



From Environmental Protection to Failed Mop Up to Strip Mining 1977/78

The carousel of photographs documents my last day working at Sands Hill Coal mine just outside of Hamden and Wellston, Ohio when I was 21 years old. The following narrative provides some context for the photos while highlighting how I went from working in New York in environmental protection to trying to assist in cleaning up a fossil fuel debacle to mining coal to feed the energy demands of the Ohio Valley.

Late-March 1978 I spent the night in a park in Plymouth England waiting on the ferry to St. Malo, France. From St. Malo I took a train and bus (and did some walking) to Lannion to be near the beaches devastated by the Amoco Cadiz tanker sinking and oil spill. I found a cold, humid room above a bar near one of the tarred beaches. I intended to volunteer in the cleanup.

My French language skills amounted to, "je ne parle pas Français". Well, that was about it and some willingness to get my hands dirty taking a quarter off from school.

The plan was to hook up with a volunteer crew for a couple weeks and then meet Harry Killas in Paris to then tour Provence, Burgundy, and Alsace.

The exceptionally weak language skills weren't so much the problem in finding a place to channel my enthusiasm for cleaning up a fossil fuel mess. From what I could make out the locals thought I was mildly "fou" to even consider volunteering and the military leading the clean-up had no time for an American idealist. Most of what I recall from the week spent around Lannion was spotty bus service, long walks, and not a great deal of effective communication. (Oh, and the backpacks (plural) were heavy.) I



can't recall how I found my way to Paris? Presumably it was a train from somewhere in Brittany arriving at the Paris Montparnasse train station. I very much remember walking around Montparnasse train station (with the two backpacks) and finding the Lenox Hotel.

After a night on a bench in Plymouth and then cold, humid nights above a bar in the early Spring in Brittany, I was desperate for a hot shower and clean bed.

And it's a bit ridiculous that I remember the name of the hotel. But the depth of my despair and the rejuvenation I received from a good night's sleep left a lasting memory of the hotel.

And now that I'm 68, French, and our apartment is not too distant from Montparnasse, I had never been able to find the hotel. This night at the Lenox Hotel was my first night in Paris. And for some reason I always thought the hotel was near the Orsay train station, which hadn't been used since the 1950s. Recently biking from our apartment near Les Gobelins to Montparnasse station I took rue Delambre off Boulevard Montparnasse and saw the hotel, which truly shocked my soul. As I was biking, I was late getting to the train station so I couldn't linger, but I've made a mental note to go back by and inspect the hotel. In 1978 it treated me to incredible luxury. And probably at a price that should have been beyond my means.

Harry joined me in Paris. I can't recall where we spent the night. Our travels through France began. I spent April and a good bit of May with Harry.

Harry had been traveling in Turkey and perhaps he contracted dysentery there, but regardless, we ended up staying on a farm near Gordes with friends of Harry's parents. With Harry laid up with what was



probably undiagnosed dysentery, I enjoyed assisting on the farm (trying to be useful with a Belgian crew building a greenhouse) and touring with the couple. He was an architect. German. She was Canadian. They met in Vancouver. He was fascinated by crystals. She was a delightful cook - great recipes for BircherMeusli (her secret, grated apples), fondue (polish the inside of the pot with a clove of garlic; be cautious with the Kirsch) and ratatouille (be generous with the olive oil). Fresh milk each morning from the neighbor's cows. After a visit to Marseilles where the belly dancer accepted Turkish lira and the Hostel curfew was met, we went wine tasting through Burgundy and Alsace. (The Grunewald altarpiece in Colmar still stands out in my mind's eye almost 50 years later.)

Another vivid memory was leaving Paris from CDG with its futuristic transparent tubed people-movers. At the time, I thought just how wonderful the touring had been, taking a quarter off from school, and knowing I would never be back to France; let alone be a French citizen.

I returned to Ohio intending to make some money before driving west to Stanford for my senior year. In a monumental contradiction of what I'd done the prior summer and my pathetic attempt at assisting with the Amoco Cadiz oil spill, I'd made plans to work with a close hometown friend who had taken over his father's strip mine.

Again, it was 1978. The country was absorbing the mid-decade oil shock and high sulphur; low BTU coal was up in price justifying reopening Southern Ohio coal mines.

Sands Hill Coal Mine was a non-union strip mine - number 6 coal - producing for coal fired plants and public schools. The work rules were more liberal and more lucrative, at least in the short run, at the non-union



mine: longer hours and more take-home pay. My recollection is the mine ran Monday through Friday on a 10-hour daily schedule. Saturday was a shorter day, but I seem to recall there was bonus pay. While I was working there was only one shift, but it's possible that as the mine went into the 1980s, there may have been periods when two shifts operated.

Not far away, the Southern Ohio Coal Company operated a deep mine in Meigs County. SOCC was a union mine. At least while I was at Sands Hill the United Mine Workers didn't attempt to unionize the miners while the UMW was generally held in derision at Sands Hill.

I started at the mine in May. Days were long. Tiring. I signed up at Ohio University in Athens, Ohio to take Economics 101 by correspondence. The credits transferred to Stanford, which ultimately were the margin that allowed me to graduate with my class in June the following year. (I will always be a bit of Bobcat...and grateful to the good people at Stanford Old Union who made the call on the transfer credits.) I also read Ayn Rand's Atlas Shrugged. I can't say the book turned me into an objectivist, but as a novel it kept me engaged in the evenings for almost 1,200 pages over the summer.

Because of the economics assignments and Atlas Shrugged there wasn't much time beyond fueling yellow equipment, pumping water off the coal face, shoveling coal, grading the pit road, pulling the bone coal off the conveyor, and dynamiting cleared land. I was typically the last to leave as I could only fuel the equipment after everyone else was finished with their days.

I was however completely useless at unsticking coal in the tipple when it rained. Coal dust and rainwater would create a paste that blocked



the tippie from loading coal into the beds of 18 wheelers bound for eventual delivery. There was a sledgehammer on a platform below the top of the tippie. I did a great deal of dirty, difficult work that summer, but I couldn't bring myself to climb a metal ladder in the rain to get up on the platform and wield the sledgehammer up against the tippie, again, in the rain. Did it once fecklessly. Came down saying it was too wet to swing a hammer in the rain on a narrow platform. The mine operator, Alan Arthur, climbed up and banged away at the tippie unsticking the blocked coal.

Alan was a childhood friend, two years older. He always had my respect, but he took it to a new height - literally 30 feet off the ground. There was no way I was going to climb on steel in the rain....

To my recollection stripping coal went like this. Sands Hill was stretched out over several square miles of rolling Appalachian deciduous forest. The forest was timbered about an acre at a time.

Once the trees were cleared, D9 bulldozers would level the land. If the ground wasn't too rocky (limestone usually),

Caterpillar pans would grade the land effectively "sanding" down the landscape. The dirt would be displaced and later used for reclaiming.

Once the area was leveled, a drill rig would come to drill holes for explosive charges that would loosen the rock or compacted soil so a dragline could get access to the coal vein's face after D9 and pans cleared away the debris.

Blasting was one of my chores. I assisted a robust elderly man, George Ward, who operated the drill and orchestrated the blasting. George would drill say 50 holes over about a half-acre. I'd tie two sticks of



dynamite with detonation cord and drop them in the holes. Keeping the detonation cord out of the way I'd then pour about 25 pounds of ammonium nitrate ("half a sack") into the hole and fill the hole in. We'd then tie the 50 detonation cords together up and across the grid. George would attach a blasting cap and a fuse. George would light a cigarette, and we'd crawl under the truck used to haul the cases of dynamite and bags of ammonium nitrate to the blasting site. Hell would break loose. Along with dirt and rock that would splatter the truck with us under it.

The engineering of all of this was comically imprecise yet typically reliable. George did it all from experience. I believe methods changed quickly once George retired and Occupational Health & Safety and mine inspectors moved the process to more modern means including electrical ignition.

The other strange thing about all of this was the dynamite and ammonium nitrate were all stored in trailers that while locked, were all very easy to open. I think as Ohio mining gathered momentum into the 1980s there were improved regulations that provided better management, control, and oversight of explosives.

The dynamite and ammonium nitrate was produced a few miles away at Austin Powder - between McArthur and Zalenski. And so there's no confusion, only coincidence, with the Mike Myers character Austin Powers, here is Austin Powder's [website](#). Austin Powder has been a large regional employer in Vinton County for decades. And while the company is headquartered near Cleveland in northern Ohio, the Vinton County facilities have produced explosives since 1931.



Another important supplier to the mine was [Walker Equipment](#) in Charleston, West Virginia. Walker sold and serviced Caterpillar [yellow equipment](#) the mine used to bulldoze, grade, and move dirt. I made one late night trip to pick up spare parts at Walker in Charleston. Keeping the yellow equipment moving was what paid the rent so the four hours or so invested in driving to and from the West Virginia State Capital was the price paid after a long day at the mine.

[Bucyrus Erie](#) made the single dragline used at the mine. (Maintaining the integrity of the steel cables was job one with the dragline. Given the tension of the cable the kinetic energy released by a break could be deadly and astronomically costly to the operating equipment.)

Mack made and serviced the pit trucks that moved coal from the coal face to the tippie. I can't recall the provenance of the 18 wheelers that were used to deliver coal.

As the summer wound down, I joined one of the drivers delivering coal to local schools. There weren't many local schools still using coal, but the ones that used coal for winter heating stocked up before the academic year began. My job was to climb into the coal bin and shovel the coal down from the chute off the truck. Dirty work this. And a reminder of just how miserable it would have been to have spent the summer in a deep mine.

Often when nearing the coal face we would hit spring water. This plus the annual rain fall of about 45 inches produces deep and dangerous [swimming holes](#) at unremediated or abandoned strip mines. The water was often sulphureous.



Emphasizing the contradictions and confusion of my college years, I had spent the prior summer volunteering in New York City ironically enough in State Attorney General Louis Lefkowitz's environmental protection division at 2 World Trade Center - early tenants at the World Trade Center before the financial services industry embraced the towers. It was 1977. It was the first time I can recall seeing people drinking bottled water, which I came to enjoy -- Poland Springs and Perrier were both brands making the rounds in New York City in the late 1970s.

I tried to convince friends at the mine that we should bottle the spring water and sell it to swells on the coast. (We had a high school friend whose family operated a bottling company in my hometown. [Gem Better Beverages](#) bottled Double Cola and Ski pop among others.) I was convinced there was a big future in bottled water. At the time my friends and co-workers were just incredulous that someone would actually pay for a bottle of water. Such was the 1970s.

Once we hit water my job was to lay in a fire hose and pump the water off the coal face. The pumped water created all sorts of problems as the runoff often contained harmful chemicals (sulphur most certainly) that pooled in around the devastated mining area creating all manner of challenges for ultimate remediation.

The coal would then be scraped up by the dragline and put in a pit truck to move the coal to the tippie for crushing, storage, and distribution.

The coal in and around Vinton County and nearby Jackson County/Wellston was once considered abundant and valuable -- the most productive in the State during the McKinley and Teddy Roosevelt terms. As described by an early 20th century Ohio State University study of Buckeye



State coal by J.A. Bownocker and Ethel Dean, the coal seams covered about 40 square miles with veins running from 3 to 4 feet.

The coal we mined was called Number 6. Number 6 doesn't refer to a grade, but rather is a geologic label related to where the coal was found in geologic strata. Number 6 coal tends to be thick and continuous. Think of it like a layer cake. The Number 6 is near the top of the geologic stack with a thickness and quality that makes it economical to strip mine. Quality is a subjective word in the context of coal. While not as sulphurous as other bituminous coals and not as energy rich as anthracite coal coming from western Pennsylvania, Southern Ohio Number 6 coal was simple enough to mine with ready access to coal-fired energy producers, consumers, and regional distribution by rail and river. After I left Sands Hill in 1978, western coal from Wyoming's Powder River Basin began to be more economical to mine - nearer the surface and in thicker seams. Wyoming's bituminous coal had a lower sulphur content that became more appealing as awareness of climate change and environmental protection became increasingly important in the latter part of the century.

In the pictures I took on my last day at the mine there are only a few pictures of people. I worked closely with George Ward and there are several pictures of him at the drill. Working near the tibble was an older man by the name of Mullins. His son had been my PE teacher in high school. Mr. Mullins was mostly deaf from his years working near the crusher. I think it's his Chevy Nova in the parking lot.

The mine mechanic was Chuck Ingalls and it's his car that is beaten up from a Demolition Derby at probably the Jackson or Vinton County fairs.

I can't recall the name of the semi-truck driver pictured smoking a cigarette.



Alan Arthur's pickup truck is in one of the images along the pit road.

Pete Rupert is in a couple of the pictures of pans. Pete was a year behind me in high school. He played quarterback. (My best Pete Rupert recollection is playing center during a game against the Meigs High School Marauders. Jodie Michaels, our football coach, must have called 6 or 7 quarterback sneaks in a row as we gobbled up first downs. It's a weird recollection and an unusually successful streak of lengthy QB sneaks where Pete just followed me up the field.) Pete's older brother married my cousin, Carol, and he was a union miner at the Meigs deep mine. I understand Pete eventually moved to Wyoming continuing to work in the coal business.

Alan's brother-in-law operated a D9 until he separated from Alan's sister.

Keith Ruckle, another high school football pal, operated a pit truck or loader. I vaguely recall him taking the loader over a hill and him coming out uninjured and no longer interested in mining.

A very close friend, Dick Gilliland, was the mine's welder. Dick went on to weld for several companies ending his career at the nuclear enrichment plant operated by Fluor in Piketon.

Joey Joseph did something at the mine, but I can't remember exactly what? I do recall that he only bathed on Sundays and his lunch bucket had sandwiches with the whitest of white bread. And he had two jokes: What's dumber than a Dum-Diddy? A Dum-Dum Diddy. And why is a coal bucket dumb? 'cause a coal bucket eats coal. You get the drift.

Alan's other brother-in-law, Jack Huffman, worked at the mine doing a variety of jobs with unbounded energy and enthusiasm.



Alan eventually survived a glioblastoma and passed away in May 2017 as I was being diagnosed with lymphoma. Sigh. Consequently, I couldn't attend the service. We had been friends since grade school.

Sands Hill Mine operated on land owned in part by my extended family. It had been inherited from my great aunt's husband, Gus Campbell, who had been a pharmacist in my hometown, Wellston. The land probably had been mined off and on since the beginning of the 20th century. Early in the 21st century a portion of the mine land was sold to Rumpke Waste to be used as a land fill. In 2007, Sands Hill Mine and my family's land were sold to a private equity funded mining operation out of Lexington, Kentucky called Rhino Resources. Rhino Resources filed for Chapter 11 bankruptcy 13 years later. I'm not exactly sure what goes on now at Sands Hill, but there may still be some amount of limestone mining conducted by the private equity investor who financed the 2007 purchase and there is at least some discussion online about installing solar facilities.

Looking back now at the Sands Hill pictures I'm reminded of the childhood friendships that were reinforced by my last summer in Southern Ohio. And while the arc of going from the New York AG's environmental protection office to attempting to assist with an environmental disaster to working at a strip mine seems contradictory both at the time and now in hindsight, I was nonetheless satisfied by all of the work however meaningful in the context of NY State, useless in Brittany, and remunerative in Ohio.

My childhood neighbor, Kathy Oths, was two years behind me at Stanford. She also spent the summer of 1978 in Wellston; working as a waitress at Norris Restaurant. We drove back to Stanford late in September in my 1970 Ford LTD, stopping in San Juan County, Utah to pick up a friend



who had spent the summer working for a government funded program of some sort. With the Utah detour it was more than 2,600 miles from Wellston to Palo Alto telling stories and guzzling 65 cent per gallon leaded gasoline.

Again, the photos were taken on my last day at the mine. I had just turned 21. Back at school I printed and mounted about 12 photos as a souvenir. Recently my wife and daughter saw them and encouraged me to show them more of the photos. I found the negatives in the garage. It seems I was quite well organized almost 50 years ago. I had the negatives converted to .tiff files and I converted them to JPEG for the purposes of the website. I had the images copywritten after labeling them with titles. I've tried to organize the carousel to communicate the general flow of activity at the mine on one day in the late summer of 1978.