Chapter 7 – Life and Times in the Benson Mines

"How a society organizes itself to be productive is a fundamental building block of civilized life, and the organization of work is at the core of an industrial relations system."

[Hoerr, 1988, *And the Wolf Finally Came*]

Driving through Star Lake anytime in the fifties or sixties and continuing eastward on Route 3, I remember entering the bottomlands of the marshy Little River and very soon encountering two man-made features that very nearly obliterated the natural landscape. A huge tailings pile could be seen on the right; gray, sandy looking, and extending for nearly a mile along the road. On the left would appear an obvious industrial complex, evidenced first by a large, flat-topped mound of boulder-size broken rock, and then by buildings, sheds, railroad cars, heavy trucks, and the other trappings of a typical smokestack industry. In rapid succession one would come upon an overhead trestle carrying a pipe across the highway and up onto the tailings pile, where it might be seen discharging a thick, murky liquid sluicing its gritty contents onto the expanding pile. Overwhelming all in the complex could be seen a huge black colossus of a structure with belching chimneys and, viewed from the right angle, the red glow of fires inside. The impression received was that the entire structure was a great hot glowing furnace. Remarkably, there were openings in the walls, and sometimes men could be seen looking out, surely moving toward the outside air to gasp for oxygen and to avoid the worst of the roasting heat.

The forbidding structure at the heart of the Benson Mines complex was its sinter plant. Little did I realize upon first viewing this sight in the mid-1950s that seven years later I would be one of the workers who now and then would peer out from inside the giant furnace.

My getting to work in the sinter plant, or "cinder plant" as some locals aptly called it, was not wholly straight-forward. The first three of four or five summers—after high school and during summer breaks from college—spent there were as an employee not of the steel company, but of a subcontractor. Wager Brothers Construction Company of Watertown, NY had a more or less continuous series of contracts improving and rehabilitating the complex's mechanical systems. I learned only much later that the use of contractors for repair and remodeling was a controversial practice strictly circumscribed in labor contracts. The unions wanted all the jobs in steel industry plants—including cyclical maintenance and plant upgrades to come under the aegis of the United Steelworkers of America. Although Wager Brothers workers were likewise unionized, their jobs were less circumscribed, their protections were not the responsibility of the steel company, and they certainly afforded company management a much more flexible and perhaps less expensive option for accomplishing certain tasks.

One year while I was on the workforce we installed a new conveyor system in the sinter plant that included a small drum-type device to magnetically remove bits of iron from the dust-collecting system. My co-workers told me that the machine we had worked to install would be worth $200 per day to J&L. About the same time I worked inside the cylindrical sinter cooling tower, shoveling out its gravelly contents to a level where welders could work on the steel structure. Another year—during a scheduled plant shutdown—we rebuilt some thick steel chutes that had become deformed from years of contact with hot, nearly molten fragments of sintered iron—I think in fact they were the "windboxes" beneath the steel grates of

the sintering machines. Another task was building the foundations for a new scale to weigh railroad cars and their contents, this job just outside the sinter plant. Yet another summer was spent as a production employee of the steel company, and more will be said about that later.

My father and his friends, who included the managers of the operation, had conspired to get me a job with the contractor—I say "conspired" because I felt indeed fortunate as a recent high school graduate to have a high-paying job even for a short term when second-best was two to five dollars a day as a caddy at the golf course. Employment by J&L was not an option at that time, but working with Wager Brothers had the fig leaf of deniability in the adversarial labor-verses-management environment that one entered upon employment by J&L.

My father was delighted to have secured this job for me, but the day before I was to start work, something caused him to become frightened. It was an agitated father who sternly warned that this was a union job and I could expect trouble, most probably from one of the two Mulvaney brothers, one of whom he suspected to be the union shop steward. I did not sleep that night before my first day at work, wondering whether thuggery by the union stewards, the fires of the sinter plant, or any of an infinite number of unimagined horrors would get me first.

As things turned out, the sinter plant held the only real horrors. The men were friendly and kind, and if they thought about me it all, their concern seems to have been that an inexperienced kid like me would get hurt doing difficult and dangerous things in the hazards attendant to crawling around on beams while surrounded by rock, fire, and steel machinery. They seemed to care little for the union, and it turned out that as skilled craftsmen, most belonged to the United Ironworkers (technically,

the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers) or were millwrights belonging to what is now the International Brotherhood of Machinists and Aerospace Workers. Most of the time I may have been the only person on the job who, if I had been a union member, would have belonged to the Laborers' International Union of North America—formerly “Laborers and Hod Carriers”—an amalgamation of what my coworkers regarded as definitely inferior beings represented by a union that could do little for them. In sum, my status with regard to the union movement seems to have been far off the screen of my co-workers.

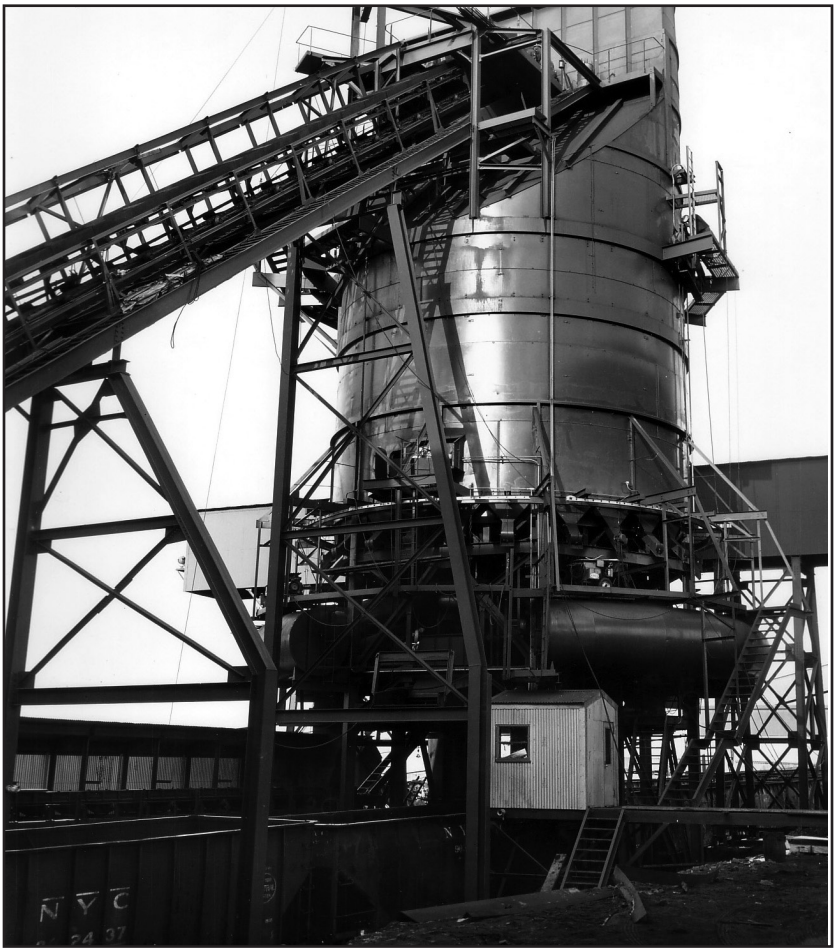
The men were inclined to call me and other inferior beings “kid” or interchangeably and perhaps more commonly “junior”. In fact, another young man who was no younger than me but destined to become a career laborer, had become so attached to this name that he proudly painted “Jr.” on his hard hat. No question about it, this person was intent on becoming “Junior” for life.

Whether the Steelworkers sharing the plant cared anything about my presence was never evident, but we construction company employees were tolerated by production workers. I did not realize at the time that contracting out was a major national issue in labor relations. We were paid less money than the steel workers, and of course had no claim on continued employment at the mine. Much later, however, it became evident that such issues were of concern to perhaps only a tiny minority or workers.

Regarding the horrors of the sinter plant, it would be forty years before I became aware that this very sinter plant might have been a significant source of dioxin contamination. We knew that catching a flying chunk of hot sinter in one’s shoe would be painful and falling 30 feet would have likely fatal consequences. However, we knew nothing of dioxins, nor then did any of the world’s scientists.

What I recall from the first day of my on-the-job education was learning to drive a standard shift vehicle—in short

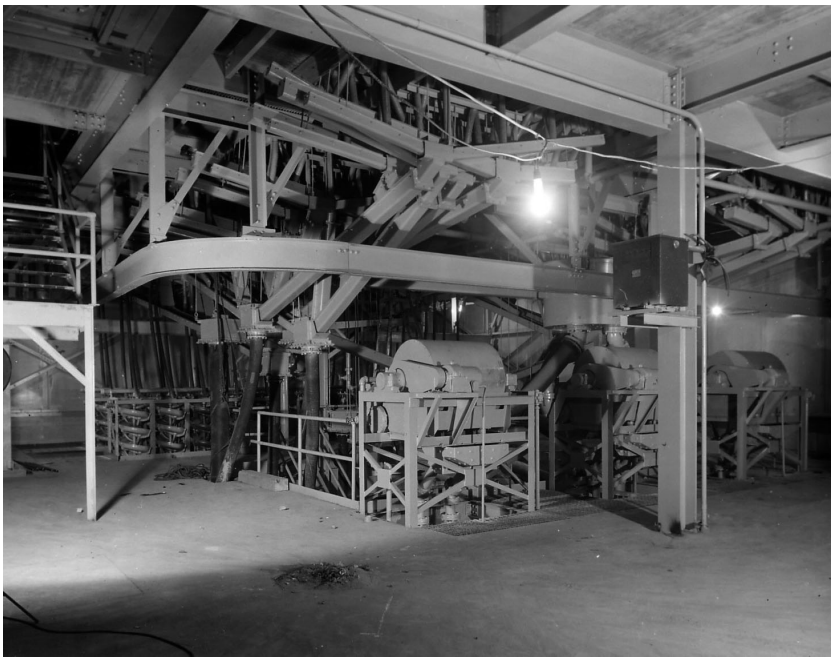
order when the boss said: “Hey, Junior! Get that ___ing truck out of the way—take the __er down the __ing hill.” The truck lurched and stalled once or twice, but avoided the falling debris and never again would I shy away from a vehicle with a clutch. There were strange names for all the tools of the trade, inevitably prefaced by the “___ing”



Cooling tower for sinter. Note the railroad cars below. One of the author’s early jobs with Wager Brothers was working inside the tower to make improvements during the plant’s annual two-week shutdown.

modifier. Crudity of speech was the norm, and when asked by my Mother about whether “the men” used “rough language”, I reported that the words used were not too different from those heard at boy scout camp, but perhaps

were used with a modicum of more originality and aplomb. Times have changed, of course, and I heard little at the mine or in the company of boy scouts that today is not commonly uttered in public by girls and even some women in respected positions.

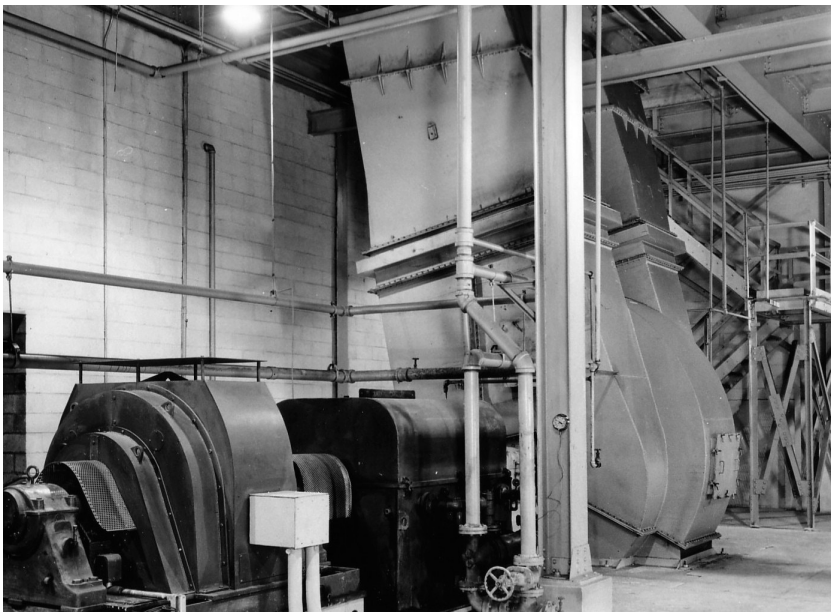


Drum-type magnetic concentrator. The cylindrical object at the center of this image is a drum-type magnetic concentrator, placed in the stream of materials undergoing gravity concentration (note Humphreys spirals at the left center). This was one of a number of such devices placed at various stages to improve efficiency by removing magnetic ores that might be lost in gravity concentration, sintering, or other processes. The author worked on installation of a device of this type in the dust collection parts of the sinter plant.

That same first day when I rescued the ___ing truck, or certainly sometime during the first week, I was handed a jackhammer and told to break out some of the concrete floor around the base of a steel staircase. This was intended to permit the attachment of a clamp or some similar device. Having very recently been a lowly high school pupil, I was thrilled to have been given the responsibility for handling

an impressive piece of construction equipment like the jackhammer; that and the hard hat I had been issued I took as powerful emblems of my achievement of adulthood.

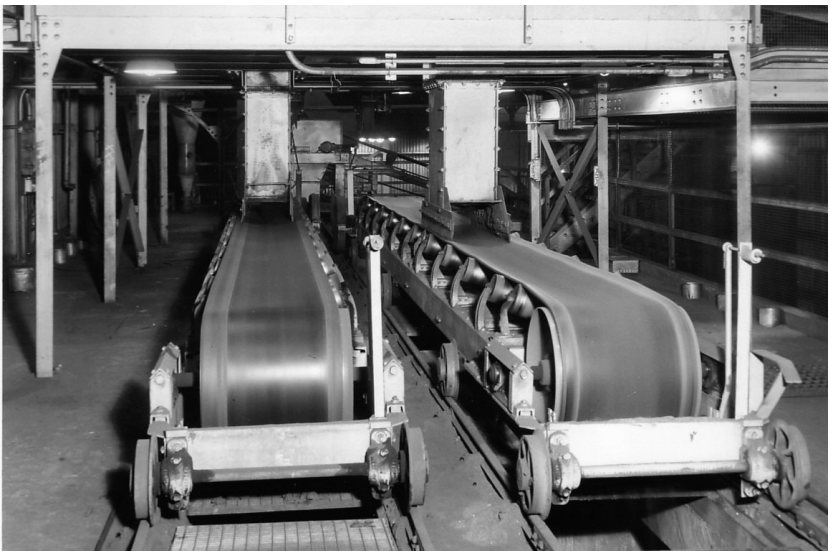
Like most instructions I ever received in my summers at in the Benson Mines, those for my jackhammering job were vague. Nor had I seen the clamp they wished to attach, so I really did not know how much concrete to break out. Starting tentatively, I gradually became more aggressive



Air handler. This mechanical room housing motors and fans looks like the one in the Benson Mines sinter plant that suffered a jackhammer penetration of the ceiling owing to the author's excessive enthusiasm.

and had the little crater around the base of the stairs just about where I wanted it when the jackhammer dropped about a foot. It was very soon evident that I had gone all the way through the floor, dislodging a chunk of concrete that fell from the ceiling of the room below, leaving a hole from which protruded the chisel end of the jackhammer. In retrospect, it was fortunate that the chunk I dislodged was not large enough to swallow the entire jackhammer, or perhaps the jackhammer and me with it. I ran to the foreman who quietly listened to my explanation of what

had happened, chuckled faintly, and with a light-hearted expletive, quickly reassured me that the matter was of no importance to anyone. Later, when visiting the room below. I discovered that the one-inch hole that had swallowed the business end of the jackhammer had broken out a six-inch chunk of concrete from the ceiling. The men working below had noticed, had heard how it happened, and thought it quite amusing. I thought they would be concerned, but now realize that they felt no sense of ownership of the sinter plant and could not have cared less about a hole in the ceiling.



Tripper cars. These movable conveyors were located above silos and distributed ore materials from the concentrator to the sinter plant. One job for Wager Brothers involved installing a device to electrically signal when ore had reached the top of a sinter plant silo.

I think also I leaned many more things than how to use a clutch and a jackhammer. Among them was the incipient lesson that all men are deserving of respect and acknowledgement in one's actions of the dignity of his compatriots. All around me were construction workers who were intelligent, well-intended, and basically nice—if sometimes bothersome—persons. I suppose the lesson of looking for good in everyone began with my parents, who

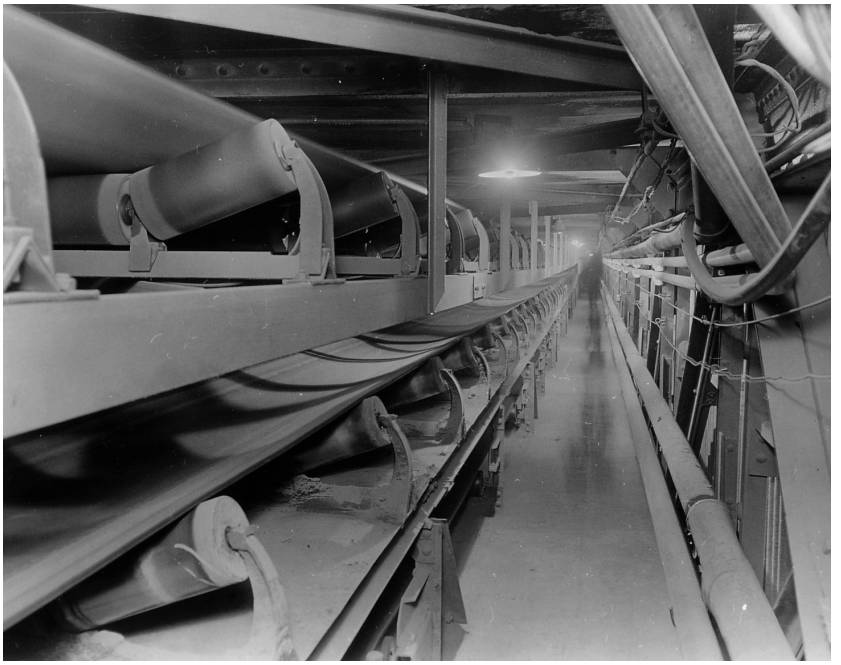
may have feared and pitied those of lower birth and lesser accomplishments, but nevertheless believed in the basic oneness of humanity. Looking back on the J&L experience, there were adult men of apparent sound mind and body who were accorded lower status than me, a raw kid. Perhaps they thought too little or too much, were too little capable of thought, responded too poorly to the garbled instructions of their supervisors, or for other reasons were regarded as poor workers to be called to the effort only when the Union Hall was nearly empty. Even then I thought that what appeared to be one of the more common of their sins—telling the boss how he ought to do his job—would be irresistible occasions of sin for myself; I would either become a boss or, failing to become one, would be relegated to the ranks of the ineffectual and intolerable.

Whether the lessons learned were ones to be kept throughout life or discarded, the summers working for Wager Brothers provided me with a valuable opportunity to gain experience in a part of the real world that is the only real world for many of our fellow men. The dangers were many, the conditions harsh, and the physical demands often extreme. Nevertheless, the experience was a much more enriching one than might have been possible had I spent my summers as a lifeguard or camp counselor. And when one of the kindly Mulvaney brothers turned to me and said “Hey Junior, take this torch and blow a hole in that steel plate,” ego soared. Never mind that on the first effort, too little pre-heating with acetylene and too early flooding with oxygen produced a unsightly and ineffective not quite-aperture in the steel plate. So, it looks easier than it is, but help was nearby. Other opportunities would present themselves, and after a few fine tunings, any new task undertaken would well done indeed. After graduating from high school, I graduated again, from standard-shift trucks, to jack hammers, to oxyacetylene torches, and eventually to a brief try or two with electric welders.

The lessons learned in the summer working directly for J&L as a production worker were different in some ways, although not to be denigrated.

In *And the Wolf Finally Came*, John Hoerr describes his experiences working in a U.S. Steel Corporation plant in the Pittsburgh area while a college student. He remarks about how numbers of college students were added to the rolls of workers in the summers, and that no one seemed to care what they did. He describes his job, which consisted of collecting data that no one would use, notes the great numbers of paperback books read on the job, and further describes the near-universal practice of sleeping on the job during the 11 to 7 shift. Reading of these things brought back memories.

When I had worked for the contractor, I was the only student employee on the work crew, but the year I was hired by J&L there were several of us. Unlike Hoerr and his fellow students, we had been hired to do regular



Conveyors. Conveyors went everywhere in the sinter plant, spewing great volumes of dust and requiring cleanup with brooms and shovels at least once each eight-hour shift.

production work, which for the most part consisted of using broom and shovel to pick up the iron and coal dust falling or blowing off conveyor belts, or spewing forth from the sintering machine, and returning them to the appropriate material streams. The settling and accumulation of this dust was constant, and after one unmanned shift, there might be several inches of dust and spilled ore covering the floor. A typical eight-hour shift might involve 3-5 hours of sweeping and shoveling, depending on the specific part of the plant, the size of the assigned area, and how good a job the worker on the earlier shift might have done. For the most part we were filling in for workers on vacation or those absent for other reasons, and thus over the course of the summer, one might get to work in several different parts of the plant.

One of my jobs was in a place called “the tunnel”. This was the lowest part of the sinter plant, at the base of massive concrete silos that received iron ore concentrate and powdered limestone. These materials were fed from the bottom of the silos onto a conveyor belt that would ultimately carry them up to the sinter machine. Duty there was a reasonably good job, not nearly as dirty as most in the plant and there was only a small area that needed to be cleaned. Dust from the limestone was thick, however, and one’s throat and eyes became noticeably irritated before the end of a shift.

Aside from the small section of conveyor to be cared for through the normal sweeping and shoveling activities, my main job was to sit near a conveyer where materials sifted down from above and, at intervals during the shift to place a steel pan or “weigh boat” on the belt. There it would be filled by materials flowing from the silos and onto the conveyor. The pan and its contents were weighed on a nearby scale, and the weights were recorded in a logbook. Every now and then a phone on the wall would ring and someone in another part of the plant would ask for the latest weight recorded. Instructions on how to do the job were given to me by the foreman, but these dealt only with what I was to do; the role of these tasks in the

operation of the sinter plant was not explained. I can only surmise that the weights reported by phone led someone in a control room somewhere to adjust the proportions of components added from the silos, and perhaps to adjust he amount of coal that would be fed to the mixture further down the line.

I did not work alone on this job, a gruff old man (probably over 50!) and I shared responsibilities, and we would spend most of the shift sitting on a wooden bench; I would be watching or furtively trying to read a paperback book carried in with me, and he would be either watching with half-closed eyes the conveyor belt carry its burden onward—or more likely dreamily staring into space. He let me do the weighing and about the third time, as I was carefully weighing the sample and preparing to record my findings, he jumped up from the bench, grabbed the weigh boat from me, tossed its contents back onto the conveyor, and recorded a fictitious number in the log book. From that point onward, when the old man was working I did what was necessary to be engaged in other duties when it came time to record the weights. I don't know whether the old man's actions really affected the quality of J&L steel products, but it was obvious that his attitude had advanced beyond apathy and into the realm of contempt.

There is a footnote on that particular old man. One of the other college students working that summer remarked, with a sense of tragedy, that it would doubtless be possible to come back in 20 years and find that same old man still sitting on the same bench in the tunnel under the sinter plant, still staring ruefully at the conveyor and its load. We had no inkling that 20 years later the sinter plant would be demolished, or would soon be demolished. It turned out, however, that the old man's thread would run out much sooner. Within a year he was fired for pilfering when a random check of lunch buckets turned up a roll of company-purchased toilet paper he was carrying out of the plant.

Was the old man in the company of Jean Valjean—a

hungry man condemned for stealing a loaf of bread? Or was the so-called random search really targeted to snare a bad employee? Although all or nearly all who might know the answer to these questions are dead by now, it would be interesting to know whether little justice or big justice was at work. In all likelihood, it was a case of big justice. Oblinger (1984) comments extensively on the lax policies of Bethlehem Steel's Cornwall, PA plant regarding what might be considered pilfering or outright theft of materials—no one in Cornwall ever bought a shovel, and it was a

The tunnel. This image is believed to show the sinter plant tunnel; it focuses on a feeder mechanism designed to move feedstock materials from silos to conveyors, which would carry them up to the sinter machines.

tacitly accepted practice for objects useful in households to migrate from the plant to the workers' homes. It is likely that most households in the Clifton-Fine area also openly held at least some objects that had been purchased by J&L, and their average value would have far exceeded that roll of paper.

When I read Fiedler's 1947 article with the title "The Dynamic Story of the Benson Mines!", I found a personal connection. It mentions "the tunnel" as follows:

> "The sinter plant is the largest of the Benson plant buildings. Adjoining it are large storage bins for both ore concentrates and fine anthracite coal. A long belt conveyor carries the material from these bins up to the sinter machine. Measured amounts of fine coal and ore concentrates are discharged onto the conveyor in the dark tunnel beneath the storage bins."

When working there, I had not thought much about the darkness of the tunnel and the fact that it must have been the very lowest point in the bowels of the huge plant. The concrete storage silos are now about all that remains of the sinter plant and an old photo of the destroyed plant shows the gaping end of the tunnel; it is possible that one could crawl through it if permitted to prowl about the ruins.

Returning to the life and times of the workers in the sinter plant, I have no way of knowing whether any of the hourly employees were ever told more than I was told. That is, I may not have been alone in the vagueness of my understanding of what went on in the various parts of the plant. On the other hand, we temporary employees may have gotten a uniquely superficial view of things.

One experience stands out as an example of how little we knew. There was an absenteeism problem, particularly on the night shift, and one might arrive at work to find that you had been bumped up to a higher position—presumably the lowest-level positions—mostly shoveling spilled ore back onto conveyors could be left vacant for a shift while the higher ones were progressively more needed to keep the plant running.

One whole week I worked in a job above my normal entry-level role because the regular occupant of that job was on vacation—I got paid at a higher rate, but do not

recall detecting any significant difference in duties. One night during that week I arrived to find that I had been bumped up two levels to the “car man” job—during the night shift the highest-paid hourly job in the plant. The foreman wasn’t there and another worker, or a foreman from another part of the plant showed me how the car man used an electric winch with a drum like a winch on a sailboat. This was used to move a railroad car stationed under a chute at the rear of the plant. A large Manila rope with a hook on one end could be attached to the railroad car, wound around the drum of the winch, and used to pull the car several yards, where it would rest under a chute and receive materials—probably sinter—from some part of the plant. I was not told when to move the car, where to move it, and what events would cause it to need being moved. The car remained unmoved throughout the shift, and although the plant appeared not to shut down, beyond that I was unaware of what havoc my failure to do whatever was expected of the car man might have produced. Fortunately for me and for J&L, that experience lasted only one shift.

Most of the sinter plant was extremely dirty, and indeed it seemed one of the dirtiest places on earth. Men emerging from parts of the plant were so covered with gritty dirt that they might be mistaken for dark-skinned races. There was a saying that would have been politically incorrect—had the term been coined in the nineteen sixties—that a black man could not work in the sinter plant because he could shower endlessly, but never know when he was clean. Diversity was nil. No women worked in the sinter plant or any other part of the Benson Mines operation, with the exception of a handful of secretaries in the office and the single nurse who was stationed in the dispensary during the daytime shift.

There were exceptions to the ubiquitous dirt. In the back, on the lowest level, was a room that seemed to house the main mechanisms of the air handling system; its motors, and turbines were housed in painted ductwork, and it was probably no dirtier than the average factory. Extreme

exceptions to the pervasive dust and grime were two small rooms near the top of the plant, above the fan room. These rooms housed electrical components, presumably relays and switches, and their relatively delicate mechanisms were protected from dust by tight seals and filtered air.

Although filled with a variety of humming noises and high-pitched squeals, and accompanied by multiple kinds of vibrations that were transmitted freely to the steel floor, these rooms were the prime sleeping accommodations

Electric room. The dust-free environment of such rooms provided ideal opportunities for napping on the night shift in the sinter plant.

for those on the midnight shift. And most jobs required no more than three to five hours of actual work, even for inexperienced college students. One of our number of summer temporaries could not understand this—could not come to grips with the idea that so little was expected of us—and he convinced himself that the real reason we were there was to be available in the event of an emergency. Supervisors and managers were seldom seen outside the eight-to-five tours for most salaried employees, and shift foremen were only rarely seen during the midnight shift. Lack of real work, opportunity, and the fact that almost all workers slept sometime during the shift together provided adequate justification and rationalization for the practice of nightly napping in the electrical rooms. There was a certain amount of sneaking around in order to deceive the shift foreman, but the real deception was worked on us neophytes who were naïve enough to believe that we napped in secret. This became obvious one night when the foreman entered the electric room/lounge and woke up one of the sleeping workers, telling him that a machine had malfunctioned, a large amount of ore concentrate had spilled off the conveyer, and there was indeed an emergency that required his attention.

Now it is the summer of 2002 and I am traveling again. My commuter flight discharges me at Atlanta's Hartsfield International Airport on the tarmac—the normal procedure at major airports when planes are too small to articulate with the "Jetway" passenger ramps. We pick up our carry-on luggage at planeside and a laconic member of the ground crew guides us to a passageway defined by yellow tapes strung between stanchions. We wind around within the lower part of the terminal housing baggage handling equipment and other apparatus as we walk toward the staircase that will bring us up to the second-floor concourse. While moving through the lower level of the terminal, I am suddenly struck by sights and sounds that remind me of the sinter plant. The air has a raw feeling. There are the noises of jet engines and other machinery, sounding not unlike the roaring fires, air handlers, turbines, and pumps of the sinter plant. There is the dim light of overhead bulbs

barely revealing a rude concrete and steel structure, with floors, pillars, and the stairs themselves strictly utilitarian and everywhere covered by a layer of gritty dirt. It is hot, and even the smell of kerosene exhaust belongs in a sinter plant, although it is not quite right because in the plant this smell would mingle with those of coal dust, iron dust, limestone powder, and the products of their incomplete combustion.

I am led to recall that in the sinter plant we were given respirators—the so-called respirator actually was a rubber appliance that strapped over the mouth and nose, and permitted inspired air to be passed through a felt filter to remove dust particles. One or two of us used them faithfully, but for me and for most others, they were little help. We sweated profusely in the hot plant and by the end of the day our faces were completely blackened with adhering dust. Respirators became soaked and sweat carried the grit around and under the respirators, irritating the skin, breaking the seal, defeating the attempt to pass all incoming air through the filter, and causing much discomfort. Of course exchanging comfort for safety was an easy choice for one 19 years old who expected to live forever.

Having worked in the sinter plant, proceeded to a career in biology that kept me never far from strong, acrid formaldehyde fumes, and on top of all that, having smoked cigarettes steadily for at least 35 years, I feel that my life has been charmed—that I am now wholly undeservedly still alive.

I recall the drawings in one of the J&L newsletters and realize again that in addition to the triumph, anger, and sadness in this history, there was a certain stark beauty in it also (see Chapter 14). As these conflicted and confusing thoughts end, I find that I have ascended the stairs and am in Concourse C, detached now from thoughts of the sinter plant, and preparing to fly even farther away from the Benson Mines.