

SCAT Survey

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Moon-Hines Flowline Spill

The SCAT team conducted a survey from the source of the spill, which is a leaking underground pipe (31° 45' 12" N 88° 51' 6" W), to the north end where the spill was contained (37.76157 N 88.85402 W) from approximately 1000 to 1230. Phase one of the spilled oil clean up consisted of collection and removal of free standing pools of oil and contaminated vegetation. Phase One of the cleanup was estimated to be approximately 90% complete at the time of the survey.

Soil excavation was being conducted near the source of the spill. The excavated area was designated as "the dig". An area down gradient of the source had been cleared to allow free flowing oil and surface water to collect at an underflow dam (Photo 2). The SCAT team followed the oil from the source downstream to an access road. Water flow traveled to a culvert that went under the access road (Photo 3). Once on the other side of the road, the oil followed a ditch channel. Standing oil and oiled vegetation had been removed from the immediate area of the ditch channel as compared to the January 9th SCAT survey. The soil surrounding the ditch channel had been covered with Oil Gator. Oil was seeping from the soil (Photo 5) in several areas around the root systems of trees and bushes. The entire area affected by the spill had been divided into Zones A through E (Table 1). Zone A included the area north of the culvert, Area E encompassed the area at the northern most area where the spilled oil was contained.

Clean up personnel was using oil gator, absorbent pads, and oil snares to collect the oil. The crews were also raking vegetation and placing it in bags in Zones A through E. Oil traps were being utilized to prevent recontamination of cleaned areas in Zone A. The traps consisted of a collection point and a pump. Surface water and oil was pumped around cleaned areas to prevent the re-contamination of the area. Oil in Zone A relatively stayed along the ditch area with most of the coverage being in a 5 yard band and some coverage up to a 20 yard band.

The ditch became less defined in Zone B ((N31°45.038', W088°51.065')). Oiled vegetation on the periphery of the spill was being collected as part of Phase One of the clean up (Photo 7). In Zone B, the oil spread out into a larger band (approximately 50 yards) because the ditch did not have the capacity to carry the oil and the grade of the terrain was relatively flat. Pooled oil had largely been removed as compared to the January 9th, survey. An oil collection curtain had been constructed from a material known as Nylon 66. The curtain stretched approximately 50 yards perpendicular to the water flow in the spill area. Surface water flowed under the curtain while oil was skimmed from the surface of the water by the curtain (Photo 8). Zone B included areas where oil had collected in the soil near the base of fallen trees and stump holes (Photo 9). These areas are to be flushed with water during Phase 2 of the clean-up.

The third curtain was located at the boundary of Zones B and C. The water flow through the area was not well defined. Clean up personnel periodically collect pooled oil collected up gradient of the curtain. The band of oil in Zone C included oiled vegetation on the ground and some pooled oil in the shallow ditch and low natural collection places in the terrain.

The terrain in Zone E remained relatively flat with well defined flow channels. Oil was observed in areas in a band approximate up to 50 yards wide. The final control was at 31.76087 N 88.85349 W which consisted of hard boom, sock boom and a Nylon 66 curtain boom to contain the oil. No oil was observed past this control point. At 31.76157 N 88.85402 W, there was a beaver dam which had water backed up.

At 1600, there was an afternoon meeting which included EPA, Coast Guard, County EMA, MDEQ, Contract Clean-up Personnel, and Responsible Party Representative. The SCAT team and the contractor agreed that the recommended clean-up process is to continue to recover as much of the contaminated vegetation as possible and continue collection with oil snares, absorbent rags, and vacuum trucks. The raking and bagging of oiled vegetation and the use of oil gator on dry ground will also continue. Phase one of the remediation is nearing 100% completion in each of the zones except Zone D. Phase one is approximately 90% complete in this zone. Soil excavation will continue in “the dig” area. A frac tank will be brought into the area and filled with water from a nearby creek. When water is available the flushing process of Phase two will begin.

Table 1: Clean up Zones

Zone A	N31°45.245', W088°51.091' - N31°45.038', W088°51.065'
Zone B	N31°45.038', W088°51.065' - N31°45.400', W088°51.064'
Zone C	N31°45.400', W088°51.064' - N31°45.555', W088°51.116'
Zone D	N31°45.555', W088°51.116' - N31°45.641', W088°51.182'
Zone E	N31°45.641', W088°51.182' - End

Photo 1: Head of Spill “The Dig” (N31°45.223', W088°51.089')



Photo 2: Temporary Underflow Dam



Photo 3: Culvert: (N31°45.227', W088°51.085')



Photo 4: Creek Channel (N31°45.245', W088°51.091')



Photo 5: Oil Seeping (N31°45.262', W088°51.086')



Photo 6: Oil Trap (N31°45.279', W088°51.084')



Photo 7: Oiled Vegetation: (N31°45.315', W088°51.055')



Photo 8: Nylon 66 Oil Curtain (N31°45.339', W088°51.051')



Photo 9: Typical oil seep from soil near vegetation roots (N31°45.334', W088°51.049')



Photo 10: Second Curtain (N31°45.389', W088°51.048')



Photo 11: Third Curtain Zone B-C Boundary ((N31°45.400', W088°51.064')



Photo 12: Marsh Master Material Transport Vehicle



Photo 13: Material Transportation



Photo 14: Oil Collection Point



Photo 15: Final Spill Controls (N31°45.670', W088°51.209')



Photo 16: Final Spill Controls (N31°45.670', W088°51.209')

