil, and those of us living within 200 feet of the river remain under a water advisory and must use bottled water for drinking and cooking. Businesses were disrupted or in our case, could not open due to the smell and cleanup work. And of course, the devastating impact on our river, a river that many enjoy for fishing, swimming, canoeing and hunting and are now not able to, the recovery efforts of the wildlife, including fish, geese, blue herons, turtles, beavers and more -all of which were covered in oil, was extensive and heart wrenching. We do not know at the present time what the long range impact will be on the river, our property and property value, our well water or even our health.

My husband, Ken and I own two properties in Ceresco. Our home, which we purchased thirty one years ago, is located just below the dam on 12 Mile Road, and is downstream approximately 300 feet on the south side of the river with approximately 680 feet of river frontage. This property was Ken's home as a teenager and when it went on the market, he was thrilled to provide our young daughters the same experiences of living in Ceresco along the Kalamazoo River as he grew up with. Many of the same families he grew up with were still living in the Village and over the last decade, many second generation families have come

back to purchase homes in Ceresco as well, all with stories of growing up swimming and fishing in the river with the purpose to share similar activities with their children.

Our other property is our business, Miller's Carpet, a floor covering and installation business located at 134 Marshall St., immediately above the Ceresco Dam on the north side of the river with approximately 200 feet of river frontage. We have owned this property for twenty one years, operating for the first nine years as a community convenience and ice cream store and the last eleven as a the carpet store, a transition determined when Ken's long time employer closed his business. At that time Ken had installed carpet for approximately twenty years and the idea of owning his own store offered a long term opportunity that he could retire from.

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On Monday morning, July 26, I left for work at 7:25a.m. Pulling out of my driveway and traveling over the Ceresco Bridge, I noticed a foul smell but couldn't figure what it was. Four homes north of the bridge, I noticed the neighbors were installing a new roof and I remember thinking –what in the world we're they using that stunk so bad, could it be tar? Honestly, I didn't think too much more about.

Ken opened the carpet store at 10:00 a.m. and also noticed a smell when he opened the sliding glass door to go out onto our back deck which overlooks the Kalamazoo River. As he has done six days a week for the last 21 years, Ken drank his coffee and watched the fish swim just under the surface of the water along our river bank. A customer came in so he closed the door, turned on the air conditioner and went about his day of work. Ken left at 3:30pm to run errands for the store. After I got out of work, we met for dinner and returned to Ceresco about 7:15p.m. As we came into the village, the smell hit you like a brick wall. Neither of us had heard any news so we were surprised when we came across the bridge and saw a sea of spectators on the bridge watching the flow of something coming over the dam. It was black! And so was the river above and below the dam!

We knew instantly by the smell and the color of the river that something had happened and whatever it was- it was huge. We drove across the bridge and turned into the driveway, I grabbed my camera out of my purse and walked to the bridge. Almost instantly, our eyes and throats were burning. Once at the bridge, we learned from spectators and other neighbors that the radio and TV were reporting an oil spill of approximately 850,000 gallons from a broken pipeline in Marshall. I quickly snapped several photos of the black crude coming over the dam as well as what was collecting in the spillways below the dam and along our riverbank at the house. In hindsight, I sincerely wish I had captured with photos the shock and despair on my neighbor's faces...because words alone cannot describe the smell or the sense of loss we were witnessing.

I started walking back to the house and saw Cheryl Vosburg, Environmental Program Coordinator for the City of Marshall. Cheryl and I had served on the Relay for Life/American Cancer Society steering committee for several years. Cheryl confirmed the spill and mentioned there were estimates that the spill may have been as much as a million gallons. She told me she had been in meetings with several agencies throughout the afternoon and I mentioned the Ceresco Neighborhood Watch was planning a neighborhood picnic at 6:30p.m. on Tuesday night. As a Ceresco Neighborhood Watch block captain, I asked Cheryl if she thought we could get someone to come out and talk to the residents about the spill and considering the intensity of the smell, maybe they could talk to us about potential health concerns. I told her I was sure residents would have concerns about their wells as well; I knew our well at the store was probably about twenty feet from the river and a shallow well. Cheryl said she would try to get someone to come out and talk to us. I left her and stopped at my neighbor's home, an 85 year-old woman who is essentially homebound with compromised health issues. I explained to Dorothy what was going on, and confirmed she had our phone number and my cell number in case she needed us. She was very concerned about all the people in the village, so I suggested she not answer her door unless she knew who it was, but to call me and I would come over right away. I promised that I would check on her in the morning before I went to work.

Tuesday morning, July 27<sup>th</sup>, several pumper trucks and workers had arrived and they had started pumping oil from the south bank above and below the dam. A fire truck and the Sherriff's department were arriving on site. Enbridge marked vehicles were blocking the end of our driveway and a barrage of various contractor's vehicles were parked all along the road- in every possible space. A double tanker was parked on our home property near the road and it took almost 15 minutes to get out of the driveway as I left for work.

Ken opened the carpet store at 10:00a.m. The store was completely permeated with the smell of oil. A customer had pulled in as Ken arrived, but left immediately after she entered the building. She said the odor was just too much for her. Ken apologized and quickly explained there had been an oil spill and tried to give her a business card- but she said "I couldn't put any of this carpet in my house- it smells awful in here" and left. Within those few minutes, Ken's and our twelve year old grandson, Austin's, eyes and throat were burning, so Ken checked the phone for any messages, locked up and went home. Although we were having the same symptoms at our home, we have central air there and the store does not, and the smell was intolerable, making it impossible to keep the store open for business. Additionally, the store sits approximately twenty feet from the river and the oil was collecting in the alcove directly behind the store above the dam.

Midday on Tuesday, July 27, Teri Larson from Enbridge called me to confirm a Vice President from Enbridge would attend the Ceresco picnic/meeting as well as representatives from the Calhoun County Health Department and Sherriff's Department.

Although we had over 60 RSVP's from village residents for the picnic, only 33 neighbors attended. We would learn later that many had left for hotels or were staying with family members. Enbridge arrived late- having been tied up at a briefing- so Cheryl Vosburg, Marshall Environmental Coordinator and Paul Makoski, Calhoun County Health Department started the meeting. Cheryl reported 849,000 gallons had spilled from a pipeline break at Talmage Creek in a field/swamp near Division Drive in Marshall. A unified command center had been set up in Marshall to facilitate the clean-up. The agencies included the EPA, DNRE,

Calhoun County Health Department, Fish and Wildlife and many other agencies, and of course, Enbridge. Paul Makoski, of the health department stated they would be conducting water samplings from houses along the river and when asked about the possibility of wells being contaminated, predicted that they would be doing water testing for a very long time after the clean-up, possibly years. Paul advised that the health department and the unified command center were considering a water ban for residents living within 200 feet of the river, but had not issued that ban yet. He stated that although the smell from the oil was a nuisance, it was not a health concern. The benzene readings from the monitors at the dam and other locations along the Kalamazoo River in Ceresco were very low and well within the safe range for short term exposure. I asked Paul to define short term and he stated- two weeks. I asked about the long term effects of the benzene, a cancer causing agent, for those of us living on the river and was told again that the levels were low and although a nuisance, not a health concern. I informed Paul that I was a cancer patient currently taking oral chemotherapy, living within 200 feet of the river and asked him if he still thought it was safe and he said yes. He stated again, that although the intense smell was a nuisance, and although it may affect individuals differently, it was not a health concern. Many neighbors complained about headaches, diarrhea, sore throats and burning eyes and were told by the health department to call their personal doctors. We were promised that Enbridge would be taking care of any medical bills for residents in the impacted area.

Once Enbridge representatives arrived, they recapped the information previously shared and assured the residents that Enbridge would be there until the river was totally cleaned-up, in some cases much cleaner than before the spill. They stated they were receiving thousands of calls to the 1-800 number and they were somewhat overwhelmed and backlogged but that they would continue to call individuals back as quickly as possible. They admitted there were many calls relating to wildlife. They asked residents not to collect any of the oil covered animals as it was dangerous for the animals and also for the individual- if anyone had concerns to please call the 1-800 number, yes the same one that they just said was backlogged.



Leaving the meeting, I attempted to go home and was stopped by the Sherriff's department, stating that I couldn't go south across the bridge. I realized the Sherriff's department was also stationed on the south end of the bridge –so I would not be able to get in from that direction either. I informed the deputy we had not been informed that we needed to evacuate- in fact we had not been contacted in regards to our residence at all. After several minutes of discussion, I assured him that I could certainly appreciate the safety concerns with the pumper trucks and transfer trucks moving about my driveway, and I didn't want to impede the clean up, but as the only residents affected other than my neighbor who doesn't even own a vehicle- we needed to be able to access our home. I suggested that we may have two options. 1) He could immediately build us a helipad and fly us in and out, or 2) he could call an Enbridge representative to determine how I might best access my personal property. The Enbridge supervisor on site acknowledged our predicament and stated we would be allowed to access our property from now on. Although the attempt to accommodate us was noble, my husband and I would be delayed and even stopped many times over the next several weeks. We often needed to request another intervention by an Enbridge supervisor. Twice, the Sherriff's Department refused to call an Enbridge supervisor for Ken and the conversation got pretty heated- one deputy said he was just doing his job as directed by Enbridge and did Ken think this was fun for him? – Ken informed him he was at least being compensated in the form a paycheck- we were just trying to survive and access our property. A call to Lt. Saxton resolved the issue- until we had another incident a few days later. The communication between the deputies, Enbridge and the contracted workers at the Ceresco Dam clean up site appeared to be non-existent and while their argument is the number of sheriff and contractors working the site made it impossible to inform them all - we were the only residents, besides my neighbor who doesn't drive, who had no other options for accessing our home, the work site was at my driveway and directly across the street from it- a pass or something issued by authorities could have easily solved a situation that repeated itself many times.

On Wednesday, July 28, I stopped on my way home from work to check on my neighbor. There was a water advisory notice from the Calhoun County Health Department on her door stating that residents living within 200 feet of the river should not use well water for drinking or cooking. They advised that a water distribution location would be provided at the Ceresco Baptist Church and water would be available on Friday, July 30. I shared this information with Dorothy and assured her Ken and I would be bringing her water. As her immediate neighbor, and living on the same river bank- there was not a notice on our door. To date, we have not received any contact, either a flyer or someone knocking on our door from the Calhoun County Health Department about the water ban or voluntary evacuation for our residence, or our business property, even though residents who do not live on the river water received water ban notices. Although I did not have the required notification form, I was able to receive water from the distribution site... Art Wood and I solicited and coordinated volunteers for five weeks with friends, neighbors and members of the church providing the staffing for this distribution site. On Monday, August 23, I called Enbridge and told them we had coordinated this for more than four weeks, with Art opening the church every day, meeting every shift of volunteers- often working shifts himself- and then closing the church at the end of the day, and I felt it was time they provided a person to distribute the water. On Tuesday, August 24, the pastor of Ceresco Baptist Church was informed by Enbridge that although the water ban had not been lifted, Ceresco Baptist Church would be dropped as a distribution site, effective at the end of the week. Considering the number of cases of water that were distributed, one might be hard pressed to believe this was a coincidence of timing. Residents needing water were told, by a sign Art and the pastor posted, they would need to go to Marshall or Battle Creek to receive their bottled water- an issue for me considering I was never provided an advisory notice for either of our two properties. Two calls to the health department have not resulted in a form to date. The water ban remains in effect as of Monday, September 13.

The Ceresco Neighborhood Watch block captains determined that because of all the clean up activity – which appeared to be increasing daily, the increase of resident’s health concerns and basic concerns about the true impact of the river-

another community meeting would be beneficial and after confirming the availability of the church, Sunday, July 30 at 4:00p.m. was selected. I contacted Teri Lawson, the Enbridge representative and asked if Enbridge and other agencies would be available. They were very receptive, in fact Teri called me back a few days later and asked to keep a confidence- Pat Daniel, Enbridge's CEO was interested in attending and she wondered if I thought the attendees would be hospitable, she didn't want to send him in to a bad situation. I stated that although I couldn't speak for the actions of my neighbors, I assumed it would fine, but that I was sure he would get some pretty direct questions and that, as CEO, if he couldn't handle that, he ought not be CEO. As it turned out, Mr. Daniel was busy with another matter and unable to attend the meeting. Mr. Steve Wouri, Vice President and several others represented Enbridge. Well over 100 people filled the church including Ceresco residents and others impacted by the spill. We started the meeting and I introduced Steve. He gave an update on the status of the cleanup, and although they were responsible for the cleanup, the EPA was overseeing the efforts. Enbridge stated they had submitted a cleanup plan to EPA as ordered and we waiting for approval- we would later learn from the EPA this plan was declined and Enbridge had to submit another proposal. For approximately two and half hours residents asked questions and were assured by Enbridge, again, the river and its banks would be cleaned up, and they would take care of any medical bills for impacted residents, they were the responsible party and would be paying the bills, including the reimbursement to local municipals for police and fire department assistance. Questions about property values and Ceresco being perceived as an oil spill/cleanup site were basically dismissed by Enbridge as they felt the river would be better than before the spill. Enbridge said they would be bringing in more workers and were working round the clock to clean the river. To the surprise and disbelief of many, we learned at this meeting, Enbridge anticipated to be done with cleanup, at least phase one and two, by late September. 840,000 gallons of oil had spilled into a river, swollen due to the seven inches of rain that had fallen days before the spill, with thirty miles of riverbanks, floodplains, and marshes covered in oil –with a wildlife recovery operation still being formed- it seemed like a monumental project to say it would be cleaned in eight weeks, regardless of how many workers they brought in.

All health related concerns and well water concerns were directed to the health department representative who continued to say the air readings were safe in our area, wells had been tested and to date everything was fine, in spite of residents needing to go to the hospital in some cases, or a med service in others. He reiterated that although the smell was a nuisance – it was not a health concern. Residents asked for the specific air readings and water sample outcomes and were told they would be posted on the EPA's website as soon as possible. They reported there were thousands of calls to the 1-800 number, and they were filtering through the calls, but if you had any questions, please call.

On Monday, August 2, the EPA held an informational meeting in Marshall at the high school. The format was a brief presentation to include comments from the EPA, DNRE, NTSB, Fish & Wildlife, and the health department. No public comments or questions were allowed- those would be addressed in the cafeteria area, one-on-one with whichever agency you had questions for. Enbridge was setup in a tent area outside if you had any questions for them. After the presentation, I waited for almost a half hour to ask an EPA representative if he knew when the pooled oil on the north side of the dam, behind the store, would be vacuumed as they had been doing on the south side of the dam for a week. As a business, we could not open because of the smell and removing the oil from that alcove may help. He took my business card and said he would check into it.

Wednesday, August 4, I received a call from Dan Fuller, an Enbridge right of way agent, to inform me that they would begin vacuuming the north side of the river in the next few days, from the road. I asked if they wouldn't need to access the river between our store and pole barn/warehouse and his response was, the propane tanks located near the store may be an issue, so they were planning to pump from the road, dropping the hose on the far west portion of our property- a 3 or 4 foot wide parcel which connects to the top of the dam. He didn't see need for much access, only that from the road. On Thursday, August 6, caution tape was placed, blocking off the entire area in front of our pole barn and the parking area on the west side of the store. On Friday, the vacuum truck arrived and began pumping as described by Dan. Midday, the supply trucks arrived and an assembly line of workers emptied the trucks onto the taped off area. By Saturday morning,

they had a staging area, complete with dining tents for the workers, and every possible parking space, both on our property and that of some of our neighbors, were utilized. On Sunday they had moved in another pumper onto the same area I had asked Dan about- between the store and pole barn- and were pumping there as well. To explain the degree of cleanup impact at this point, there are now two trucks vacuuming from the store property- which is the north side of the dam, a campsite and stock of supplies for the area workers is sprawled over our property in front of the pole barn, there are two trucks vacuuming from above the dam on the south side of the dam, one truck vacuuming from below the dam on the south side and two trucks vacuuming from a property immediately west of the bridge. 12 Mile Road and it's bridge is closed to through traffic and the Sherriff's Department is posted at both ends, the road in front of the store, although not posted as closed, is blocked by worker's vehicles that are parked wherever they can, including the bus and vans that transport workers, dumpsters have been brought in and now line Marshall Street, a fire truck is stationed at one vacuuming site, and the ambulance is parked at the north end of the bridge. At least four units of generator spotlights have been placed along the bridge. Several trucks containing the booms have arrived and workers are in hazmat outfits, some working the banks of the river, some working out of boats laying out the booms and some are cleaning the riverbanks, the oil transfer trucks are coming and going with great frequency, relieving the vacuum trucks of the oil and water they have collected... all of this within a few hundred feet. Our store and home property are also within that same few hundred feet. My neighbor's front lawn has a large sign -C1- an indentifying mark for the helicopters flying overhead- some times as many as fifty plus times a day.

Over the next few days, I learned, from a neighbor, that Enbridge was trying to get signed access agreements from property owners. A few residents had been contacted, including the property across from the store who gave them permission to park vehicles on a portion of her property. We were never contacted for this agreement, either for the business and home property, even though Dan Fuller had my cell phone and had called me previously.

Wednesday, August 5, Enbridge left a "door hanger" with a contact number for Scott Nordman. I placed that call on Thursday. Scott was wondering if we had any immediate needs. I said it would be nice to know when we might be able to re-open our business, he commented that although he was sure that was something they would compensate me for down the road- he was inquiring about things like air purifiers, hotel and food receipts and the like. I told him, considering the business was closed-I didn't know if we needed one right now. He didn't have any information on the house property, but was sure someone would be contacting us regarding the same questions. They did not.

Tuesday, August 10, the EPA held another public informational meeting, this time in Battle Creek, at the Kellogg Arena. They used the same format, other than attendees were invited by volunteers to fill out a questionnaire that would be given to the presenters to answer at the end of the program. After the program, I spoke with Jim Rutherford, Calhoun County Health Department Supervisor and expressed my concerns about the business property and fears of our well becoming contaminated, the property itself being contaminated because of what appeared to be an oil saturated sludge now exposed from draining so much of the river behind our building. I told him my concerns for myself as a cancer patient, and that of my husband who works a majority of our business hours and the welfare of our customers. He commented that, as a cancer patient, I probably should not be at the store. Acknowledging the store was currently closed due to the cleanup efforts, I assured him I had no reason to be there.

Wednesday evening, August 11, I went to the Enbridge community center complete with a notebook of more than 50- 8x10 color photos of our impacted business property. My concerns were that the business was closed and I was looking for some options. They requested addresses for both the house and the store and Goggled them, after several attempts, were finally able to produce the correct aerial maps of both properties. Jeff was quick to say the house qualified for the home buyout program, and I told him I was here to speak about the business property which had now been closed for three weeks...with no income, but unfortunately we still had bills to pay out including utilities. He told me Enbridge was not prepared to discuss business loss or process and compensation

at this time. In total disbelief, I said he had to be kidding me. He excused himself and left returning with Shelly Liff, assistant right-of-way agent who stated what Jeff had told me was correct, personal properties were a priority and was I interested in filling out a form for the home buyout program. I assured her I was not at the moment, but I was interested in hearing how three weeks after the spill, the company responsible for closing my business for three weeks, didn't have any answers for me...and it was not a priority! I promised her it certainly was a priority for Ken, whose livelihood had been impacted. To appease me, Jeff and Shelly looked through the photos I had brought. Shelly assured me she would bring up our situation at the management team meeting in the morning. As I was escorted out by Jeff, he shared that the company was currently working on a program to compensate property owners for access, which might be an option for us considering Enbridge was currently utilizing our property. I asked him if personal properties were a priority here as well, and like the previous 45 minutes, he had no answer.

Wednesday, August 18, seven days after I had been to the center, I received a call from Dan Fuller, an Enbridge right-a-way agent requesting a meeting to discuss our property. The soonest we could agree on an appointment time was the following Tuesday at 6:30p.m.

Ken and I met with Dan, an Enbridge employee of just a few years- but one of the first actual Enbridge employees we had met- other than VP's and the CEO. Dan asked our concerns, which at this point boiled down to the fact the store was closed and we needed some options and information. Sensing our frustration with Enbridge, Dan assured us Enbridge was a wonderful company, a sincere, forth right company that would if fact do everything they stated, they would stand behind their words to clean up the river and make every attempt to compensate those who had been legitimately impacted. He was sure we could understand the complexity of the first few days as they were setting up command centers and the logistic miracle of getting everyone in place to handle the over whelming amount of claims, sorting through many that were fraudulent, the staff were working sixteen hour days..and he had only been able to return home the previous weekend. Dan said he was proud of the fact that at the end of the day,

he could go to bed at night knowing God ..... Dan asked if we wanted to sell the property or would we consider relocation? Considering Ken was four years from retirement, we told Dan we would need to consider if moving the entire inventory and starting over in a new location was really something we wanted to do. It certainly was not in our career plans prior to the oil spill. Dan told us he actually didn't work with that area, but would be willing to discuss this option with coworkers that could authorize it. We left the meeting with the premise that Dan would be contacting us soon with an offer for Enbridge accessing our property.

The following day, Lynn Smith left a voicemail on our home machine. Apparently Dan had been called home for an emergency and they weren't sure how long he would be out, so we would need to come back in to "retell our story". I called Lynn back and in the very few minutes I spoke with him, realized we were back to square one, either Dan had been blowing smoke to appease us or this representative was just not going to be as helpful. We set the meeting for Friday, August 27, at 3:30pm.

Thursday, August 26 I stopped on my way home from work to get water from the Church. My neighbor was so impressed and happy to share that she had received an absolutely gorgeous bouquet of flowers from Enbridge. She stated she had written Enbridge a letter acknowledging them for being such a great company and thanking them for doing such a great job in their cleanup efforts. She said they had appreciated her letter so much that they had even read it at a public meeting. I told her I was happy for her, and glad Enbridge was doing something for someone. I told her she absolutely deserved flowers everyday just for being Glennie and left. In truth, I was so frustrated that we were fighting to get even a meaningful discussion out of Enbridge- remember I had been told our business was not a priority and yet they had plenty of time to read her letter, coordinate it being read at a public meeting and then order her flowers. Apparently that department wasn't as overwhelmed as the agents working with those directly affected by the spill.

I dropped off my neighbors water, as I had been doing since the spill and told her I would keep checking on her but after today, I would need to get our water from



Marshall and my deliveries might be sporadic- it was not as convenient to get it from Marshall, but would get hers whenever I got mine, making sure she had plenty. She was very concerned about her utilities considering she was on a fixed income. So I promised her I would address that with Enbridge when we meet with them the following day..they should be able to send someone out to her house considering she did not feel she was strong enough to ride into Marshall with me.

Thursday evening, Congressman Mark Shauer held a public forum in Marshall to allow residents the opportunity to hear from the NTSB and tell our stories. Enbridge's CEO, Pat Daniel and Vice President, Steve Wouri were attendance along with Meridith Powell, their PR representative. By now, several elected officials had contacted me to offer any assistance they may be able to. Julie Camp, our county commissioner was in attendance and previously being aware of our situation, asked how things were going. I told her it wasn't, we hadn't gotten anywhere and then shared the flower story. She suggested I talk face-to-face with Pat Daniel considering he was sitting just a few rows behind me in the auditorium. I took her up on that offer and followed her. She introduced me to both Steve Wouri and Pat Daniel. Pat said hi but turned his attention to someone else and left Steve to talk to me. I shared the flower story with Steve and asked why, if they had available staff for PR, why they didn't have enough staff to work with us and why businesses were not a priority. Although I did understand and realize there may in fact be situations of fraud, as we have been told repeatedly, it was very clear to everyone except Enbridge we were impacted and had legitimate concerns. I told him we were meeting with Enbridge again the following day and he personally assured me they would work with us and they did appreciate all I had done in the early stages to facilitate the Ceresco community meetings. Meredith contacted me after the meeting to determine when and where we were meeting Enbridge on Friday and said she was planning to attend the meeting and would be there if her schedule allowed.

Friday afternoon, August 27, Ken and I meet with Enbridge at their Marshall office. We were greeted by Jeff, the original right-of-way agent from my first meeting at the center. Eventually Lynn Smith, who we thought we were meeting wit joined as and after a few minutes another gentleman joined us and walked us

to a small office. They said Meredith would be joining us, but was running late. I addressed my neighbors concerns about her utilities and considering she was housebound, asked if someone could check in with her. Four times I had to repeat her name and address.

When Meredith joined us, the feeling was intimidation, four Enbridge representatives and Ken and I. Lynn started the meeting and apparently had “found” our story, because everyone in the room seemed to be very aware of our property situation, but yet no one referenced or even acknowledged the impact we were experiencing. We learned that the relocation Dan had referenced in the previous meeting consisted of Enbridge paying to move our inventory- not any compensation for rent or purchase and although the relocation was something we could consider, it was not an offer at this point. We were told we would need to provide proper documentation from our business and it would be brought before a committee to determine if we had a legitimate claim.

My response was: wrong answer and suggested they ask the one hundred plus workers eating lunch in their “camp” on our property if we were legitimate, maybe they should ask the workers pulled from behind our business to be taken to the hospital if we were legitimate. I asked why our home, which also is within the 200 foot buyout zone, qualified but yet our business property did not. Again, we heard that businesses were a more difficult situation; the possibility of fraud was difficult and took time to review and determine. Ken stood up and said he had heard enough, they could talk to our lawyer and left the room. I stated that I was appalled and frustrated with their response. I was sure that when they laid their head on a pillow last night- even considering it may have been in a hotel- I was sure they hadn’t heard the non-stop helicopters flying overhead, they hadn’t heard the hum of the vacuum trucks running twenty-four hours a day, the beep-beep of large trucks and machines backing up, the workers- including those in buses and vans arriving for work at 6:00am, parking in an area next to our home, the buzz of conversation as they all walked down a portion of our driveway, the open headers of the fan boats on the river at 7:00am every morning, or the apparent racing of the boats all day, nor had they had to endure the smell of the oil, a spill caused by their company. I was also pretty sure that each of them had

received a paycheck within the last week or so. They could be assured Ken had not. Enbridge had effectively closed out business at least for the last several weeks, and it was questionable if and when we would be able to reopen. Did they really not understand why Ken and I were so frustrated with their lack of response? A committee at some point in time was going to determine our future? I didn't think so. We have heard the CEO, Pat Daniel and other senior management say they were sorry, well sorry doesn't pay bills nor does it make the impact of the spill any less. A few hours after we got home from the meeting, Steve Wouri, Enbridge Vice President called and asked if we would be willing to meet with him. I thanked him for calling, but I was going to take a breather, I was going to take the next day to do a day of community service for the American Cancer Society. We needed to consider what our next steps would be and once I determined that, I would call him.

On Monday, August 30, I contacted a lawyer and made an appointment for the first available appointment, Wednesday, September 1, my birthday. Through several additional conversations and meetings over the week and Labor Day weekend, he began negotiations with Enbridge. He came back with what we felt was the best offer Enbridge was going to provide.

Sunday morning, September 5, I received a call from our lawyer and he informed me that Enbridge was interested in holding another community meeting in Ceresco to update the residents on the status of the cleanup. Our lawyer wasn't sure it was in my best interest to assist with the arrangements, so I provided several contacts for Enbridge, including the pastor of Ceresco Baptist Church and two other Ceresco Neighborhood Watch block captains. They had inquired as to how we had gotten the word out about previous meetings and acknowledged it was by email, the neighborhood watch phone tree and passing out flyers door-to-door. Our lawyer called back and confirmed the meeting was to be held Tuesday, September 7, and I assured him I would be attending. Sunday afternoon, we received our very first visit at our home by Enbridge, or anyone else regarding the spill...an Enbridge representative was handing out flyers for the meeting.

Tuesday, September 7, at 7:00pm, Pat Daniel, the CEO of Enbridge welcomed the residents to the meeting and thanked the church for allowing them the space to meet with them. He said the cleanup of oil from the river was essentially complete, with a few exceptions, but the cleanup of the riverbanks, wetlands and marshes was in fact going to take longer than anticipated. The EPA had given them until September 27 and they felt they would be able to do that. He said they would leave the booms in the river for as long as possible, but because the booms could not withstand the winter, they would be removed and replaced in the spring. He fielded questions about property values, what they intended to do with the homes they were purchasing- to which he said Enbridge had hired a management company to maintain them- and when asked if they intended to rent them, he said no, they were not in the real estate business. They would hold them until the market could sustain the sale of the homes, but would not flood the market by putting them all up for sale at the same time. When asked about the perception of Ceresco being an oil spill community, he asked what residents felt Enbridge could do to enhance the community. Suggestions included a park, public access to the river, and repairing the bridge... which provided the opportunity for Mr. Daniel to say, that "while it might be a touchy subject", he did want to share that Enbridge had proposed to buy the dam for the purpose of utilizing it for a green power source. Most residents were interested in learning more about it, and one said she would only be interested if it was not noisy- we had had a pretty noisy summer and didn't want to live with that every day. Tongue in check, he asked the neighbors to keep the offer in this room because if the property owner got wind of it, it would drive the price up. I assured Mr. Daniel, as the owner of the property that federal agencies had previously said was needed in addition to one owning the dam proper to allow for power production, I had heard his comments and had his number. He smiled and said he was very aware of our property location. In an internet search, I found that Enbridge purchased a 20% share of a Neal Hot Springs Geothermal Power Plant Project for \$23,800,000.00 earlier in the day.

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Enbridge CEO, Pat Daniel has said at many public meetings, Enbridge was anxious to work with those impacted by spill, and there was no need for anyone to obtain a lawyer. Although that may or may not be true, it was very apparent they were not equipped to handle a business claim. As mentioned earlier, we had three meetings with Enbridge representatives with no results and felt the only way we were going to be heard was through the voice of a lawyer. I sincerely wish Enbridge had been forthright, and we hadn't felt it was our only choice. Our lawyer has been in negotiations with Enbridge and as of Monday, September 13, I have signed a document providing Enbridge with limited access to our property for a specific period of time as they clean up the river and river banks near the dam. We anticipate an additional amount for a short term business interruption and acknowledge Enbridge has agreed to purchase the business property, if we decide to sell it, for a pre-determined period of time. The agreement does not in any way compensate Ken and myself for any pain, suffering, inconvenience or health related claims... nor does it guarantee a fair purchase price if we decide to sell. Did we reach an agreement with Enbridge, yes we did. My lawyer has assured me that although Enbridge was not equipped to handle our claim, when they were made aware, they were fair. I would suggest, we may have been quicker to think their offer was fair had they been equipped, in a timely manner to talk to us, and had we been spared all the stress and headaches.

I thank Chairman Oberstar for the opportunity to share how this spill has impacted us. I can only hope others truly impacted by this spill do not have to obtain a lawyer to be heard. I hope this hearing will be the lightning rod that allows Enbridge to realize some of the methods, strategies and programs they used in this spill were made in haste and were often ineffective and unsettling. I hope when Enbridge returns from these hearings and meets with other individuals with legitimate claims, they will be forthright, compassionate and fair. I know that may not be good for the stockholders or your bottom line, but as one who has been impacted, my bottom line is this; I was an innocent bystander, I was not responsible for the spill, I did not choose to breathe foul air, I did not choose to lose a summer to the hum of vacuum trucks, fan boats and helicopters, and strangers on my river banks, to not be able to utilize our pool for lack of privacy, I

did not choose to close a business, and I certainly did not chose watch geese struggle while covered in oil. Enbridge made that decision for me. May your community service efforts and gifts benefit those who were impacted, or at least the greater communities impacted rather than the individuals who made you feel good. I sincerely hope this spill will ensure you will be more responsible with the maintenance of all your pipelines, even if it means replacing them all. Whether or not Enbridge Energy was negligent in its actions on Sunday, July 25 is for the National Transportation Safety Board to determine. How Enbridge Energy responded to the victims of the crisis was determined by Enbridge Energy. I hope the legacy you leave behind in Michigan when you go back to Alberta, is one of good will.

**STATEMENT OF  
JOHN D. PORCARI  
DEPUTY SECRETARY OF TRANSPORTATION**

**BEFORE THE  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
U.S. HOUSE OF REPRESENTATIVES**

*Enbridge Pipeline Oil Spill*

**September 15, 2010**

Chairman Oberstar, Ranking Member Mica, and Members of the Committee, thank you for the opportunity to discuss the U. S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration's (PHMSA) response to the July 2010 Enbridge Energy Partners LP (Enbridge) oil spill in Marshall, Michigan.

Safety is the number one priority of Secretary Ray LaHood, myself, and PHMSA Administrator Cynthia Quarterman. The Department is actively working to ensure the safety and reliability of the nation's pipeline transportation infrastructure and prevent spills on the 174,000 miles of hazardous liquid pipelines it oversees. Over the past 20 years, all the traditional measures of risk exposure have been rising – population, energy consumption, pipeline ton-miles. At the same time, the number of significant incidents involving onshore hazardous liquid pipelines has declined 28%, accompanying a decrease of 57% of gross barrels spilled.

The oil spill on Line 6B, and the more recent spill on line 6A, of Enbridge's Lakehead System are significant, and an unacceptable blemish to this record. On the evening of Sunday, July 25, 2010, Line 6B ruptured in Marshall, Michigan. An estimated 819,000 gallons of oil were released. Enbridge confirmed the pipeline rupture on Monday July 26, at 11:45 a.m. PHMSA and other Federal officials were not made aware of the incident until 1:33 p.m. (EST.), the time when Enbridge notified the National Response Center.

I am deeply troubled by Enbridge's detection of and response to this oil spill. I visited Marshall, Michigan on two occasions to get a first-hand look at the spill and consequential damage and to ensure the Department is aggressive in its response to the spill and the needs of the affected community. The oil spill has had major consequences for Marshall's residents and the properties of homeowners along the pipeline route, the Talmadge Creek and Kalamazoo River, and the fish, wildlife, and vegetation living in and along the banks of the waterways. Mr. Chairman, Members of the Committee, I assure you the Department, through aggressive regulation and oversight, will use its full enforcement authority to ensure that operators meet pipeline safety standards.

To ensure safety is not only our top priority, but also the top priority of those we regulate, the Department will submit new legislation to strengthen pipeline safety. In addition, the

Department is working on significant rulemakings to increase regulatory oversight and improve guidance to operators as well as other efforts to increase coordination with partners and to support research and development.

#### **I. HOLDING ENBRIDGE ACCOUNTABLE**

Since the Obama Administration took office, the Department has repeatedly warned Enbridge to focus on the safety and performance of its entire Lakehead Pipeline system. In February, PHMSA leadership met with members of Enbridge's Executive Leadership team, including the top official for liquid pipelines to discuss PHMSA's concerns about Enbridge's repair methods and a series of major failures involving its pipeline system. PHMSA told Enbridge to review its approach to safety and report back. PHMSA expressed its concerns to Enbridge about the operator's repair methods, and a series of major failures involving its pipeline system. This year, PHMSA also conducted eleven inspections of Enbridge's Lakehead system and initiated five enforcement actions. Last month, PHMSA issued a final order assessing a \$2.4 million civil penalty against Enbridge and requiring it to revise maintenance and repair procedures and to train and re-qualify employees, in connection with an incident near Clearbrook, Minnesota where two workers died as a result of Enbridge's failure to follow safety regulations while repairing a pipeline.

Over the last several years PHMSA has conducted 96 inspections of Enbridge's operations, 44 involving the Lakehead system, of which Line 6B is a part. As a result of these inspections, PHMSA initiated 24 enforcement cases against Enbridge that involved the Lakehead system. These cases, which included Notices of Proposed Violation, Notices of Amendment, and warning letters have resulted in 94 allegations of non-compliance with pipeline safety laws and regulations. Consequently, PHMSA has required Enbridge to modify its operation and maintenance manuals including procedures on first discovery reports, accident reporting, emergency response, prompt response to natural disasters, valve inspections, repair procedures, and conditions that could adversely affect the safe operation of the Lakehead system. PHMSA also cited Enbridge for failure to conduct timely inspections and failure to make timely repairs.

The many actions taken against Enbridge collectively demonstrate the Department's close oversight, however more can always be done to address safety. Enbridge's techniques to manage pipelines must change and we have firmly delivered this message to the company's leadership. While the failure cause has yet to be determined for the Marshall failure, we are not waiting to apply lessons learned. PHMSA will ensure that Line 6B is safe for return to operation and in compliance with pipeline safety laws and regulations. At the outset, PHMSA issued a Corrective Action Order (CAO) to Enbridge. The CAO requires Enbridge to take specific steps to ensure the safety of the pipeline, develop and submit for PHMSA approval a written gradual step-by-step restart plan for Line 6B, and develop and submit for approval an integrity verification and remedial work plan for Line 6B.

PHMSA is also inspecting Enbridge's compliance with regulations related to maintaining the integrity of the line and control room procedures, and is examining Enbridge's response to the incident, including its leak detection capabilities, emergency shut-down systems, and its notification procedures and practices. PHMSA also has an open investigation into Enbridge's conduct and compliance with pipeline safety laws. This investigation includes whether Enbridge



promptly notified the National Response Center of the spill, had an adequate leak detection system and related control room procedures, and whether its pipeline integrity program meets PHMSA's safety standards.

PHMSA oversaw the pipe removal, the repairs, and all testing. PHMSA will continue to oversee other assessments and remedial actions and independently review all relevant information and data. In addition, PHMSA retained an independent third party expert to assist in its examination of inline inspection and other integrity validation assessments to ensure a rigorous review. The Department is closely watching Enbridge as they take every step to come into compliance with pipeline safety laws and regulations and holding them accountable for their promise to go beyond minimum standards.

PHMSA's incident investigation is focusing on past, current, and future compliance with U.S. pipeline safety laws and regulations. The National Transportation Safety Board (NTSB) launched an investigation into the specific cause or causes of this failure and its related consequences. During the NTSB's investigation into the failure, PHMSA conducted formal interviews of Enbridge personnel, local agencies, and citizens to gather pertinent facts, data, and documents relevant to the failure, including the sequence of events and factors that may have contributed to the release. When NTSB launches an investigation into a pipeline incident, PHMSA uses the findings to inform its approach to addressing causal factors of an incident. Accordingly, PHMSA is not addressing the causes of this particular failure, or its consequences, today.

Department and PHMSA personnel have been on-site and directly engaged in the response efforts since the spill occurred. PHMSA immediately responded to the Enbridge Line 6B spill, dispatching two investigators to the release site and one additional investigator to the Enbridge control center in Edmonton, Alberta, Canada. Several more inspectors worked on-site to discharge both PHMSA and NTSB's investigative responsibilities. PHMSA quickly coordinated with community leaders and first responders. PHMSA not only coordinated with members of the NTSB, but also met with Region 5 representatives of the Environmental Protection Agency, congressional staff, and other emergency personnel engaged in the response efforts. The Department and PHMSA continue to be very responsive to the community, attending and speaking at community meetings, meeting directly with community leaders, and participating in briefings for local officials. I would like to recognize and express my appreciation to the men and women of the PHMSA team who worked tirelessly for the last forty-five days to this end. PHMSA personnel responded to the incident with vigor, and have spent a significant amount of time on-site.

## **II. HOLDING ALL PIPELINE OPERATORS ACCOUNTABLE**

The Department's pipeline oversight program is based on three fundamental tenets.

- First, PHMSA must establish safety standards that are both prescriptive and risk-based, verify that operators perform to these standards, and take enforcement actions against operators if they are not in compliance with these standards.

- Second, PHMSA can impact safety culture and operator performance beyond minimum compliance with the regulations.
- Third, pipeline operators must understand and manage the risks associated with their pipelines, including taking actions to prevent pipeline spills and minimizing the impact of any spills should they occur.

Under the Obama Administration, PHMSA has begun a comprehensive review of the existing pipeline safety regime and developed initial solutions, through legislation, potential rulemaking, and other actions, to ensure that all pipelines are adequately regulated and that operators put safety first.

#### **A. Strong Legislation**

Today Secretary LaHood presented to Congress the Administration's legislative initiative for the reauthorization of the Department's pipeline safety program entitled, "Strengthening Pipeline Safety and Enforcement Act of 2010," designed to fill regulatory gaps and strengthen enforcement. The proposal:

- increases the maximum administrative civil penalties for the most serious types of violations from \$100,000 per day/\$1 million for a series of violations to \$250,000 per day/\$2.5 million for a series of violations;
- adds 40 additional inspection and enforcement personnel over four years;
- closes regulatory gaps on "gathering" pipelines – lines that collect products from processors or refiners and delivers to transmission pipelines – by eliminating current statutory exemptions for gas and hazardous liquid gathering lines;
- requires a review of the effectiveness of current rules that apply risk management requirements to pipelines in high consequence areas (HCAs) to determine whether these requirements should be applied to entire pipelines; and
- increases the data available to the pipeline program to minimize risks.

Secretary LaHood has said: "As the recent oil pipeline failure near Marshall, Michigan, has shown, . . . the Department needs stronger authority to ensure the continued safety and reliability of our nation's pipeline network."

#### **B. Aggressive Regulatory Initiatives**

The Department's legislative proposal will complement its additional planned regulatory initiatives to continue to improve pipeline safety. The Department intends to take significant action to reassess its pipeline safety regulations to expand and strengthen them, as needed, keeping in mind the lessons it has already learned from the Marshall oil spill. As a result, the Department is considering several regulatory actions. Specifically, the Department will consider:

- extending regulation to certain pipelines currently exempt from regulation;

- identifying additional areas along pipelines that should receive extra protection or to be included in the HCA category for integrity management protection;
- establishing standards and procedures for minimum leak detection requirements for all pipelines;
- requiring the installation of emergency flow restricting devices in certain areas;
- revising valve spacing requirements on new construction or existing pipelines;
- establishing repair timeframes for pipeline segments in areas outside the HCAs that are assessed as part of the integrity management program; and
- adopting standards and procedures for improving the methods of preventing, detecting, assessing and remediating stress corrosion cracking in hazardous liquid pipeline systems.

This week, PHMSA also issued a Notice of Proposed Rulemaking<sup>1</sup> (NPRM) proposing to revise the deadlines in a December 2009 final rule that addressed human factors and other aspects of control room management for pipelines where controllers use supervisory control and data acquisition (SCADA) systems. The final rule set a program development deadline of 18 months to August 1, 2011, and a subsequent program implementation deadline of 18 months to February 1, 2013. The NPRM proposes to expedite the program implementation deadline for most standards to August 1, 2011. Under the December 2009 rule, pipeline operators must implement methods to reduce the risk associated with controller fatigue. In addition, operators of pipelines where controllers use SCADA systems must define the roles and responsibilities of controllers and provide controllers with the necessary information, training, and processes to fulfill these responsibilities. Such operators must also manage alarms, assure control room considerations are taken into account when changing pipeline equipment or configurations, and review reportable incidents or accidents to determine whether control room actions contributed to the event.

PHMSA has also been conducting a thorough review of its inspection and enforcement related regulation, operations, and guidance, as well as its data collection and transparency, and has taken the following actions:

October 2009	Issued an advanced NPRM for comments on whether PHMSA can bring enforcement action against violators of state pipeline damage prevention laws in those states with inadequate damage prevention enforcement programs. The comment period has closed.
December 2009	Issued a Final Rule to address human factors and other aspects of control room management for pipelines where controllers use SCADA systems. This rule addressed several NTSB recommendations.

<sup>1</sup> NPRM submitted to Federal Register on September 13, 2010. Comment period closes in 60 days.

January 2010	Issued an Advisory Bulletin <sup>2</sup> reminding hazardous liquid pipeline operators of the importance of prompt and effective leak detection capability in protecting public safety and the environment.
June 2010	Issued an Advisory Bulletin <sup>3</sup> to operators of hazardous liquid pipeline facilities required to prepare and submit an oil-spill response plan, requiring them to ensure full compliance.
June 2010	Issued a NPRM regarding the regulation of the remaining population of unregulated rural hazardous liquid low stress pipelines, which was required by the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006.

We are confident that these enhancements to PHMSA's safety regulations will reduce the likelihood of a significant spill such as the one that occurred in Marshall, MI.

### C. Other Initiatives

PHMSA is establishing strong relationships with other organizations involved in responding to pipeline incidents and emergencies. When PHMSA responds to an incident, its primary concerns are the public's safety and determining an operator's compliance with PHMSA's regulations. PHMSA is often requested to share information and support the investigations of other agencies. In addition, PHMSA has a long history of working closely with local emergency officials in response to pipeline emergencies and its staff effectively participates in incidents where there is an Integrated Command System. Still, the Department must do more. The Department has reached out to EPA and the U.S. Coast Guard suggesting a new Memorandum of Understanding to ensure coordination during oil spill response.

PHMSA also recently announced it is awarding seventeen research contracts totaling \$5.9 million to companies and institutions for the development of new projects that provide innovative solutions to improving pipeline safety and protecting the environment. The awards will support the development of research projects targeted at addressing the associated challenges of pipeline safety with the detection, prevention, and characterization of threats and leaks, and construction quality. To date, PHMSA has invested over \$57 million for 161 projects focused on providing solutions for detecting pipeline leaks, preventing damages to pipelines, improvements in pipeline materials, and improved pipeline system controls, monitoring, and operations.

### III. Conclusion

Mr. Chairman, safety is the Department's highest priority. In addition to the Michigan spill, investigations are now underway to determine the causes of a last week's Enbridge oil pipeline break in Illinois and the Pacific Gas and Electric natural gas incident in California. Incidents like these must not happen. I assure you that the Department will remain vigilant in ensuring the safety and integrity of all pipelines under its jurisdiction. We are making every effort

<sup>2</sup> Pipeline Safety: Leak Detection on Hazardous Liquid Pipelines: January 26, 2010.

<sup>3</sup> Pipeline Safety: Updating Facility Response Plans In Light of the Deepwater Horizon Oil Spill: June 23, 2010.

to ensure Line 6B is free of safety and environmental risks before Enbridge is granted permission to restart. As stated before, the Department will hold Enbridge and all pipeline operators accountable for the safe operation of their pipelines.

Thank you and I am happy to respond to your questions.

## U.S. House of Representatives Committee on Transportation and Infrastructure

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*Testimony Regarding the Enbridge Pipeline Oil Spill in Marshall, MI*

**Kelli D. Scott, Administrator/Controller and Public Information Officer**

**Calhoun County**

**317 W. Green St.**

**Marshall, MI 49068**

**269.781.0966**

**Wednesday, September 15, 2010**

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Chairman Oberstar and honorable members of the committee, thank you for the opportunity to be here today. Thanks also to our local Congressman Mark Schauer for your commitment to include local governments in the mix of testimonies. It was difficult to summarize into this brief testimony Calhoun County's perspective on the oil spill and its impacts on our community given relatively short notice, and given the fact that although we are out of "crisis" mode, the oil spill is not yet all cleaned up. We still have more questions than conclusions to offer.

I am here today to attempt to paint for you a picture of what Calhoun County was like before July 26, 2010, what the County's involvement in oil spill response effort has been to get the situation to what it is today, and what I believe the local concerns will be going forward. Before the crisis that started locally ends locally, it is important to the County Commissioners that we begin through various engagements to plan long term restoration strategies. If what you hear today offers any preliminary "lessons learned" for future reference or leads to any assistance in this recovery strategy, we will all be better off.

This is my full statement; I will limit my remarks today to a five-minute summary of it.

### **INTRODUCTION**

I have been the County Administrator/Controller for about a year and a half, and was appointed as the County's Public Information Officer (PIO) in May 2009. I completed two days of Incident Command Structure training last summer, and thankfully this is the first time I had to get real "on the job experience" with a major environmental disaster happening literally in the county's backyard.

On Monday night, July 26, 2010, I was at home in my pajamas playing Monopoly with my family. I got a call at about 8:30pm from our County Public Health Officer Jim Rutherford, who informed me that there had been a major oil spill in Marshall and that I should come to the next incident briefing to be held at 9:00pm. Briefings were scheduled thereafter for every three hours, around the clock. I had never heard of Enbridge and was unaware that its pipelines traveled through our county. When I got to the Incident

Command, which was then located at Enbridge's facility in Marshall (and would later be moved three times to its eventual and current location in the Marshall industrial park), several County officials were on scene along with officials from the State of Michigan Homeland Security, Environmental Protection Agency (EPA) and other agencies. Enbridge officials continued to arrive into the night. No one wore badges at that point and so it was unclear who was actually there and what roles and responsibilities each had. There was an attempt to get organized, yet there was a great deal of confusion and the status was certainly not determined at that point. Sheriff Al Byam and I remarked after a few hours that the setting was sort of surreal—like a really bad dream.

We would later learn that the oil spill had leaked approximately 819,000 gallons of oil into a creek in a rural area and then into one of Michigan's major inland rivers, the Kalamazoo River, and was headed for Morrow Lake 30 miles downriver (West) from the spill site. On Monday night, however, the magnitude was unknown and it was dark before the situation could be fully assessed. The County's Emergency Management Services Director Durk Dunham said to me "at the time I envisioned a few large vacuum trucks would come in and remove the oil and then we would go home and have dinner that night." As it turns out, Mr. Dunham logged over 100 hours per week for the next two weeks and probably hasn't had dinner at home much since. As part of the Incident Unified Command, Mr. Rutherford also has attributed more than 500 hours of his time to the oil spill. Sheriff deputies were dedicated to traffic control and public safety and our county Emergency Operations Center (EOC) was deployed from day 1. My efforts as PIO required lots of overtime on nights and weekends for the first few weeks after July 26, but have now tapered off. As locals, our unexpected challenges included trying to maintain family life and hold down our day jobs that pre-oil spill were already full of meetings scheduled, ambitious goals to achieve and people to lead. Some of the county's work in progress simply got put on hold indefinitely while we reacted to this crisis.

#### **BEFORE JULY 26**

Calhoun County is located in southern Michigan, midway between Chicago and Detroit, at the junction of two major interstate freeways - I-94 (east/west) and I-69 (north/south). We are the 17<sup>th</sup> largest county of 83 in Michigan, with a population of approximately 136,000 and an area of just over 700 square miles. My office and our County Seat are in Marshall, just down the road from the site of the Enbridge Oil Spill.

There are three population centers within the County: the City of Albion in the eastern portion of the County, the City of Marshall in the center and the City of Battle Creek in the northwest corner. The City of Battle Creek is the largest metropolitan area in the County. The remainder of the County is primarily agricultural. There are 19 townships, four incorporated cities and four villages within the boundaries of the County. Our website, [www.calhouncountymi.gov](http://www.calhouncountymi.gov), encourages people to visit, live and do business in Calhoun County, proudly stating that "Calhoun County offers the serenity of country living and the cultural and recreational amenities offered in urban settings."

Just a few relevant words about our governance structure...the county is governed by a seven-member elected Board of Commissioners, who are elected on a partisan basis every two years. 2010 is a County

Government election year, with the oil spill happening just one week before the August 3 Primary Election. In addition to the Board of Commissioners, the County has five elected officials, including Water Resources Commissioner and the Sheriff. Our Emergency Management Director reports to the Sheriff and is essentially an office of two plus some volunteers. Calhoun County just recently created an independent Consolidated Dispatch center that just begun operations out of the County Building in Marshall in March of this year. The Dispatch Authority is governed by a board separate from the County Government and hired an Executive Director who moved from a neighboring county. From an Emergency Management (EMS) standpoint, our county is somewhat unique in that in addition to the County's EMS office, Battle Creek City also has an EMS operation.

Due to the national economic crisis and Michigan's budget crisis, Calhoun County has experienced significant increases in tax foreclosures, and we are in our second year of property value declines. The real estate market continues to be depressed and our County ranks very low compared with other counties when it comes to several key health indicators. Several coordinated local efforts have just begun to sprout to take new approaches to turn things around. Use of our environmental assets such as rivers, parks and trails are part of many plans to encourage healthier lifestyles in Calhoun County.

An editorial appeared on June 13, 2010 in Crain's Detroit ([www.craigslist.com](http://www.craigslist.com)) titled "Turn Oil Spill into Pure Michigan." The suggestion was that Michigan's tourist industry could be boosted by targeting travelers who have abandoned Gulf Coast vacation plans due to the BP oil spill this past spring. It is ironic and sad that a month and a half later we experienced a local tragedy that at the least cut off recreational use of the river, which resulted in canceled camping, fishing and canoeing trips, and other events booked before the July 26 incident.

#### **THE RESPONSE - COUNTY GOVERNMENT INVOLVEMENT**

Calhoun County elected and appointed officials have been actively involved in the coordinated governmental response to the event. In consultation with County Board Chair Mike Rae, I authorized the filing of the appropriate paperwork just before midnight on Monday, July 26—the day the spill was reported—to declare a local state of emergency under state law, thus triggering various local, state, and federal response activities. Calhoun County Sheriff Allen Byam and Emergency Services Coordinator Durk Dunham have worked closely with officials from Enbridge, Federal On-Scene Coordinator, EPA, the State of Michigan, Kalamazoo County and the City of Battle Creek in the Unified Command to make every effort to ensure that public safety and public health concerns are addressed promptly and to the fullest extent possible.

The pipeline rupture took place in the 6th District represented by Commissioner Becky Rocho and has also affected to some degree all other districts represented by Commissioners Julie Camp, Terris Todd, James Haadsma, Lisa Gerow and Kirk Lee. Most of the commissioners were involved with the oil spill response efforts, attending briefings, touring the river on airboats, and working closely with officials and citizens along the shores of the Kalamazoo River to facilitate appropriate actions. Voluntary evacuations were announced for 61 properties along Talmadge Creek and the Kalamazoo River starting on July 27



due to levels of benzene in the air, and remained in place for about three weeks to protect citizens potentially at risk. County Health Officer Jim Rutherford and Emergency Services Coordinator Durk Dunham are representing the County on the Unified Command Team. The Calhoun County Land Bank, working in conjunction with the EPA and Enbridge, has made available property in Albion, Michigan for use in staging the numerous vehicles and personnel involved in the response effort and will continue to do so during on-going cleanup and remediation process. Enbridge is also leasing parking spaces from the County for one of their two community centers, located very close to the county building in Marshall.

From the beginning Calhoun County has afforded all requested resources to Enbridge and the Incident Command. We are part of the vendor list and like others, expect to submit invoices to Enbridge and get fully reimbursed for our efforts. To date our total investment to the oil spill response has exceeded \$300,000, with the majority of the cost coming from Public Health, Office of the Sheriff, Administration and Equalization, which created over 400 maps for Enbridge and the EPA for various uses. The Calhoun County Road Commission, which is a separately governed organization, estimates at least \$500,000 in damages to roads because of the heavy equipment being used in the response.

#### **COMMUNICATIONS – MY ROLE**

From the day the oil spill was reported, my cell phone began ringing almost off the hook, and my executive secretary began emailing me with messages coming into my office from various concerned parties—media with inquiries; local residents concerned about air quality, water quality, traffic restrictions; local businesses with questions about impact to their operations; relatives who were evacuated; county commissioners and other government officials wanting updates. For the first few days there were not many answers or time to keep up with the calls. I found myself memorizing and passing on quickly the number to the only hotline we had to give to residents (1.800.306.6837)—run by Enbridge and staffed by them and local Health Department employees.

On Thursday July 29 after a regularly scheduled Unified Command meeting, the PIOs from all agencies and Enbridge started to formally meet and tackle the challenge of creating a unified communications system. With EPA's ramped up resources then available along with the State's Joint Information System, we had a new website as a tool, a media line and a listserv so we could route questions to each other as appropriate. We developed a frequently asked question (FAQ) page for the EPA website and began facilitating daily press briefings, along with staffing the regular briefings (then held twice daily) for assisting agencies to attend. It was impressive the first few weeks to see how committed our local, state and national elected officials were to the response efforts and to the needs of those of us involved.

After the voluntary evacuations were announced and many residents left their home to relocate to hotels, relatives' homes or wherever, it became a real communications challenge to get message updates to them. As PIOs we were encouraged to help get the message out that the Unified Command was working better and better together and it was definitely true that increased structure and more formality within the Incident Command Center was of great assistance.

One of the early stories centered on the response time and the reporting of the oil spill. I understand that specific item is part of one or more investigations. I would make just one point on the issue and that is that we find no record, and the Consolidated Dispatch Authority finds no record, of Enbridge contacting the County or Consolidated Dispatch to alert of any potential problems with the pipeline. As the 911 records show, the Consolidated Dispatch was notified by a Consumers Energy employee who discovered the leak on the morning of July 26, and that triggered the Dispatch notification to County EMS and then Battle Creek Hazardous Materials Response. Our understanding is that Enbridge was required to notify only the National Response Center. There also was not notification from either federal or state agencies to the County or Consolidated Dispatch.

From a technology standpoint, we now reflect on a couple of shortfalls that may have helped communication efforts be in place earlier on in the process. Our county, like many, has a website created several years ago and currently undergoing a total redesign and upgrade to include new technology such as social media and messaging capabilities that would have been helpful to have during this emergency. Our Geographic Information System (GIS) was recently updated and fleshed out to include new layers such as floodplain maps. We did not have pipeline maps on the GIS, even though we now know they are readily available from the National Pipeline Mapping System (NPMS) through the U.S. Department of Transportation. Likewise, Consolidated Dispatch did not have the pipeline layers on its computer system.

#### **LOOKING FORWARD**

I can't speak on behalf of all the local governmental units or directly for our residents. But the many conversations I've been involved with usually end with the following five questions about the future of Calhoun County and the aftermath of the Enbridge oil spill:

1. How long will Enbridge be here in town, and what will we be left with once they're gone?
2. When will the Kalamazoo River be open for recreational purposes again—2011, 2012?
3. How will this environmental disaster impact future economic development—how many businesses will avoid Calhoun County when contemplating start up, expansion or relocation?
4. What will happen to our property values, which we thought were close to bottoming out before the spill but were expected to rebound in the next year or two?
5. Are we safe—how can we be sure another pipeline failure doesn't happen in the near future?

I also serve as a county representative on the Board of Directors of our local Battle Creek/Calhoun County Convention and Visitors Bureau (CVB). From a Convention and Visitors Bureau perspective we have appreciated the boosted hotel occupancy and increased levels of visitors in town frequenting our businesses. But we are concerned about the long term negative impacts the oil spill will have on our community and have approached Enbridge with the request to consider assistance with public relations once the cleanup is complete. We believe there will be opportunity to focus on the positive news of how the river is being restored and how residents and visitors can enjoy the river in the future.

Involvement of many of us from the County will continue indefinitely in the response to the Enbridge Oil Spill so that there is local representation on site. These efforts will likely focus on ongoing communications, monitoring of public health impacts and focus on public safety. It will be months before damage to our roads and county parks can be assessed and plans put in place to correct.

On August 5, 2010, the Calhoun County Board of Commissioners resolved to create a new "task force" in response to the oil spill and the magnified realization that we have a number of energy transmitting pipelines traversing the area and crisscrossing inland waterways like the Kalamazoo River, and further that an aging infrastructure puts the area at continuing risk for tragic events to be repeated in the future. One premise to be discussed is whether there is a need to accelerate the development of environmental cleanup and restoration technologies.

There is already local experience in creating, testing and training in new technologies and sciences, with one example being the International Food Protection Training Institute launched in July 2009 in Battle Creek—Cereal City USA—with the \$1 million federal appropriation that U.S. Rep. Mark Schauer, D-Battle Creek, helped secure for the institute, along with other local funding. Our new task force or authority will include local, state and federal officials and private sector representatives, with special attention to those involved with economic and business development, tourism, parks and recreation, real estate and planning. My office will coordinate this effort and we hope to begin meeting next month.

#### **CONCLUDING REMARKS**

Our hope is that if we leverage the local education, research and technology assets we already have in our County with any expertise and funding available to communities suffering from such catastrophes, we will not only return our county to its pre-spill state, but also turn it into an even better place to visit, live and do business in.

We urge the Committee on Transportation and Infrastructure to consider any items that may increase local awareness of pipeline existence, safety regulations and pipeline failure response training and resources. Our Health Officer reminds me often that "there is no play book" for each unique emergency situation when we discuss lessons learned. But from my perspective, communication plans that begin from the responsible party and include early and direct notification to local emergency centers of potential issues with pipelines would streamline response efforts if nothing else. Please do not hesitate to contact me if there is anything further Calhoun County can do to help your Committee or the public.

Again, thank you for your time today.

\*\*\*END\*\*\*

**Statement of  
Darla Thorpe and Denise Green  
Ceresco, Michigan  
Before the  
Committee on Transportation and Infrastructure  
U.S. House of Representatives  
September 13, 2010**

Dear Members of Congress,

I would like to say that our situation is one of many bad situations. I want to take the time to thank you for listening.

I am one of two trustees of my parents trust. Working through this trust has been difficult for us. Losing one parent is difficult but losing both in a two year period is even more difficult. The property which was our childhood home is about to be removed from our lives, well that is if we can sell it. The home must be sold to conclude our parent's estate.

There are four girls in my family, which all have been affected differently with this oil spill.

I would like to start with my oldest sister. Diana has major health problems such as, systemic lupus and diabetes. To say the least she has a compromised immune system. The Tuesday after the oil spill, it was said to be "safe" in Ceresco, Michigan (which the Kalamazoo River runs through). Diana had went there for a few hours, resulting in her having to use her inhaler several times on her drive home. This has caused Diana to not be able to attend church, which she has attended her whole life, and been the pianist for forty plus years. This has been very upsetting to her. Diana's doctors have told her to stay away for the area. She also lives on a farm north of Albion, Michigan, which the pipeline runs through. Within days of the spill, there was a road built across the street from her. We had heard about another oil leak north of Albion, asking about that we were told that they were testing the pipeline. We find it strange that most of the activity was being done during the middle of the night. The result of this work being done at night created several sleepless nights for her. The trucks going in and out all night, heavy equipment running, safety back up buzzers, with bright lights shining on her home all night long.

My next sister Dorene, has unfortunately been homeless for almost a year. Michigan gets very cold during the winter months. We would have liked to have her stay at our childhood home, but she nor the trust could afford that. She could however use her portion of the estate to purchase something else.

Denise's effects from the oil spill have been magnified greatly as she not only is affected by the sale of our parent's home, but she also owns and lives in a home 317 ft. from the river. She has two of four children which still live at home. Denise's youngest daughter, which just turned 12, asks her the question often "am I going to get cancer?" My sister reply's "I don't know." My sister can't even have her daughter's birthday party at her home, as nobody wants to come to Ceresco. As a result of that she gets to pay for having it somewhere else. This is very stressful for her and her family. Her family has not had anybody from Enbridge contact them about anything that might help them from the beginning of this. She just got an air purifier less than a week ago, only because she was at the third Ceresco town meeting and asked the question why nobody had let her know about the possibility of at least getting an air purifier. They are not fortunate enough to have air conditioning in their home. The whole month of August was very hot and humid, and because of the heavy fumes that were in the air, they had to keep all the windows in their home closed. She did fill out a claim at the community center for an air conditioner, but never heard anything about her claim. Denise wanted to get her family away from the heavy air in Ceresco, but packing your whole family up and going to a motel is not easy to do. She asked her husband about doing that, but he happens to service one of the motels that Enbridge was using and he didn't feel that they would have been any better off as the Kalamazoo River runs close by the motel. Maybe Enbridge didn't realize that at the time, I don't know. Denise's whole family has suffered to date from a lot of the symptoms that people are having, including headaches, sore throats, swollen glands, and diarrhea. This has ruined their summer. It is very hard to realize how this has impacted people. This is just a portion of the impact for her family.

I have actually been impacted the least of all of my sisters. I live approximately 23 miles from Ceresco. To try to put it into perspective, two days after the spill I could smell the oil from my deck. I am one of two trustees of our parent's trust. It is my responsibility to settle the estate, the biggest portion being selling our parents home and our childhood home. We had a realtor come into the home in June, she told us the things that we should do to maximize the value of the home. We were in the process of doing them, when the oil spill happened. The day after the oil spill I was at our parent's home working on it, at that time I didn't know anything about the oil spill. That night my sinuses started running, but I

didn't give it much thought. The next week I went to my Doctor he told me that I had a sinus infection and gave me some heavy antibiotics as I was scheduled for shoulder surgery the next Monday.

Three of us had gone to the claim center to fill out a claim on our parents home, and health concerns. We were told that our claim would be at the Committee level the next day. I went back down there the following morning and ask to talk to somebody that was at a higher level with Enbridge. The woman that I talked to told me again that our claim was at the committee level. I told her that our situation was different, and that I needed to talk to somebody that could make decisions. I then told her that I expected a phone call by that Monday as I was scheduled for surgery. That afternoon (August 7, 2010) I received a phone call from Wesley Smith, who told me that he was from Enbridge and that he was told that I wanted to talk to him. I told him about our parent's home and trying to settle the estate. I also told him that Vice President Wouri had told Denise at the second Ceresco meeting when she told him of our situation with our parent's home, that our situation with our parent's home was different and that we should not worry at all, that Enbridge would take care of us. Another Enbridge man took her name and phone number down, but nobody had contacted her at all. Wesley Smith told me that he had looked at our claim and that because we were outside of the 200 foot perimeter that they were not going to be able to purchase our parent's home. I then reminded him again of what Vice President Wouri had told my sister, and he said that Mr. Wouri didn't mean it that way. I then said that I disagreed with what he was saying and asked to talk to someone at a higher level. His reply was it was at the top. I asked him for some names of others on the top. He was silent. I then said that we were at an impasse, and we should end this conversation.

We went to the community meeting in Marshall, Michigan which was held by Congressman Mark Schauer, and once again I asked what we could do about our situation. I did not realize at that time that the CEO and Vice president of Enbridge were at the meeting as they came in just before the meeting started and sat 2 or 3 rows in back of us. Afterwards, Mark Schauer's staff took my name and number down, then Meredith Powell from Enbridge came and asked for my name and phone number. She told me that she would call me the next day. After the meeting was over I was leaving when I passed Vice President Wouri, he stopped me and introduced himself to me. He said that he had told Denise that Enbridge would take care of us and that he was sorry. Meredith called me the next day and asked me if we had filled out a home purchase form. I told her no that nobody had offered that to us. She e-mailed me a form. I filled it out and sent it back to her certified to make sure they received it. I received a letter from Enbridge stating

that they were reviewing our claim on Tuesday, September 7, 2010. She called me again on September 9<sup>th</sup> and said that they had reviewed our claim and that they would purchase our parent's home because of the estate. She also said that people would probably be talking, again said that they were purchasing our parent's home because of the estate. She then told me that they are using a group of 6 appraisers from our area and that they would purchase it at the appraised amount as of the day before the spill. She then called me again and said that their legal counsel needed a copy of the trust. I faxed the trust to her, she called me again stating that their legal counsel needed more information and if we had been dealing with a lawyer and or financial advisor. I asked her why, and her reply was that he needed to know why the purchase of the home was affecting the estate. I told her that the home was a large portion of the estate. I said I couldn't settle anything until the home was sold. She said that she would get back with me.

We have great concern of the group of appraisers that Enbridge is using as we have been told that in several different cases they are not appraising homes fairly. Pat Daniel on numerous occasions has promised to make it right by the people. We do not want to take advantage of Enbridge, nor do we want Enbridge to take advantage of us.

On a larger scale, what is Enbridge going to do to make this right by all the people in Ceresco's community? This has been life altering and very stressful for most of the people who live in the community. What is Enbridge going to do if the Aquifer of the river has been stirred up? We hope that Enbridge will actually make this right by the people and show their loyalty as a Company.

**WRITTEN TESTIMONY  
BY MAYOR SUSAN BALDWIN AND  
CITY MANAGER KENNETH TSUCHIYAMA  
CITY OF BATTLE CREEK, MICHIGAN  
10 NORTH DIVISION STREET, SUITE 202  
BATTLE CREEK, MI 49014**

**SUBMITTED TO THE U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**

**SEPTEMBER 14, 2010**

Thank you for the opportunity to provide written testimony for the House Transportation and Infrastructure's hearing on the Enbridge Pipeline Oil Spill in Marshall, Michigan on July 26, 2010, and the impact of the spill on the City of Battle Creek. Our testimony provides a preliminary assessment of the spill's impact, since it is too early to understand the long-term effect it will have on the river environment and the Battle Creek community.

**ENBRIDGE OIL SPILL IMPACTS ON THE  
BATTLE CREEK COMMUNITY**

The immediate impact to the community has been well-documented in the media, and for the City of Battle Creek has resulted in the following additional costs as of August 31, 2010:

- Police Department, including Emergency Management = \$27,000
- Fire Department, including Hazardous Materials response = \$2,000
- Public Works Department, including Environmental and Wastewater Treatment = \$20,000

The following facts about the impacted area along the Kalamazoo River through Battle Creek show the importance of this water feature to our community:

- Approximately 192 acres of potentially impacted wetlands
- Approximately 14.5 miles of impacted Kalamazoo River shoreline, of which 9 miles is owned by the City of Battle Creek, 2.5 miles is privately owned, and 3 miles is public right-of-way
- Approximately 180 acres of the Kalamazoo River that is no longer safe for recreation (fishing, kayaking/canoeing, swimming) as dictated by the Calhoun County Health Department



The attached maps highlight the impacted area.

For several years, the City of Battle Creek and its Clean Water Partners have been emphasizing the importance of the rivers, lakes, and groundwater in the area. We collectively have been trying to instill a sense of stewardship of our water resources and have been promoting recreational opportunities our water ways provide. The Kalamazoo River is a vital asset for our community. However, the positive strides that have been made to shepherd that asset have been set back significantly by the stigma created by the oil spill from the broken pipe on the Enbridge Company's infrastructure.

Since 2001, an annual river conservation day event has been held for the Greater Battle Creek area. Between 400 and 600 volunteers turn out each year to clean up trash, remove tires, and remove invasive species from waterways. Many of those volunteers have made it a point to participate year after year because they care deeply about our rivers, lakes, and streams. Much of that work was conducted on the Kalamazoo River.

The Kalamazoo River is particularly important to Battle Creek as a source of recreation. Our community is fortunate to have this valuable resource right in our backyard and many use it to the fullest extent. Photography contests have been conducted to capture seasonal images within the watershed and there are plans to produce a 2011 calendar with those photos. Local canoeing events have been coordinated in a watershed-wide program known as Kanoë the Kazoo. In fact, the canoe event in the segment of river now affected by the oil spill was to have occurred two days before the spill was discovered. It was cancelled due to flood conditions. Now we can only wonder when we will be able to canoe that scenic section of the river again.

Efforts to bring attention to the river and its value to the community have encouraged adoption practices that care for the river by reducing nonpoint source pollution, especially from storm water runoff. Threats to the watershed have been identified and preventative guidelines have been developed so that everyone can help reduce pollution. Regulations have also been enacted to reduce contaminants in storm water.

Battle Creek has been very active as a community in caring for our river system. We are keenly aware of the value it has in promoting quality of life. An annual children's water festival for fourth and fifth grade students is conducted each year and historically between 800 and 1000 are in attendance at each event. The festival is used to educate children about the importance of protecting our water resources and uses the Kalamazoo River as an example of a resource needing protection. With all of the emphasis that has been placed on water amenities in our community, we are saddened by the devastation the oil spill has caused and have the following concerns:

- The strong petroleum odor on the morning of July 27, 2010, will be long remembered as the oil made its way into our community. We know that air monitoring has been ongoing as soon as response crews arrived. However, we are concerned about the long term health effects some members of our community may face who may be more sensitive to exposure from the chemical constituents in the oil.
- Businesses, residents, and the City of Battle Creek all own property along the Kalamazoo River. The use of that property is not only affected now because of the oil and the many cleanup crews, but also into the future. We are concerned about

the loss of the use of the property, loss of value of the property, and development potential because of lingering impacts from the oil spill in the area, and the stigma attached with the pollution and its impact on overall development efforts in Battle Creek both now and into the future. Environmental perspectives are becoming increasingly important in economic development efforts. More and more frequently the City has engaged with prospects who are sensitive to not only environmental conditions on a particular site, but also environmental conditions in the community as a whole.

- Some oil will be left to naturally attenuate in sensitive areas. Our worry is the length of time it will take for the oil to naturally biodegrade. We realize it will be decades for that to occur. It is also understood that aggressive cleaning may delay recovery of sensitive areas even further than if they were allowed to degrade through natural processes.
- Submerged oil is present throughout the spill-impacted area of the Kalamazoo River. The Mill Pond area of that River has a large amount of the submerged material and removing it needs to be considered a top priority. A residential area is located near the Mill Pond and the Mill Pond is widely used for recreational activities. We are troubled about the amount of oil present, about the way the submerged material will be removed, about how much will remain, and about how the residential area will be affected.
- The long-term impact from the spill on groundwater is unknown. The City uses groundwater for its drinking water supply. Although the City's well field is unlikely to be impacted by the spill, there are private wells owned by residents and businesses in proximity to the Kalamazoo River that could be impacted.
- As outlined above, many public events have been organized around the use and care of the rivers in our area. Those events certainly have been affected this year and will be into the future. There is a concern over how the public may react to efforts to reduce nonpoint source pollution, a chronic concern in the river, when pollution of the magnitude of this oil spill has occurred. Will the public react by being more concerned or will a sense of hopelessness pervade? Will some adopt an attitude that the river is so polluted now that the aesthetic, recreational, and residential value to the community is forever lost?

Many trained scientists, engineers, and specialists have been working around the clock to clean up from the oil spill. The City of Battle Creek has been impressed by the scale of this effort. In spite all of the efforts, however, the fact remains that this river system has been altered and it will not return to its former state for many, many, years to come. Hopefully, that is not a sadness that we will need to learn to live with and the Kalamazoo River and the surrounding area can be restored to its natural state. A large part of the heart of our City has been damaged by the pollution that the oil spill caused.

The City of Battle Creek and other local units of government are prepared to be a part of the long-term response to this incident. We believe it may be appropriate to establish an authority consisting of local, state and federal personnel to coordinate research, cleanup, and general restoration of the Kalamazoo River. Such an authority needs to be financially supported by federal, state, and private sources, and can be used as a test case and model for environmental response and clean up procedures, activities,

and technologies. We all need to work together to do what we can to prevent something like this from ever occurring again, and developing an effective response in the unfortunate event it does.

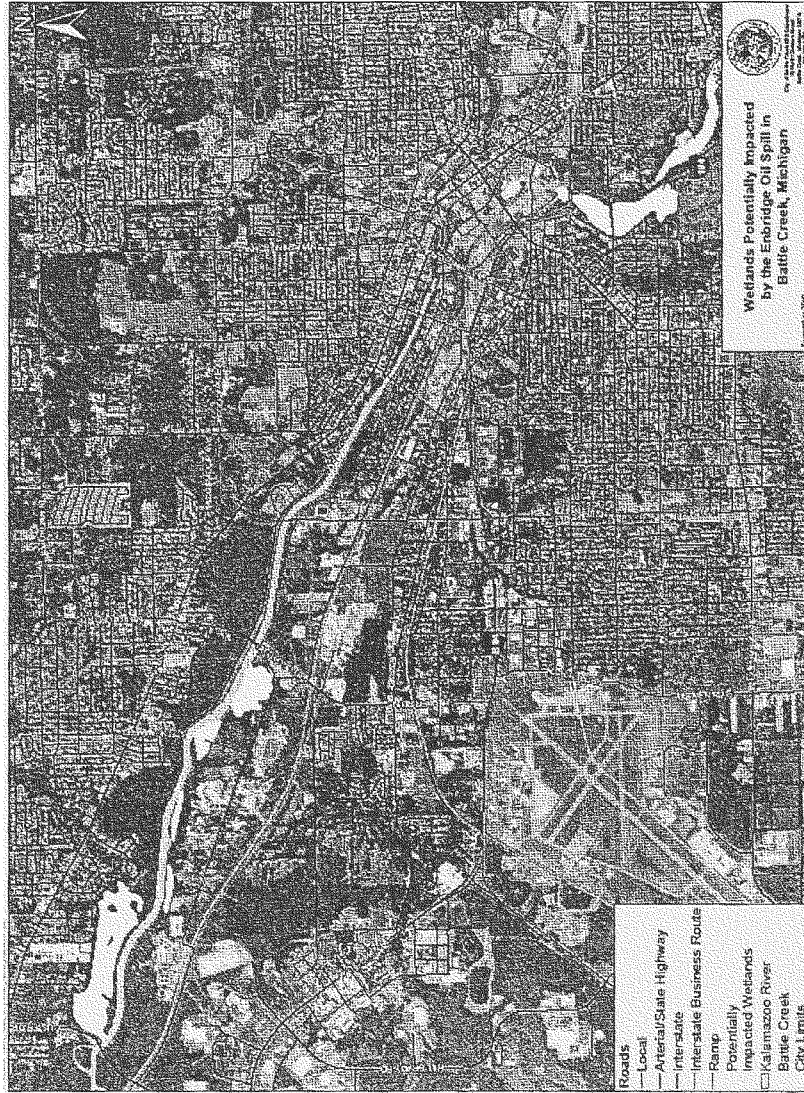
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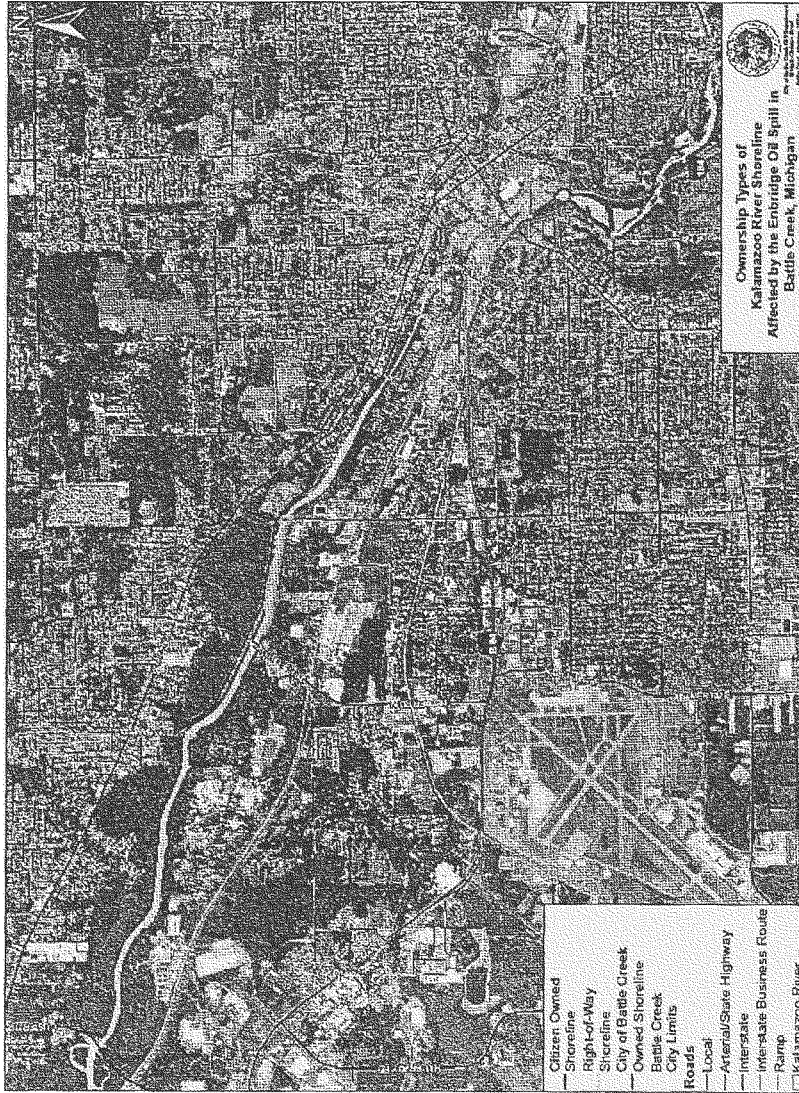
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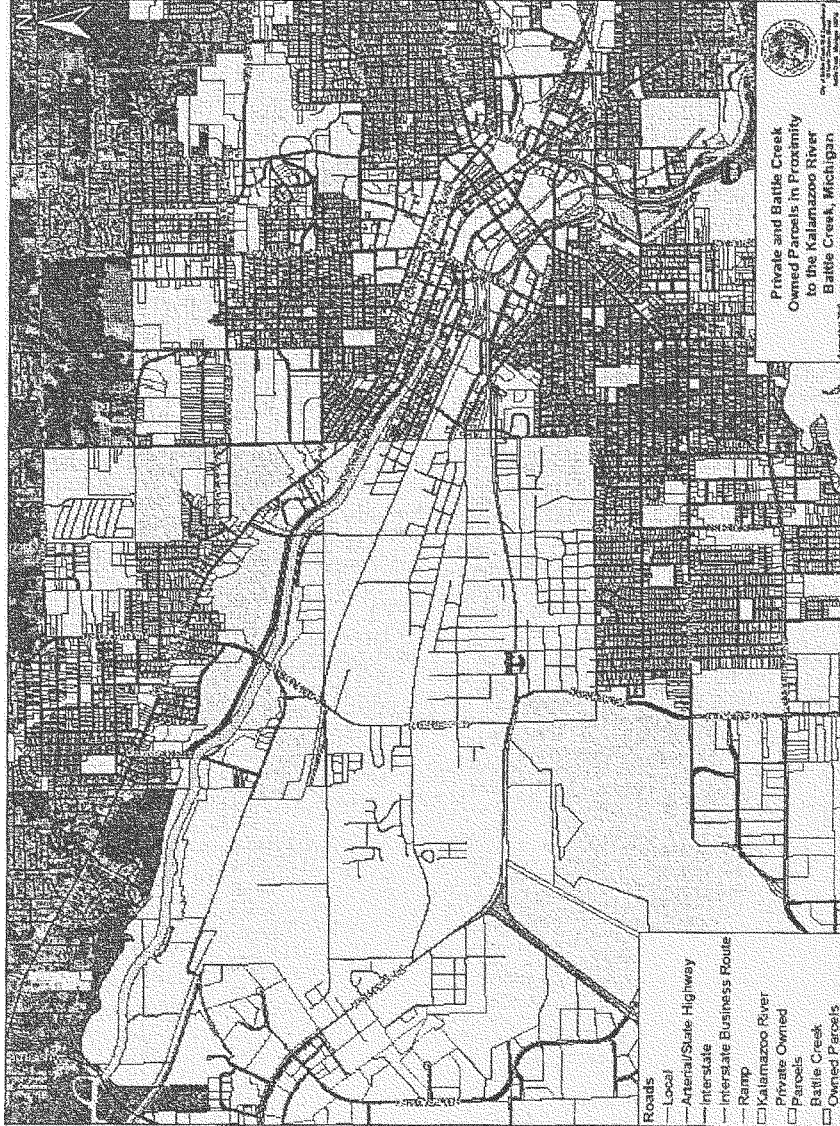
Susan Baldwin,  
Mayor

Handwritten signature of Kenneth H. Tsuchiyama in cursive script.

Kenneth H. Tsuchiyama,  
City Manager









**Testimony for Congressional Investigation into Enbridge Oil Spill  
Disaster in Michigan  
Drafted by Rita Chapman  
*Clean Water Program Director, Sierra Club Michigan Chapter  
and Elizabeth Irvin  
Sierra Club National Office***

On July 26, 2010 in Marshall, Michigan, a 30-inch pipeline, owned and operated by Enbridge Energy Partners, LLC, burst and spewed an estimated 840,000 up to 1,000,000 gallons plus of oil into Talmadge Creek, a tributary to the Kalamazoo River. Impacts to residents, wildlife, Talmadge Creek, and the Kalamazoo River occurred swiftly.

Community stakeholders and the media inquired early as to whether or not the pipeline was carrying oil from the highly-controversial and toxic tar sands. Tar sands is a sour, heavy crude that contains, on average, 11 times more sulfur and nickel, six times more nitrogen, and five times more lead than conventional oil. Whether extracted through open pit mining or in situ operations, tar sands are more toxic, corrosive, and greenhouse gas intensive than other sources of fuel. This oil is mined in Alberta, Canada and currently transported to U.S. refineries primarily via a 1,900-miles pipeline, of which the Pipeline 6B that burst in Marshall, Michigan is part.

After the pipeline burst on July 26, Enbridge CEO Patrick Daniel claimed it was not carrying tar sands crude. Later, after evading the question for days, Enbridge Energy Partner's Daniel admitted to the media that the oil that gushed into the Kalamazoo river was in fact derived from tar sands oil. Though infrastructure for a massive expansion of tar sands oil development and importation is currently being built and operated, we do not know how this heavy, corrosive material will interact with conventional pipeline materials. In order to pipe raw tar sands crude into the U.S., it must be mixed with a chemical cocktail of diluent, the composition of which is known only to the oil companies. The EPA has raised concerns that the completely different chemical composition of tar sands and diluent will drastically impact spill response procedures.

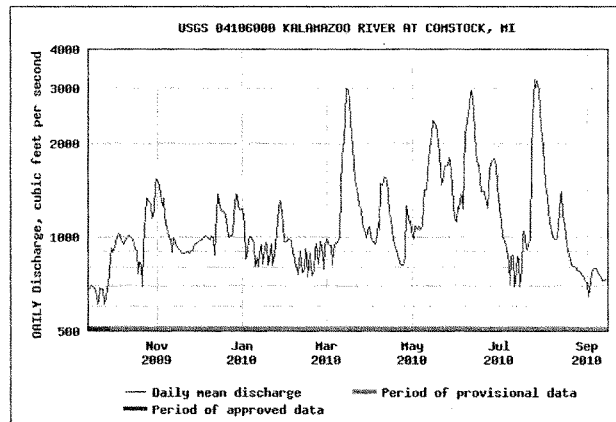
It is very important for a community to know exactly what is flowing in pipelines through their area. They have the right to know the risks and dangers at hand. Failures of federal oversight and the resulting damage to Michigan communities and wildlife should be fully examined as the United States considers new permits to lock in additional pipeline infrastructure carrying the world's most toxic fuel through their neighborhoods.

### Kalamazoo River at High Water During the Enbridge Oil Leak:

[http://waterdata.usgs.gov/nwis/dv?referred\\_module=sw&site\\_no=04106000](http://waterdata.usgs.gov/nwis/dv?referred_module=sw&site_no=04106000)

According to the U.S. Geological Survey website, URL above, when the oil leak occurred the Kalamazoo River was in at a high-water stage. In some places the river was up and over its banks, inundating riverside wetlands and the floodplain. The water carried the oil into and onto these places, and left it there as the water receded. In places the crude oil piled up like solid sludge.

Unfortunately, because of the sensitive nature of these wetlands and riparian areas, it is possible that cleaning up the oil will cause more damage than leaving the oil to degrade over time.



spring 2011 bird migrations.

However, this also means that until the oil degrades, with every high water event, more oil, or oil-sheen, will be released to the river, causing more damage. Wildlife will also be more impacted if the oil is left to degrade rather than removed, causing great concern for fall 2010 and potentially

### Public Health Concerns - Evacuations due to toxic air emissions & odors

Because strong petroleum odors quickly permeated the affected area, the Calhoun County Public Health Department (CCPHD) conducted "real time" air monitoring, testing the air for toxic volatile organic chemicals (VOCs) associated with crude petroleum. The chemical benzene was measured at levels of concern to public health, and by July 29 CCPHD officials issued a voluntary evacuation notice to an area that included 61 homes. Officials with both the CCPHD and the Michigan Department of Community Health went door to door to assure that as many people were notified as soon as possible. Residents were also advised not to spend time in the immediate area around the portions of the river impacted by the oil spill.

Exposure to the odors can cause headaches, nausea, light-headedness, vomiting, and other short-term ailments, but more seriously, exposure to certain levels of benzene for prolonged periods may increase the risk of cancer. Residents with acute prolonged illness have been advised to seek out care from their own physicians.



As the surface of the oil comes into contact with air, the benzene was/is expected to volatilize and so the emission levels will lessen as time passes. However as the USEPA and their contractors and Enbridge work their way along the river banks to remove the oil from soil and vegetation, more benzene emissions are expected. This means a high level of concern remains, and that all caution must be exercised as cleanup continues.

#### **Potential for Groundwater Contamination in the Mid- to Long-term**

This question of potential groundwater contamination from this spill so far remains unanswered. To date, well water testing by the CCPHD has not detected contamination. In the first few weeks, bottled water was provided to residents within 200 feet of Talmadge Creek and the Kalamazoo River as a precaution, for drinking, cooking, and for bathing. The CCPHD will continue to test well water periodically. The agencies have stated that if groundwater contamination does occur, it will likely take several months, as groundwater tends to flow toward a river. It is unknown what actions would be needed to remediate the groundwater, if contamination is detected at a later date.

To date, riparian residents have been advised not to use river water for irrigation or for watering animals. Irrigation by river water could cause contamination to groundwater, as this would transport the contaminated water upgradient toward uncontaminated groundwater.

There should be a mechanism in place for protecting groundwater, and for anticipating potential groundwater cleanup costs, so that if contamination is detected at some future time, there are resources already in place to pay for cleanup.

#### **Ecological and Wildlife Impacts**

In the weeks following the July 29 oil spill disaster, wildlife mired in oil were among the most heart-wrenching images in print news media and on the Internet. Wildlife are still at risk because of fall and spring migration through the affected area, since southern Michigan rivers and wetlands typically provide resting and feeding places as birds fly south. While many animals and birds have been captured, cleaned of oil, rehabilitated, and released elsewhere, birds that stop for rest, food, and water during migration may come in much higher numbers in a shorter period of time. Impacts to species of concern may be unavoidable.

The spring 2011 wildlife and bird nesting season may reveal more long-term impacts to wildlife exposed to crude petroleum hydrocarbons.

The U.S. Fish & Wildlife Service' website provides a Daily Wildlife Report on their oil spill webpage: <http://www.fws.gov/midwest/oilspill/index.html>.

#### **Tuesday, September 14, 2010 Update (Cumulative)**

Live-in care TOTAL animals: 399	3 Great Blue Herons
19 Canada Geese	2 beavers
5 Mute Swans	1 snake

368 turtles	1 Wood Duck
2 mussels	2 domestic geese
	1 Red-Winged Blackbird
	3 Great Blue Herons
	1 Rock Pigeon
	8 muskrats
	2 beavers
	3 meadow voles
	3 opossums
Total number of wildlife released to date: 989	9 snakes
91 Canada Geese	819 turtles
11 Mallards	35 frogs and toads

### Impacts of Future Oil Spills

Enbridge CEO Patrick Daniel was quoted saying that spills are an inherent risk of oil pipelines. Enbridge has applied to the Michigan Department of Natural Resources and Environment for a permit to drill support structures in the Great Lakes, in order to maintain the integrity and safety of existing pipeline structures. The pipeline in question is located at the Straits of Mackinac in northern Lake Michigan, the drinking water source for millions of Great Lakes basin residents.

Enbridge will soon be responsible for the importation of roughly 1.6 million barrels per day of tar sands oil, through the Lakehead network and the recently permitted Alberta Clipper pipeline. TransCanada, Enbridge's competitor, has recently begun operating a dedicated tar sands pipeline through the Midwest, and is aggressively seeking a permit for another pipeline that would run from Alberta to the gulf coast. Together, the new construction that has been proposed since 2008 is more than three thousand miles and could carry more than two million barrels per day of tar sands crude into the United States. TransCanada has already reported two spills on its pipeline, which has been in operation for a little over two months. Enbridge's dedicated tar sands pipeline has not begun delivering yet, but as of September 13, 2010, a third Enbridge oil spill in two months has been reported. The question is not *whether* these pipes will spill but *when* they will spill.

The Enbridge spill in Michigan is a disturbing signal of PHMSA's inability to oversee the existing network of pipelines, let alone the rapid expansion currently taking place. Spill reporting is largely left up to the pipeline companies themselves, which can result in disastrous delays in emergency response, as seen in Michigan. Local residents reported toxic smells more than 16 hours before Enbridge reported the spill to the government, significantly delaying the federal response and exacerbating the disaster. The new pipelines being constructed by Enbridge and TransCanada run through sparsely populated farmland in the Midwest. A spill in such areas might go undetected for far longer.

Such a spill, particularly on the proposed Keystone XL pipeline, would be disastrous. Keystone XL runs through the Ogallala Aquifer, a source of drinking water for 8 states and the source of one third of our nation's agricultural water. A spill the size of the Michigan accident would be catastrophic to farmers and communities throughout the Midwest.

Given the safety records of these oil companies and the inadequacy of government oversight over oil pipelines, it is even more appalling that these companies are trying to skirt what little regulation that does exist. TransCanada applied for a safety waiver on both of its pipelines to run them at a pressure above the legal limit. This waiver was granted for Keystone I, and allowed TransCanada to save one billion dollars by buying thinner steel. In the wake of the Enbridge spill and the intensive public scrutiny of oil pipelines TransCanada withdrew the application for the Keystone XL waiver, essentially admitting they were pushing for something unsafe. The company has reserved the right to reapply for this waiver at a later date, when congressional and media scrutiny has waned. PHMSA should take preemptive action and cease the practice of approving these waivers.

PHMSA must devise means of holding Enbridge, TransCanada, and other oil companies to strict leak detection and reporting standards. It must conduct its own inspections and oversight over the safety requirements for these pipelines. It must be able to enforce its recommendations, so that Enbridge and other oil companies cannot continue to ignore PHMSA's guidelines and recommendations. These companies should be required to disclose the chemical composition of the oil and diluent pumping across our rivers and farmland, and should provide to the public a comprehensive emergency response plan before construction begins on any new projects. Any community along this five thousand mile network of oil pipelines could be the site of the next Kalamazoo, Michigan or Romeoville, Illinois disaster. Until the public can be confident in PHMSA's oversight and enforcement abilities, no new tar sands pipelines should be approved or built.

**STATEMENT OF THE U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE  
INTERIOR, ON THE ENBRIDGE PIPELINE OIL SPILL NEAR MARSHALL,  
MICHIGAN, BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION AND  
INFRASTRUCTURE**

**September 15, 2010**

The U.S. Fish and Wildlife Service (Service) is the premier government agency dedicated to the conservation, protection, and enhancement of fish, wildlife and plants, and their habitats. It is the only agency in the federal government whose primary responsibility is management of these important natural resources for the American public. The Service also helps ensure a healthy environment for people through its work benefiting wildlife and by providing opportunities for Americans to enjoy the outdoors and our shared natural heritage. The Service is responsible for implementing and enforcing some of our nation's most important environmental laws, such as the Endangered Species Act, Migratory Bird Treaty Act, the National Wildlife Refuge System Administration Act, and the Marine Mammal Protection Act.

The Service's East Lansing Field Office received its first notification of the Enbridge Pipeline oil spill near Marshall, Michigan at approximately 4:00 pm EST on Monday, July 26, 2010, from the Department of the Interior's Regional Environmental Officer and responded immediately. The Service's lead environmental contaminants specialist in the state arrived at the Incident Command Post in Marshall at 6:15 pm and began providing technical assistance to the U.S. Environmental Protection Agency (EPA) and Enbridge. Because of the Service's previous work on the Kalamazoo River, the specialist was able to provide the EPA and Enbridge authorities with firsthand information on resources at risk, river conditions, access points, and local points of contact. The Service also worked with Enbridge that evening to establish a hotline for communication between the public and the Incident Command relating to sightings and rescue of oiled wildlife. In addition, the Service began working with Enbridge to determine what the company would need to do to construct a rehabilitation center for oiled birds and other wildlife. The Service also began mobilizing biologists to the site.

In the first few days of the spill, Service biologists and law enforcement agents led the reconnaissance and recovery efforts for oiled wildlife with great cooperation and assistance from the biologists and conservation officers of the Michigan Department of Natural Resources and Environment (MDNRE), and subsequently with U.S. Department of Agriculture personnel. Simultaneously, the Service organized and led the Wildlife Branch within the Operations Section of the Incident Command, oversaw construction of the Wildlife Response Center, continued technical assistance to EPA and Enbridge, participated in press briefings at the request of the Unified Command, implemented wildlife deterrence measures, and began ephemeral data collection for a Natural Resource Damage Assessment (NRDA), in coordination with the

National Oceanic and Atmospheric Administration (NOAA). The Service also established a Pollution Removal Funding Authorization with EPA for their response activities and obtained initial funding for NRDA from the Oil Spill Liability Trust Fund through the National Pollution Fund Center.

A major emphasis for the Wildlife Branch has been keeping the public and staff safe from exposure to the oil and the hazardous fumes being released from the oil while providing the best care possible for oiled wildlife. Public information and outreach about our trained responders and Wildlife Response Center was critical in preventing the public from putting themselves in harm's way as they tried to rescue wildlife.

By the end of the first week of the spill, the Service was operating with over a dozen staff on site with personnel from many Service programs in the Midwest region. Several law enforcement agents also assisted the National Transportation Safety Board and assisted in evidence documentation for the wildlife response.

The Service has led the Wildlife Branch throughout the spill response. The Wildlife Branch has included staff from the Service, MDNRE, USDA-Animal and Plant Health Inspection Service, NOAA, Enbridge and their contractors (including Focus Wildlife and others), Binder Park Zoo and other zoos, local rehabilitators and volunteers. For safety, access and other logistical reasons specific to this spill, the Wildlife Branch also has conducted the field operations components of ephemeral data collection for NRDA. The Wildlife Branch has included over 100 people throughout most of the response and has operated seven days per week since the start of the spill. All staff are trained in working with hazardous materials and wildlife.

The Wildlife Branch is monitoring fish, mussels and other benthic invertebrates, wildlife, plants and habitats impacted by the spill. As part of the response, the Wildlife Branch is capturing oiled birds, mammals, reptiles and amphibians, treating them in the Wildlife Response Center, and releasing them back into the wild when possible. The Wildlife Branch is also collecting dead oiled animals and recording observations of oiled animals that could not be captured. The numbers of oiled fish and wildlife collected and directly observed will be combined with other site-specific data to estimate the total number of fish and wildlife directly impacted by the spill. As of the morning of September 13, 2010, rescue efforts were continuing with oiled birds, mammals, turtles, snakes, and frogs still being brought in for rehabilitation on a daily basis. Until the response to the spill is complete and animals are no longer being brought in or collected, the following information regarding fish and wildlife must be considered preliminary, and viewed as only one piece of the information that must be factored in to determine the full impact of the spill on natural resources.

As September 13 over 1,400 animals had been brought in with over 1,300 of them either in care or already released. Species brought in include Canada geese, mallards, wood ducks, swans, a belted kingfisher, red-winged blackbird, great blue herons, muskrats, beavers, voles, shrews, raccoons, opossums, mink, a spotted turtle (a threatened species in Michigan), eastern box turtles, Blanding's turtles, common map turtles, common musk turtles, common snapping turtles, painted turtles, eastern spiny softshell turtles, northern watersnakes, eastern garter snakes, bullfrogs, green frogs, and American toads. Turtles were the group of vertebrates most impacted by the spill with over 1,100 captured as of September 13, and 10 to 80 affected turtles continue to be captured daily. Only 16 dead oiled fish have been found. In addition to ongoing turtle trapping and netting, the Wildlife Branch crews are still working to capture dozens of oiled Canada geese and a smaller number of oiled mallards, great blue herons, sandhill cranes and beavers still known to be in the area. Migratory birds impacted include, as of September 13, approximately 150 brought into the Wildlife Response Center and approximately 50 in the area that have been observed to be oiled by our crews but still capable of flight and not yet captured. Of all of those, 22 migratory birds have been brought in, or observed to be, dead as a result of the spill. The relatively low number of dead birds can be attributed to the rapid response, deterrence measures taken to keep birds away from the oil, and professional rehabilitation of those captured.

In the first few days of the spill, Focus Wildlife, under contract to Enbridge, directed the construction of a state-of-the-art animal rehabilitation center in a vacant building in Marshall, Michigan. The Wildlife Branch is headquartered in the same building so all reconnaissance and recovery efforts are coordinated with animal care and release. Veterinarians experienced in responding to oil spills perform and supervise the animal care. Animals are protected from other stresses and monitored prior to release. All birds are banded before release with standard Service bands. Ducks and geese also receive a second band that says "Oil Spill Bird." That band has a phone number that hunters can call for additional information.

In addition to the effects of the oil, most wildlife have diverted from the impacted sections of Talmadge Creek and the Kalamazoo River due to the increase in noise and activity from the intense response efforts with over 1,500 workers on the banks and a flotilla of airboats and motorboats. Nearly all of the vegetation has been removed in the approximately five acres of impacted wetlands in the source area and along the floodplain of Talmadge Creek.

Some of the oil that was released has sunk and is now mixed with sediments in the Kalamazoo River. We do not yet know what the long-term impacts of this might be on benthic invertebrates, aquatic plants, bottom-feeding fish, and turtles that burrow into the sediments to hibernate. Service environmental contaminants specialists are an integral part of the Environmental Advisory Group that is advising Unified Command on this and other technical issues. The Unified Command, with the advice of this group, has worked hard to balance the need to remove the oil with the desire to do as little long-term damage to the environment as possible.

The Trustees for the Natural Resource Damage Assessment (Trustees) include the Department of the Interior, represented by the Service and the Bureau of Indian Affairs; the State of Michigan, represented by the MDNRE and the Michigan Attorney General; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration; the Nottawaseppi Huron Band of the Potawatomi; and the Match-E-Be-Nash-She-Wish Band of Potawatomi.

The Trustees' scientists are conducting a variety of collection efforts to understand the full impact from this spill and develop restoration plans for the area. Most of this work is being done in cooperation with scientists from a consulting firm employed by Enbridge. They have collected water and sediment samples in addition to those that EPA and Enbridge have collected for the response and will use all analytical results that become available to them to compare the regulatory criteria and thresholds for effects to aquatic life. Fish samples were also collected for several purposes using both a standard fish health protocol that includes the evaluation of infectious disease and histopathology endpoints and an oil-spill-specific protocol for tissue residue levels. Freshwater mussels and co-located sediment samples were also collected for chemical analysis. In addition, MDNRE has an annual status and trends monitoring program for fish and benthic macroinvertebrates that includes monitoring points on the Kalamazoo River and Talmadge Creek. Monitoring under this program is being conducted in the impacted areas and reference areas during September. Researchers from Michigan State University have been studying nutrients and algae in the Kalamazoo River, so their data from before, during, and after the spill may be useful in understanding the environmental impacts of the spill.

The Trustees have also collected data to evaluate the impact of the spill and the response activities on habitats. NRDA teams surveyed habitat types and the degree of oiling along the riverbanks and floodplain of the Kalamazoo River. In addition, vegetative communities in the floodplain were inventoried to determine if the oiling or the disturbance caused by the response activities has caused a change in the species of plants present. The Trustees are especially concerned that the spill could result in an increase in invasive species in the floodplain. Finally, the Trustees are monitoring habitat impacts from construction of access roads and staging areas as well as changes to the stream and river channel and floodplain that might result from soil scraping, excavation, and increased erosion resulting from boat traffic and removal of vegetation.

In the future, the Trustees are likely to use the same protocols being used for ephemeral data collection to monitor the status of the resource and the efforts undertaken by Enbridge to restore the resource to its pre-spill condition. The Trustees may design other studies to look for impacts from long-term exposure to any residual contamination from the spill.

The Service will continue to help manage the Wildlife Branch as needed. Going forward, we will continue to participate in the Environmental Advisory Group, conduct the NRDA and restoration planning, and oversee the wildlife collection, rehabilitation and release efforts by Enbridge.

Thank you for the opportunity to provide a statement on the Enbridge Marshall, Michigan Pipeline oil spill. We would be happy to provide any follow-up information requested by Members of the Committee.