

**Inconspicuous Contamination: Velsicol Chemical Corporation and Hidden
Oaks Golf Course – St. Louis, Michigan**

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Imagine walking onto the sixth tee box at Hidden Oaks Golf Course in St. Louis, Michigan. You pull out your driver, tee up the ball, and try to play a hook to compensate for the dog-leg left. The ball hooks too far, flies over a wall of trees, and lands in a somewhat circular area of grassland. Searching for your ball, you come across many metal posts that surround this desolate area. The tops of the black posts have their lids locked with a Masterlock. The white posts have unlocked lids. Curiously, you decide to lift up the lid to see inside. A valve that says “test well” is at the top of the post. You shrug, think it has to do with something about testing the groundwater, and find your ball ten feet away. Pulling out a nine iron, you set your feet, swing, and land the ball on the green. The only thought on your mind is hoping not to three putt.

This area that the golfer voluntarily entered was actually a former burn pit that was used by the Michigan Chemical Company and the Velsicol Chemical Corporation from 1956 through 1970 (See figure 1).¹ The site contains “an inactive waste and disposal site, consisting of an open dump, burn pit, brine well, and brine pond.”² A person without adequate knowledge of the Velsicol Plant would presently never guess that this area of grassland had ever been a

¹ Michigan Department of Health. “Public Health Assessment: Former Burn Area – St. Louis, Gratiot County, Michigan.” EPA Facility Id: MIN000510389. March 21, 2012. Web. http://www.michigan.gov/documents/mdch/Former_Burn_Area_PHA_Public_Comment_379509_7.pdf.

² Ibid.

site where hazardous “waste liquids” were burned weekly.³ This area was used for the “disposal of polybrominated biphenyls (PBB), tris (2,3dibromopropyl) phosphate (TRIS), dichlorodiphenyl trichloroethane (DDT), and filter cakes from bromide operations.”⁴ Although an exhaustive log containing all the materials that were disposed of at this site was never created, it is likely that “magnesium oxide wastes, sodium chloride wastes . . . other hydrocarbon wastes, and heavy metal residues” were also disposed at this site.⁵ Interestingly enough, the contamination is said to be deep under the ground without having the potential to harm anyone who has come in contact with it. Even as the EPA continues to research and sample the former burn pit located on the Hidden Oaks Golf Course, the golf course continues to operate the same as it has since it opened.

The main plant site is located in St. Louis, Michigan along the Pine River at 500 Bankston Street, which is directly across the Pine River from the burn pit (See figure 2 & 3). Since the middle of the 1800s the plant site has served as a “lumber mill, oil refinery, salt plant, and chemical plant.”⁶ In 1935, the MCC (Michigan Chemical Corporation) purchased the area from former operating

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ United States Environmental Protection Agency – Region 5. “Five Year Review Report: Fourth Five-Year Review Report for Velsicol Chemical Corporation Site – St. Louis, Gratiot County, Michigan.” September 2012. Web. <http://www.epa.gov/region5/////cleanup/velsicolmichigan/pdfs/velsicol-mi-4th5yr-review-201209.pdf>

Henry Holcomb's sawmill and began manufacturing chemicals.⁷ This is when the refinery began deliberately dumping wastes into the Pine River.⁸ As a result, the citizens of St. Louis developed a petition in 1941 to pressure the city to create a plan against the plant due to the odors arising from the river.⁹ Simultaneously, the MCC began research on DDT and constructed a DDT plant in 1944 to aid the Allies during World War II from insects.¹⁰ Around this time, DDT began being heavily scrutinized due to its harmful properties to living organisms other than insects. In 1963, Velsicol Chemical Corporation took over MCC, and in 1964 all manufacturing of DDT was stopped.¹¹

Although the manufacturing of DDT was discontinued, the Velsicol Plant continued to be inspected concerning its harmful actions on the environment. It was the cause of the one the worst agricultural disasters in United States history in 1977, when it accidentally substituted a fire retardant (PBB) in cattle feed that was shipped across the state. Hundreds of cattle were disposed of, while it was suggested that almost every person in the Lower Peninsula in Michigan had consumed PBB.¹² As pollution monitoring of the area had been in

⁷ City of St. Louis: Middle Of The Mitten. "History by Decades." http://www.stlouismi.com/1/stlouis/history_by_decades.asp

⁸ Alma College. "Pine River Timeline." http://www.alma.edu/academics/departments/social_sciences/public_affairs/involvement/pineriver/timeline

⁹ Ibid.

¹⁰ "History by Decades."

¹¹ Ibid.

¹² Ibid.

place from the 1930s onward, the DNR began an investigation of the contamination of the area and found that it was dangerously contaminated which led to the closing of the Velsicol Plant in 1978 and the initial cleanup actions of the area.¹³

In 1982, Velsicol, the U.S. EPA, and the State of Michigan agreed to a Consent Judgment which stated that Velsicol was to provide \$38.5 million for the cleanup activities.¹⁴ The cleanup activities included tearing down the buildings on the site as well as constructing “a slurry wall around the fifty–four acre site and a clay cap over the site.”¹⁵ These cleanup measures involved the main plant site as well as the Gratiot County Landfill where cattle was disposed of and the previously stated burn pit area that was at this time, on the property of a functioning golf course.

The burn pit site was purchased in 1970, and a 9–hole golf course was constructed around the burn pit named Edgewood Hills located at 1270 Monroe Rd.¹⁶ When Velsicol closed in 1978, the plant was under heavy investigation along with the sites that it maintained while the plant was still in production. In 1982, the former burn site was proposed to the National Priorities List (NPL) of

¹³ Ibid.

¹⁴ United States Environmental Protection Agency. “Velsicol Chemical Corp. (Michigan).” Last updated March 28, 2013. <http://www.epa.gov/R5Super/npl/michigan/MID000722439.html>

¹⁵ Ibid.

¹⁶ Hidden Oaks. “History & Our Mission.” Web. <http://www.hiddenoaks-golf.com/about.html>

the EPA.¹⁷ Subsequently in 1983, during the first cleanup actions, “68,000 cubic yards of contaminated soil” was excavated which “led to the deletion from the NPL in 1983.”¹⁸ This soil was then placed in the main plant site within the boundaries of the slurry wall and underneath the clay cap that rests on top of the site.¹⁹ The EPA, in agreement with the State of Michigan, removed the site from the NPL because it was “determined that responsible or other parties have implemented all appropriate response action required.”²⁰ The Velsicol Burn Pit Site (Gratiot County Golf Course Site) remained quiet until in 2006 when “soil and ground water contamination was found and the EPA and the State of Michigan decided to propose this area to the NPL,” again.²¹ Testing had been continuously going on in the area, but it seemed that the logical and responsible thing to do was to re-evaluate this area and adopt the necessary precautions.

The reports seem to contradict each other as to the level of contamination that is found in this area. On the site, two ash piles still remain in the area and were finally analyzed in 2005. In these samples, “levels of

¹⁷ United States Environmental Protection Agency. “NPL Site Narrative for Gratiot County Golf Course.” Last updated November 27, 2012. <http://www.epa.gov/superfund/sites/npl/nar1809.htm>

¹⁸ Ibid.

¹⁹ “Public Health Assessment: Former Burn Area – St. Louis, Gratiot County, Michigan.”

²⁰ NPL Site Narrative for Gratiot County Golf Course. Federal Register Notice: December 30, 1982. <http://www.epa.gov/superfund/sites/npls/nl/n0503022.pdf>

²¹ United States Environmental Protection Agency. “NPL Site Narrative for Gratiot County Golf Course.”

arsenic and lead were found higher than screening levels.”²² Although, the Michigan Department of Health feels that the “contaminants present in the soil at the FBA (Former Burn Area) will not harm people’s health,” the statement seems to be completely and utterly contradicted as stated later in the report that “not enough information is available to determine if the contaminants present in the ash piles at the FBA could harm people’s health.”²³ A misguided expectation for this area is that “workers and visitors to the golf course are not expected to have contact with the ash piles,” ignorantly because “the FBA is not on the golf course.”²⁴ In actuality, the FBA is only a few feet off of the sixth hole fairway, and looks nothing like or has any indication that it had ever been a burn pit, or a Superfund site of the EPA (See figure 4). I know this from personal experience as I strolled onto the FBA that is now covered with grass. The only reason I knew it was the FBA was due to the test wells that surrounded the area (See figure 5). The area contains many test wells, as well as other metal posts to confirm the area. Because there is insufficient evidence to suggest the accurate harmfulness of the area, the Michigan Department of Health has recommended “restricting public access to the ash piles,” but nothing has gone into effect

²² Michigan Department of Health. “Former Burn Area.” 2012. http://www.michigan.gov/documents/mdch/Former_Burn_Area_Fact_Sheet_March_2012_379510_7.pdf

²³ “Public Health Assessment: Former Burn Area – St. Louis, Gratiot County, Michigan.” Pg. 29.

²⁴ Ibid., 30.

thus far.²⁵ A fence or wall around this area could influence golfers to stay away from Hidden Oaks, and also be the reason that golfers would not be able to retrieve their poorly hit tee shots.

The levels of contamination found in the soil and groundwater are allegedly considered not to be harmful. But, the contaminants are continuously migrating into the groundwater which could “have the potential to reach residential or municipal drinking water.”²⁶ This is the cause for the reemergence of EPA action. These “residential wells and municipal water wells are located within a 4 mile radius” that holds the “ground water supply of approximately 20,000 residents.”²⁷ As a result of the groundwater testing being positive of a “pesticide manufacturing byproduct,” the city of St. Louis “filed a lawsuit against Velsicol Chemical Corporation and the independent trust that owns the site in April 2007.”²⁸ Due to the chance of contaminants reaching these residents’ water supply, the FBA, as of 2010, was placed on the NPL. Currently, the area is in the Remedial Investigation of “collecting and analyzing data to determine the

²⁵ Michigan Department of Health. “Public Health Assessment: Final Release – Velsicol Burn Pit – St. Louis, Gratiot County, Michigan.” EPA Facility Id: MIN000510389. March 27, 2013. Web. Pg. 30 <http://www.atsdr.cdc.gov/HAC/pha/VelsicolBurnPit/VelsicolBurnPitPHAFinal03272013.pdf>

²⁶ Ibid.

²⁷ United States Environmental Protection Agency. “NPL Site Narrative for Gratiot County Golf Course.”

²⁸ United States Environmental Protection Agency. “EPA Proposes Cleanup Plan for Soil and Ground Water.” February, 2012. <http://www.epa.gov/Region5/cleanup/velsicolmichigan/pdfs/velsicolmi-fs-201202-proposed-plan.pdf>

extent of contamination . . . [to] better assess the cleanup options.”²⁹ After this, a Feasibility Study will be proposed that entails different options on how to handle the cleanup process. Next, the EPA will choose a plan and present it to the public where they have an opportunity to give input concerning their own thoughts as to how the cleanup process should be handled (the EPA is considerate of St. Louis residents’ opinions and takes any suggestions/opinions earnestly). The final plan is verified and made into the Record of Decision. Then, Remedial Action can begin. Jena Braun of the U.S. EPA Region 5, Superfund Division acknowledges that the “EPA is at the beginning of the process so it will be awhile before any cleanup is done at the Burn Pit.”³⁰ Early estimates of cleaning up the Superfund site extend from \$300 – 500 million.³¹

So, how has the FBA affected the Hidden Oaks Golf Course? An honest assessment would say, meagerly. The golf course is under new management that began in 2013 to a group of leasers. According to Paul Luneck, one of the co-leasers of the course, the contamination around the golf course “never really gets brought up.”³² Having golfed at the course since the 1970s when it was known as Edgewood Hills and while the plant was being held accountable for the disaster, Paul never saw any changes or regulations that were put on the

²⁹ Jena Sleboda Braun, e-mail message, April 8, 2013.

³⁰ Ibid.

³¹ United States Environmental Protection Agency. “EPA Proposes Cleanup Plan for Soil and Ground Water.”

³² Paul Luneck. Interview by Matthew Grew. Personal Interview. St. Louis, March 23, 2013.

course, “I never noticed a decrease in people who came here, or any type of consequence to the vegetation on the course.”³³ Paul says of the FBA, that it is “between the fifth and sixth holes in an out-of-bounds area where there are test wells.”³⁴ His son, Justin Luneck, another co-leaser, says that “no one really thinks or talks about it. Everyone just knows not to eat the fish out of the Pine River or grow a garden.”³⁵ Both Justin and his father were unaware that the EPA is in the Remedial Investigation stage of the cleanup process and are going to be proposing cleanup actions that range into hundreds of millions of dollars. Their carefree attitude of the situation and having golfed at the course for many years shows that the contamination that is still at the FBA is not regarded as serious because it is as Justin says, “deep under the ground.”³⁶ When the time comes for the EPA to take samples from the FBA, Paul and Justin said that they are willing to accommodate the researchers, seeing as how it will not have an adverse effect on the golf course until the cleanup action is started.

On GolfMichigan.com (a website that details all the golf courses found in Michigan), the contamination caused by the Velsicol Plant at the FBA is never mentioned under the description of the Hidden Oaks Golf Course. Such things as “it is a daily occurrence to encounter wildlife such as deer and turkey” and

³³ Ibid.

³⁴ Ibid.

³⁵ Justin Luneck. Interview by Matthew Grew. Personal Interview. St. Louis, March 23, 2013.

³⁶ Ibid.

the “relaxed atmosphere will leave you with a memorable golf experience” make up the description.³⁷ It is likely that any type of talk concerning the FBA on the golf course could be bad for business. Regardless of the FBA, the Golf Digest recognized Hidden Oaks as “2009/2009 Best Places to Play as a ‘Four Star’ golf course.”³⁸

After 43 years of passivity to the area, golfers at Hidden Oaks are accustomed to not worrying about the contamination. The area is obviously not fenced off, so the general presumption is, how bad can it be? The FBA is in the Remedial Investigation stage of the cleanup with any serious action being on the far horizon. As the EPA continues to do research on the FBA, golfers and workers at Hidden Oaks continue to use the golf course as if there was never a hazardous waste pit in operation sixty years ago that they come into contact with every day.

³⁷ “Hidden Oaks Golf Course.” <http://www.golfmichigan.com/golfcourses/coursedetail.cfm?recordid=6671>

³⁸ Ibid.

Figure 1 - Former Burn Pit in Operation (1956-1970)



Figure 2 - Main Plant Site During Operation



Figure 5 – Unlocked Test Wells at the FBA:





Locked Metal Posts (possible test wells) at the FBA:



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