INL/CON-05-00339 PREPRINT

American Material Culture: Investigating a World War II Trash Dump

Great Rift Science Symposium

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October 2005

The INL is a U.S. Department of Energy National Laboratory operated by Battelle Energy Alliance



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I love trash, the older the better. Some of my favorite trash lies relatively untouched in the middle of the Idaho National Laboratory (INL). The U.S. military dumped its trash in dry irrigation canals during and after their World War II activities, shortly before the federal government designated this arid and desolate place as the nation's nuclear reactor testing station in 1949. When read critically and combined with memories and photographs, the 60-year old trash provides a glimpse into 1940s' culture and the everyday lives of ordinary people who lived and worked during this time on Idaho's desert.

In the fall of 1942, after months of rumors, speculation, and, finally, frenzied construction, the U.S. Navy opened the Naval Ordnance Plant two miles north of Pocatello to manufacture, assemble, and repair a wide variety of weapons and ammunition.² The size of ordnance ranged from light caliber to sixteen-inch guns with culvert-size barrels and shells resembling small rocket ships. However, before being sent from this dry, inland locale onto Navy battleships, the ordnance first had to be test fired to ensure its accuracy and dependability.³ The dangers associated with test firing, called proofing, required an isolated, relatively flat area with gravelly soil and no outcrops or

¹James Deetz, "In Small Things Forgotten": An Archaeology of Early American Life", (New York: 1977, rev. 1996).

²Due to urban growth since World War II, the remaining Ordnance Plant structures are now well within Pocatello city limits.

³---. "Size of Ordnance Plant Still Surprises Visitors." <u>Arco Advertiser</u> 16 January 1946.

other obstructions that could cause shells to ricochet. After inspecting several possible test sites, Navy Commander J. A. Scoville selected a six-mile wide by twenty five-mile long stretch of sand and sagebrush approximately sixty miles northwest of Pocatello and seventeen miles northeast of Arco.⁴ After site selection, the Navy quickly commenced building the proving ground, one of only six in the country and the only one used to test fire the Pacific Fleet's "Big Guns".

By the end of 1942 the war with Japan was accelerating and the Navy had no time to waste in getting weapons into battle. Like the rattlesnakes and jackrabbits that called it home, construction workers and equipment soon swarmed over the once deserted and barren land. By the following summer, Naval officers, civilian men and women workers and their families, and Marines with guard dogs had arrived at the site the Navy called the Arco Naval Proving Ground, later shortened to the NPG.

On November 11, 1943, the Navy celebrated Armistice Day and the NPG's formal opening by inviting curious local town folks to a special program. Although the nearly eighty-thousand acre firing range was off-limits, dozens of visitors toured the southern portion of the NPG including two separate and distinct sectors that together covered a little over two hundred acres.⁵ The northern-most "Proofing Area" was the business end of the NPG. It consisted of a railroad spur and 250-ton gantry crane that civilian workers used to unload the ordnance after its arrival by rail from the Ordnance Plant. This area also included an office building, rows of concrete gun abutments, earthen and concrete munitions bunkers, and a control tower that sat atop a heavily

⁴---. "Navy Man Says Site Near Arco Chosen As Range." <u>Arco Advertiser</u> 2 October 1942.

⁵---. "Armistice Day At Gun Range". <u>Arco Advertiser</u> 5 November 1943.

reinforced eight-foot wide concussion wall to protect the women and men who loaded and fired the weapons.

On the south side of the concussion wall and about a half mile away from the Proofing Area was the "Residential Area" where military and civilian workers and their children lived. It contained solid, red brick bungalows that served as officers' quarters, matching red brick barracks for the Marine guards, a cinderblock commissary that residents called "the store"⁶, and a water tank on tall, wooden stilts.⁷

At first, unlike the Navy officers and Marine guards, most civilian workers and their families lived in communities around the NPG including Arco, Idaho Falls, and Blackfoot. However, rough roads and severe winters made the drive to the NPG treacherous from all directions. This danger, combined with the scarcity of available housing, led the Navy to construct nineteen small, white frame houses and two barracks to shelter the newcomers. Some families lived at the NPG until 1949 when the Navy transferred the site to the newly formed Atomic Energy Commission, leaving behind a desert littered with ordnance, empty buildings, and piles of garbage.⁸

Some of the homes and other Navy buildings and structures were reused by the nuclear reactor program but nearly fifty years would pass before another thought was given to their garbage or the lives and culture it represented. For example, the trash dump's location revealed clues to society's attitude about the environment during the 1940s. Although the trash dump lies just off the main highway between Idaho Falls and

⁶ Susan Stacy. Unpublished manuscript. "Nuclear Camelot". (Idaho Falls: U.S. Department of Energy, 1999) p. 11.

⁷Wyle Laboratories. <u>Interim Ordnance Cleanup Program: Record Search Report</u>. (Idaho Falls: U.S. Department of Energy, 1993), pp. 2.6-2.8.

⁸ Stacy, pp. 11-12.

Arco, passersby would never know it existed. As evidenced by the scattered debris, the NPG cleanup crews apparently backed up to a dry irrigation canal dug in the early 1900s and shoveled the trash into it. The gently undulating terrain and large sagebrush concealed debris that missed the canal and, unless one accidentally stumbled across it, the existence of the dump would remain unknown. However, the dump's location was not accidental and illustrates the "out-of-sight, out-of-mind" mentality about refuse that existed at the time and still exists today. However, unlike today, the military did not even attempt to cover the trash with soil, leaving it exposed to the elements but hidden from human view.

Like the casual passersby, my coworkers and I were unaware of the dump until an INL project manager called us about the need to clean it up. We jumped at the chance to examine the then mysterious debris and determine where it had come from and who might have left it.

The near absence of industrial waste and the wide variety of household items indicated to us that the trash had obviously not come from the INL's scientific activities. And, although the depth of the trash varied, in some places exceeding three feet, it extended for well over a mile. The sheer volume of garbage and its uneven distribution suggested to us that whoever had dumped the trash had made several trips to the same canal, perhaps regularly and over an extended period of time. Some of the garbage also appeared as though it was intentionally set afire in a misguided effort to destroy it, either before or after dumping. But, like the tin foil and aluminum cans often found in campground firepits, most of the discarded items remained intact though charred and missing paper labels. Given its relatively close proximity to the former NPG residential area, we assumed that the trash originated there but still had to prove it. A cursory inspection of several of the artifacts allowed us to date them. Diagnostic features, such as the structure, composition, and openings of cans, manufacturer trademarks, inclusions in glass bottles, and patterns on china, allowed us to narrow the dates of the dump to between 1920 and 1960. Knowing the INL area had been closed to the general public and their garbage since 1949 helped us to narrow the dates further.

We continued our investigation by searching libraries, newspaper archives, and federal records for information about the NPG. Although the information was scattered and often vague, we did find documents that detailed the size and kind of weapons tested, the results of many of these tests, and descriptions of the NPG's residential and proofing areas' infrastructure. But, other than mentioning the commanding officers' names, official reports said nothing about the people who had left the trash. Although local newspaper articles did provide a little more personal information, they too concentrated mainly on official activities. Fortunately, we soon learned that some of the NPG alumni had stayed in Southeastern Idaho and, over the years, told stories punctuated with shows of old photographs. As word got out about our search, we began hearing stories about life on the NPG base, often from people who were just children during World War II.

During subsequent visits to the dump, our excitement grew as we identified individual items and realized they supported the stories we had learned about the social activities and people at the old NPG. For example, we had heard that the Navy threw fairly wild parties at this area where the government had long ago prohibited the possession of all alcohol. One story recalled Saturday nights when the NPG engineer drove a locomotive, used to move the ordnance around the NPG, from its shed and talented local musicians played the latest tunes while young couples danced and drank the night away. Predictably, after a few hours and many drinks, punches were thrown and the on-duty Marine guards had to break up the fights. The substantial quantity of heavy crown-top beer cans lining the dump lent credence at least to the first part of this story.⁹

A baby doll carriage frame, toy train and scores of melted and misshapen marbles we found scattered among the cans brought to mind another story also involving trouble and the Marine guards but this time the culprits were much younger members of the NPG community. It seems that, while riding the school bus the seventeen miles each way to and from Arco, a few of the restless boys taunted and bullied the smaller and younger children. Following the concept that "it takes a village to raise a child", the military stationed a Marine guard to ride the bus to and from school which effectively took care of the problem.¹⁰

Old photographs showed a semi-circle of the now nonexistent small, white frame houses in the NPG Residential Area where entire families lived. Barely visible in the backyards of many of these tidy homes, appeared gardens.¹¹ The women who lived at the NPG had apparently tried to make the isolated and barren desert seem more like a friendly small town than a wartime Naval base. They raised and displayed flowers in the once-bright red, yellow, and blue pots and vases we found strewn throughout the dump. To supplement their families' bland diets the women planted, canned, and served fruits and vegetables from the backyard gardens as evidenced by their now-grown children's

⁹Al Anselmo. Personal interview. September 12, 1997.

¹⁰Stacy, p. 12.

¹¹Photographs taken immediately after the AEC acquired the NPG are available at the INL Photography Laboratory located in the INL corporate offices in Idaho Falls.

fond memories and the dump's bent pressure cooker, broken Mason jars, and fragile, floral patterned crockery pieces. These items lay scattered randomly among the ubiquitous tin cans and bottles that spoke volumes about the NPG's tasteless, militarysupplied food staples. The unmistakable cobalt-blue Milk of Magnesia bottles and glass fragments shone majestically against a backdrop of dozens and dozens of blackened ketchup bottles that snuggled companionably among thousands of rusted bean and meat cans. Other medicine bottles, including some we normally associate with hangovers, also languished nearby and reminded us of the Sunday morning paybacks that likely followed the NPG's Saturday night get-togethers.

Thanks to priceless stories, hours of research, and our ability to read the language of historic artifacts, the dump turned from just another trash heap into a treasure trove of 1940s memorabilia. Such studies of American material culture serve to fire our imaginations, enrich our understanding of past practices, and humanize history. Historical archaeology provides opportunities to integrate inanimate objects with animated narrative and, the more recent the artifacts, the more human the stories they can tell.¹² The INL World War II trash dump investigation provided an opportunity to combine archaeology and history to vividly portray unique events from Idaho's more recent past.

¹²"Archaeological Theory Today", ed. Ian Hodder, (Cambridge, UK:2001), p. 217.

Bibliography

- ---. "Navy Man Says Site Near Arco Chosen As Range." <u>Arco Adverister</u>. 2 October 1942.
- ---. "Armistice Day At Gun Range." Arco Advertiser. 5 November 1943.
- ---. "Size Of Ordnance Plant Still Surprises Visitors." <u>Arco Advertiser</u>. 16 January 1946.
- Stacy, Susan. "Nuclear Camelot." Unpublished manuscript, U.S. Department of Energy, 1999.
- Wyle Laboratories. <u>Interim Ordnance Cleanup Program: Record Search Report</u>. Idaho Falls: U.S. Department of Energy, 1993.