

**ATTACHMENT 5 – ENBRIDGE EMERGENCY RESPONSE TIMELINE**



## Incident Event Log

### Initial Incident Details

<u>Nature of Incident:</u> Leak downstream of Line 6b Marshall Station.
<u>Location</u> Downstream of Marshall Station. (Approximately MP# 608)
<u>Date and Time of Incident:</u> 08:16 mst July 26, 2010
<u>Immediate actions taken by the ECC (e.g. Lines shut down etc.):</u> Line was already shutdown and sectionalized. The Line was then isolated as per procedure.

### Initial Contacts (incoming & outgoing)

<u>Time (MST)</u>	
08:16	Chris Treacher (269- ) (Consumers Energy)
08:24	Tom Fridel (219- )
08:45	Ben Camp

### Details of Incident Developments

<u>Time(MST)</u>	<u>Details</u>
July 25 <sup>th</sup> , 2010	
14:58	Line 6b was shut down as scheduled per pump orders.
July 26 <sup>th</sup> , 2010	
01:04	Line 6b was started up as scheduled.
02:02	Column was unable to be filled between Mendon and Marshall. The Line was shutdown to investigate.
04:20	After consultation with CCO On-call and MBS the decision was made to restart the line.
04:52	Line was shutdown to investigate. The column separation between Mendon and Marshall was still present.
05:00	Beginning to double check volumes, numbers, and pressures.
05:30	Discussions taking place with Regional and the field, as well as with CCO On-call and Engineering.
06:40	Talked to Brian at Marshall who states that everything at the station looks fine.
08:16	Call was taken on the Emergency Line in the control center. Chris Treacher (269- ) from Consumers Energy reports oil spotted on a creek South of the town of Marshall on Highway 27 and Division Rd.

	The Line was already shutdown and sectionalized so we isolated 2 up and 2 down of Marshall (MLV# 599.43, 607.66, 610.61, and 620.66)
08:24	Called Tom Fridel to inform him of the reported Leak. PLM was dispatched. Also notified CCO On-call.
08:45	Ben Camp (PLM) called in to confirm the reported leak. He states that it is about ¼ - ½ miles downstream of our Line 6b Marshall Station.
08:50	Tom Fridel and CCO on-call notified of the confirmed leak. Tom Fridel states that there is no need to contact the Police as we have field staff on site and don't require assistance at this time.
11:48	As per Tom Fridel there is nothing further to report. They will be sending out an Update Via e-mail when there is something new to report.
16:00	Called Bill Burdeau to notify him of some calls we were receiving on the Emergency Line in regards to oil on the river near Ceresco, Michigan. Bill reports they were unsuccessful with booms at this location so they moved their efforts further downstream.
16:10	Bill Burdeau reports they have just finished up an emergency response meeting and will be sending out an update shortly. I will forward on the update when it becomes available.
20:05	<p>Called Bill Burdeau for an up-date. Staff had just completed their 9:00 pm briefing. Below are the minutes from the 6:00 pm as well as the 9:00 pm briefings</p> <p>Public Officials Briefing  <b>6:00 PM (Local)</b>  - Line was shut down last evening as part of planned shut down  - When the line was planned to restart pressure was not obtained and the upstream and downstream valves were closed off (approx 6:50 AM local time)  - Estimated 19,500 barrels have been released  - SBS needs to be notified of the leak (Complete)  - Other counties are being notified by county officials (Complete)  - The Plan is to work 24 hours a day as long as it remains safe  - Recovered products to be taken to Griffith or Stockbridge tank farms  - Several concerns were raised about the water speeds and how for downstream we are currently set up  - Enbridge is monitoring benzene levels, personal gas monitors will be provided to the police department (Complete)  - Brian Buck to establish hot zone and contact Larry Springer to get a 1-800 number (Complete)  - Meeting Scheduled this evening at 9:00 PM local  - Debriefing will be planned for every 3 hours on the hour  <b>9:00 PM (Local)</b>  - Reviewed items from earlier meetings  - Trucks are currently emptying into frac tanks at the Marshall station  - Marlin provided an update on the Benzene readings, David will continue to provide updates which will be used to determine if additional evacuation is necessary. The residential neighborhoods need to be the focus four hourly monitoring  - A hot zone has been established and 50' from the edge of the work zone will be used  - Bill provided an update on what resources are present and what is coming, it was decided that more frac tanks and vacuum trucks will be necessary  - Rusty provided an update on the cleanup effort, at the head, 4 flumes have been set up</p>

	<p>and appear to be collecting about 75% of the oil. A road will be set up tomorrow so that equipment has easier access to the sites</p> <ul style="list-style-type: none"> <li>-Mick provided an update on the boom deployment areas, A drive and 15 mile have boom and vac trucks at them. Wattles Park has about 600 feet of boom deployed along with vac trucks. Linear Park is the next downstream site where boom will be deployed. Access is a problem at several locations. Wattles was the last spot that sheen was noticed.</li> <li>-Tom Fridel provided an update on the environmental impacts including wildlife. It was recommended that more resources be utilized in this area. Shane Yokum provided an update on the environmental contractors being utilized and what is coming this way. At this time we do not need to be concerned about drinking wells, but it is possible that some farmers utilize water from</li> <li>-Signs are being made up and will be placed on the way down to Morrow Lake warning of bodily contact</li> <li>- The phone number has been set up 1-800-</li> <li>-A written plan is being worked on and will be ready for the mid-night meeting</li> </ul>
22:50	<p><b>12:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Benzene levels were collected in the residential area, less than 50 PPB detected at 2 sample points and no LEL. Monitoring will continue through the evening. No additional evacuation necessary.</li> <li>-Bill Burdeau provided an update on the resources presently being utilized and what we can expect tomorrow.</li> <li>-The flumes are holding and working well and appear to be improving.</li> <li>-At Division boom, A drive has boom, 15 mile has boom, Wattles has boom, pulling in boom at Linear Park currently. Frac tanks that are on site are full and tankers will begin to transport crude to Griffith.</li> <li>-Wildlife contractors will be present in the morning to assist.</li> <li>-A mobile laboratory will be on site tomorrow to take water samples and how the data is distributed will be worked out.</li> <li>-Pipeline integrity is evaluating tool runs from the past to assist with a return to service plan.</li> <li>-Consumers Energy and the rail road have been notified.</li> <li>-EPA re-iterated that we do not want to get oil past Morrow Lake.</li> <li>-Around 24 residence have been evacuated as of now.</li> <li>-No roads are currently closed, but this will be evaluated again in the morning.</li> <li>-A sampling plan and sight specific needs to be identified. The hot zones will also be marked.</li> </ul>
July 27, 2010	
01:20	<p><b>3:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Monitoring in the residential area is continuing, 460 ppm benzene on bridge, pid &lt;4 at homes, dragger &lt;50. Readings at the bridge are expected to increase during the morning. Police are informed that the bridge may be closed, traffic may need to be rerouted.</li> <li>-There will be 20 additional frac tanks on site in the morning with a capacity between 20,000 and 30,000 gallons</li> <li>-Oil is continually being sucked up, with 2 or more vac trucks at each site. Will continue to move downstream with additional boom and vac trucks. Boom was removed from Burnum and Riverside because the water was too swift. The boom was moved to Linear park along with 2 vac trucks. Boom will be deployed at Morrow lake regardless of oil on site or not.</li> <li>-May need to consider revising the estimated spill amount, and obtaining an oil water indicator to get a accurate measure oil being retrieved.</li> <li>-The powerplant has been determined not affected based on location and the railroad</li> </ul>

	<p>operator was informed of the leak.</p> <ul style="list-style-type: none"> <li>-The health plan will be prepared by David Lu, it will be template to be filled out at the site.</li> <li>- There is a minimum of 2 PLM supervisors for each crew. To keep clean-up progressing, additional supervisors are in route to focus on repair.</li> </ul>
04:00	<p><b>6:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Monitoring in the residential area resulted in lower benzene levels of 50 &lt; ppm.</li> <li>-2 more tankers, 4 vac trucks, 15 frac tanks, and more manpower from consolidated and charps have been added for resources.</li> <li>-The flume is holding, and there is a crew pulling oil off upstream of the creek. There is still a crew at Division at the culvert, and two vac trucks at 15 ½ mile, moving to A</li> <li>-The current is very strong at linear park, preventing the boom from being set. Bringing in a "set back", to take oil off water at 20<sup>th</sup> street bridge.</li> <li>-Augusta is being considered for a boom location in addition to one other location. More boats are on the way that to help set the boom. An additional 23,500' of boom will on site by 9 AM.</li> <li>-Weather will be monitored during work to ensure worker safety.</li> <li>-The leading edge of the oil is at the 20<sup>th</sup> street bridge in Battle creek.</li> <li>-Drinking water samples will be obtained and tested to ensure it is safe.</li> <li>-Focus Wildlife will arrive at 10 am.</li> <li>-terri Larson and larry will be on site for media contact,</li> <li>-15 mile is not at a point to close, pedestrian traffic will be restricted.</li> </ul>
07:00	<p><b>9:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Steve Wuori opened the meeting by thanking the outside agencies for their interest and cooperation thus far.</li> <li>- Jim Rutherford and Dirk Dunham mentioned that they are activating their EOC which is located in Battle Creek in the Justice Complex. The County and government groups will be located there. In addition Kalamazoo County sending a team and a response trailer to Marshall. The briefing will be moved to the EOC at 161 East Michigan Ave. , Battle Creek, MI.</li> <li>-Large scale maps are being worked on to allow for referencing of crew/work locations.</li> <li>-A special focus will be put on the area before the Morrow Lake area.</li> <li>-The flume setup up near the leak site continues to be a success.</li> <li>-Air quality continues to be monitored and will continue to be a focus.</li> <li>-The Wildlife rehabilitation contractor will be on site today to respond to any wild life.</li> <li>-A county press release will be sent out shortly.</li> <li>-Enbridge intends to GPS all of the work locations.</li> <li>-Work on access continues to move forward with road construction at some of these sites.</li> <li>-Shane Yokum provided an update on the Benzene levels. A vehicle is out continuously monitoring work sites, and neighborhoods.</li> <li>-The minimum risk levels for benzene is .09.</li> <li>-CTEH is on site to help with monitoring and provided an update on the services they are going to be providing. They will bring in more monitoring tomorrow for first responders.</li> <li>-An Enbridge air quality person has been requested at the EOC, in addition air monitoring will be taking place while the wildlife efforts are taking place.</li> <li>-Several calls are being placed with residents feeling nauseous, they are being instructed to call the 1-800 number. Enbridge has an individual dedicated to responding to the calls, but it was suggested that this structure be looked at and addressed immediately. This will become a joint effort between the County and Enbridge.</li> <li>-Dave provided an update on the resources that are currently in use.</li> <li>-Bill Burdeau provided an update on the flume set up near the leak area and noted that this area will continue to be a focus.</li> </ul>

	<ul style="list-style-type: none"> <li>-Steve Sleaver mentioned that overnight they installed boom at the 20<sup>th</sup> street bridge, downstream of 20<sup>th</sup> street boom was installed near the boat launch.</li> <li>-Boom has been deployed at division, 15 1/2 mile rd, A Dr North, Wattles Park, Linear Park by Jackson and 20<sup>th</sup> St., Bedford Rd.</li> <li>-It was emphasized again that the area upstream of Morrow lake will be a focus.</li> <li>-For the next meeting, the work sites will be noted on the maps.</li> <li>-Boom position will be focus today to ensure they are properly utilized.</li> <li>-Near the Ceresco dam there are some natural collection points that can be utilized. Just downstream of the dam is another area that will be utilized.</li> <li>-Steve Wuori wanted to emphasize the importance of the safety of everyone involved.</li> <li>-Sampling plans continue to be put together; a mobile lab is expected on site around 11:00 AM this morning. This sampling will include drinking water samples.</li> <li>-The EPA requested a specific health and safety plan for this work.</li> <li>-It has been suggested that discussions with Morrow Lake should begin taking place.</li> <li>-A press conference will be held today</li> </ul>
13:00	<p><b>3:00 PM (Local)</b></p> <ul style="list-style-type: none"> <li>-An update was provided on the boom locations and the resources that are currently at the sites.</li> <li>-An environmental update was given on the benzene readings and they continue to drop. Moderate to strong odors still exist, but these are not related to VOC's. Some water sampling has taken place, both surface water and drinking wells.</li> <li>-The benzene badges are coming in tonight for those who want them. More benzene monitors are coming in, as well as chips for the monitors.</li> <li>-A count will put together for those residents who have been evacuated.</li> <li>-Several calls still coming to the 1-800 number, concerning health, wild life etc.</li> <li>-A site safety plan will be in place before any individuals are allowed on the river this evening.</li> <li>-No safety incidents to date.</li> <li>-A security person is tending to the media and others who do not have authorization to be in the site.</li> <li>-A note was made to be cautious of several logs down at the lower end of the river</li> <li>-More vac trucks to be here tomorrow</li> <li>-We may have to man a radio if necessary to communicate between command centers.</li> <li>-Next meeting will be at 7:00 PM (local)</li> </ul>
17:00	<p><b>7:00 PM (Local)</b></p> <ul style="list-style-type: none"> <li>-There have been no detections on Benzene in the community areas. The EPA is also shadowing the workers in the field taking measurements.</li> <li>-There is more matting on the way from Roberts pipeline, along with 6 more light plants and 2200 feet of containment boom.</li> <li>-The 'setback' worked well in the swampy areas. It will be moved to the flume site to take better advantage, along with a skimmer. There are now two flumes at the site.</li> <li>-Flume is being installed at A Drive. A crew is continuing to work at the culvert with 1 tanker and 5 vac trucks. At heritage park there are two skimmers, two light plants, and a vac truck with one more on the way. Linear park boom has been difficult to place but work is continuing. There is 1000 feet of boom installed at Fort Custer. There are two runs of booms installed at Morrow Lake. There is a vac truck staged at the Dam continually cleanup.</li> <li>-the Sherriff will be contact to close or manage traffic on the river to keep public boats from disrupting the cleanup.</li> <li>-there are 35 rooms filled so far with landowners who have voluntarily evacuated.</li> <li>-there is a joint press conference scheduled at 4pm</li> <li>-the governor will be on site at 8:30 PM</li> <li>-A map has been created to show the current location of resources and manpower and</li> </ul>

	<p>collection points and is being updated.</p> <ul style="list-style-type: none"> <li>-the sheetmetal workers building is being looked into for additional storage of resources and supplies.</li> <li>-the superior command post will be on site at 2AM and will be staged at the joint command post.</li> <li>-a list of key people for each collection site is being created to help coordinate resources being dispatched</li> <li>-A safe work permit is being filled out for each shift and for each crew location with an Enbridge representative at each location.</li> <li>-the next meeting will be at 12 AM</li> </ul>
<p><u>22:00</u></p>	<p><b>12:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Elevated benzene reading in flume area, crew wearing half masks, cartridges and filters to be changed every 6 hours. All benzene readings at the dam are less than .2 ppm, heritage park benzene readings also low levels. Benzene monitoring will be done at the sheet metal shop, during class time. Residential air monitoring ongoing, no benzene detected in community area.</li> <li>-There will be more crew trained in boom deployment on site at 7 am, more air compressors, light plants and other supplies.</li> <li>-More gas monitors are being obtained for contractors, will be provided by CTEH</li> <li>-More people will be sent to Morrow lake to get a boom deployed. Additional personal floatation devices will be brought to sites.</li> <li>-There will be a large safety meeting and orientation for all contractors tomorrow morning before work starts. Make sure there are tailgate meetings before starting work and hazard assessments for each work site, report all near misses to help prevent incidents.</li> <li>-There are two trucks with water will be stopping at sites for workers</li> <li>-The police have been keeping the public under control and away from sites, it is a good idea to put caution tape up.</li> <li>-A large commercial space was rented for animal rehab. Four miles of the creek have been evaluated so far. The actual rehab will start Thursday.</li> <li>-Once excavation starts the soil will be stockpiled. Excavation is scheduled to start tomorrow.</li> <li>-There are 2 skimmers at the flume site, with vac trucks. The excavation site is not safe for work. The pipelines have matting to prevent more damage. There have been some roads installed for access, and will be increased tomorrow. More mats have been ordered.</li> <li>-A new staging area has been set up at the sheetmetal warehouse.</li> <li>-At 16 mile rd there are 2 vac trucks working, 15 ½ mile rd has vac trucks working, A drive has flume upstream, and downstream has skimmers.</li> <li>-At waddles park 3 vac working, at 20<sup>th</sup> and Jackson MPC is working, 2 access roads created by Kalamazoo sherriff dept at Gail community park for boom and Climax and Streamside for boom.</li> <li>-So far there are 11 locations with boom, with 10 additional pointed out for the morning.</li> <li>-45 rooms filled with residents, voluntary relocations.</li> <li>-Flooded homes from previous storms in the spill area will be checked for oil.</li> <li>-A map has been created with boom locations and man power at each location will be added.</li> <li>- The site specific safety plan has been reviewed and an operational plan will be available by 7am</li> <li>-A unified command press conference is scheduled at 10:30 am.</li> <li>-Any new contractors or resources should be filtered through the Marshall office.</li> </ul>

	Summary of Current Actions
<p><u>July 28</u> <u>05:50</u></p>	<p><b>7:00 AM (Local)</b></p> <ul style="list-style-type: none"> <li>-Tom Reminded everyone to focus on their task.</li> <li>-Meetings will be held 4 times a day, at shift changes, noon and mid-night.</li> <li>-Several more boom locations identified last evening and have been broken down into divisions.</li> <li>-Still attempting to get boom pulled at Morrow Lake.</li> <li>-Teams will be assigned to the divisions and a focus will be put on those areas which includes more deployment and more boom sites.</li> <li>-Communication will be critical today and a structure will be set up to make this happen.</li> <li>-Jim Helhowski will be the logistics chief</li> <li>-The 5 divisions heads will evaluate what resources are necessary at their sites and will reports back to make that happen.</li> <li>-Safety is to remain a focus when completing job tasks.</li> <li>-The 5 division heads for the day shift are Marty Fail, Steve Sleaver, Brian Treecus, Ryan Anderson, Bill Palmer</li> <li>-Security will be at the gate area to sign in visitors and keep unnecessary individuals out of the areas</li> <li>-Air quality monitoring continues to take place. There 117 real time readings and no benzene was picked up.</li> <li>-An animal hospital is being constructed and they will begin bringing in animals later today. Jim Snider will be the contact for the wildlife issues.</li> <li>-The EPA is going to be setting the benzene limits and a discussion will take place later today around this issue.</li> <li>-The EPA brought up a concern about an area around 15 1/2 mile where some boom was moved.</li> <li>-The media is starting to move down river, report them to Terri Larsen if there are concerns.</li> <li>-A community meeting was held last night where information was provided to the public.</li> <li>-This has moved to the national media and a reminder was provided to keep the media at a safe distance and remain courteous.</li> <li>-Another press conference will be held today at 10:00 AM (Local)</li> <li>-Media pocket cards will be made available to all those who require. Terri Larsen reminded everyone to refer all media to one of the public affairs officials for comment.</li> <li>-An aerial tour will take place this morning to determine where the lead oil edge is located.</li> <li>-A reminder of the number to call for public information 1-800-</li> <li>-If necessary, additional individuals will be place on returning these calls</li> <li>-An EPA order was given to Enbridge that require information to be relayed to them. Bob Steede and Patsy Bolk will work on this to gather information for these requests.</li> <li>-The unified command plan is still the approach being taken and documentation remains a critical component of this.</li> <li>-The safety orientations for new contractors is taking place.</li> <li>-Vehicle safety continues to exist, vehicle parking has become an issue and we need to remain diligent.</li> <li>-Brian Johnson (Operations Chief) 918-</li> <li>-Next meeting will be today at noon</li> </ul>
<p><u>July 28</u> <u>10:00</u></p>	<p><b>12:00 PM (Local)</b></p> <ul style="list-style-type: none"> <li>-New lay down area established at MCW which is located at the corner division.</li> <li>-Operations continue as planned and more boom continues to be deployed</li> <li>-Tom re-emphasized the importance of the 800 number, this will now be staffed 24 hours a day, and a new venue for this is going to be looked at</li> <li>-Safety continues to be a focus and there have been no issues to date</li> </ul>

