



## Washington History in the Classroom

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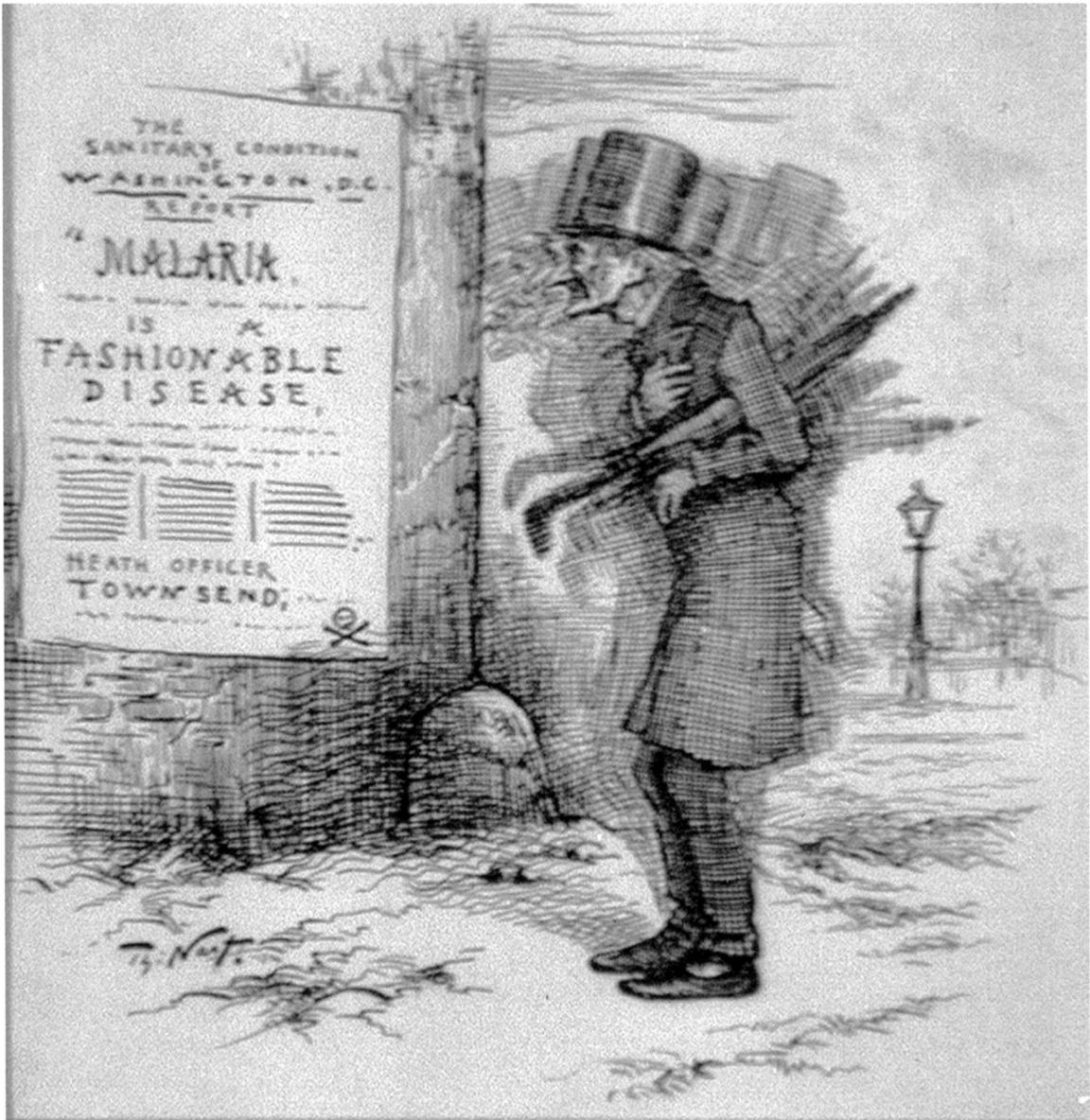
**“Washington History** magazine is an essential teaching tool,” says Bill Stevens, a D.C. public charter school teacher. “In the 19 years I’ve been teaching D.C. history to high school students, my scholars have used *Washington History* to investigate their neighborhoods, compete in National History Day, and write plays based on historical characters. They’ve grappled with concepts such as compensated emancipation, the 1919 riots, school integration, and the evolution of the built environment of Washington, D.C. **I could not teach courses on Washington, D.C. history without *Washington History*.**”



*Bill Stevens engages with his SEED Public Charter School students in the Historical Society’s Kiplinger Research Library, 2016.*

**Washington History** is the only scholarly journal devoted exclusively to the history of our nation’s capital. It succeeds the *Records of the Columbia Historical Society*, first published in 1897. *Washington History* is filled with scholarly articles, reviews, and a rich array of images and is written and edited by distinguished historians and journalists. **Washington History** authors explore D.C. from the earliest days of the city to 20 years ago, covering neighborhoods, heroes and she-roes, businesses, health, arts and culture, architecture, immigration, city planning, and compelling issues that unite us and divide us.

The full runs of *Washington History* (1989-present) and its predecessor publication the *Records of the Columbia Historical Society* (1897-1988) are available through JSTOR, an online archive to which many institutions subscribe. It’s easy to [set up a personal JSTOR account](#), which allows for free online reading of six articles per month in any of their journals, or join the Historical Society at the [Membership Plus](#) level for unlimited free access to our publications.



*Reflecting the contemporary belief that streets littered with household refuse and waste, ashes, and animal carcasses bred disease, this cartoon by Thomas Nast satirized the District's imperfect efforts at sanitation. Scientists pursuing "germ theory" would soon establish that the cause was bacteria, not refuse. Published in Harper's Weekly, November 26, 1881. (Library of Congress.)*

# Talking Trash

## *Solid Waste Policy in the District of Columbia, 1877–1922*

by Curtis J. Hartman

Almost every day, in every major city in the United States, a marvel of planning and engineering takes place. Early in the morning, householders haul or wheel bins filled with refuse to the curb and later in the day come home to find those bins emptied and the trash gone. For a single household, this may not seem like a particularly impressive feat; it is the scale of the operation that is daunting. In the District of Columbia alone, the Department of Public Works collects roughly 132,000 tons of trash and recyclables from 105,000 households every year.<sup>1</sup> While the number is impressive, it is worth noting that the Department of Public Works only collects residential waste from buildings with three or fewer households, leaving apartment complexes and businesses, the largest producers of trash, to contract with private parties for this essential service.<sup>2</sup> With the modern backdrop of budgetary shortfalls in mind, and many cities trying to save costs through privatization, it is worth exploring how the current compromise in District trash collections arose and why past administrators believed that mu-

nicipal collection was the best option for city households.

It is easy to assume that the modern system of collection and landfilling “grew up” organically as the increasing waste stream became an important feature of the urban landscape, but that is not the case. The late nineteenth and early twentieth centuries were a time of intense experimentation and profiteering as municipalities began to grapple with the complex issues of waste management. Examination of this trial-and-error approach reveals policymakers gradually recognizing the need for, and subsequently developing, a comprehensive environmental policy. The relatively small territorial size of the District of Columbia, coupled with the absence of county and state resources, forced it to come to terms with many of the problems surrounding refuse collection and disposal before other municipalities. As early as 1889, a report of the Health Officer of the District of Columbia stated that: “Appropriate places for [refuse] are becoming scarcer year by year, and the question of some other method of disposal . . . must soon confront us.”<sup>3</sup> The District’s unique governmental structure and legal status in turn allowed the city to become something of a Progressive Era proving ground for methods of collection and disposal that

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other municipalities lacked either the funding or public support to attempt.

In June 1878, Congress passed a refined version of the Organic Act, making permanent a system of government in which three commissioners, two civilians appointed by the president and confirmed by the Senate and a third member appointed by the president from the Army Corps of Engineers controlled virtually all municipal administration with no meaningful accountability to District voters.<sup>4</sup> When the D.C. commissioners were first established, waste was not seen as a particularly important issue to address. The commissioners were unclear as to whose responsibility the waste stream was, and eventually assigned it to the Washington, D.C. Health Department, under the newly appointed health officer, Dr. Smith Townsend. The commissioners planned to contract for the collection and disposal of all city refuse, meaning the District intended to authorize and pay a private contractor to handle the entire waste stream. Contract oversight was handled by the Health Department, which provided inspectors to ensure that collection and disposal were handled in a sanitary manner. In 1880, the newly invested commissioners entered into their first exclusive contract with a private hauler to dispose of the city's waste.<sup>5</sup>

The emergence of the solid waste industry required the Health Department to adopt a new lexicon for designating the different types of trash. It is important to understand that during this period the waste stream was not considered as a single entity; several distinct categories of waste existed in the public consciousness, each with its own requirements for handling and disposal. The earliest documents used terms like "refuse" and "offal" interchangeably in reference to the waste stream as a whole, but further classification of the waste stream indicated the special handling of each category. In the *Annual Report of the District of Columbia Health Officer of 1888*, three catego-

ries of solid waste are listed under the heading of "offal": garbage, night soil, and dead animals.<sup>6</sup> "Garbage" referred to food waste generated from household kitchens, and "night soil" was the product of home privies in those areas that were not yet connected to the sewers. Dead animal disposal referred primarily to dogs and horses, which was an essential function of municipal waste collection. Ashes, the byproduct of coal- and wood-burning stoves used for cooking and heating, which later were considered as a part of the waste stream, were listed separately under "The Abatement of Nuisances."<sup>7</sup>

To further complicate matters, prior to this time no one had thought to measure the amount of waste the city produced. The lack of records led the Health Department and Congress to severely underestimate how much waste was generated, and the initial contract appropriated slightly more than \$10,000, or \$28 per day, for the removal of all garbage. In June 1880, Mr. H. Clay Jones, who was awarded the contract, claimed it was impossible to haul all of the city's garbage for \$28 dollars per day. Jones had already hired fifteen men and thirty wagons to haul the waste, and had leased a building—designated by Doctor Townsend of the Health Department, at the corner of First and N streets, S.W.—for the storage of all refuse waiting to be hauled off via the nearby James Creek Canal. When it became clear that hauling all the refuse was going to cost more than he was going to make, Jones suspended all collection, leaving hundreds of tons of garbage, night soil, and animal carcasses to rot in city streets. Townsend secured orders from the commissioners to let Felix M. Draney take over the contract, but Jones refused to allow Draney's garbage haulers into the designated storage area, arguing that he had leased the site and did not have to allow anyone in. Ultimately, the police became involved and arrested Jones, but not before most of the refuse had been dumped on the canal bank rather than in the designated



*"The Utilization of Old Tin Cans." From Scientific American, Vol. 68, No. 12, March 25, 1893, p. 186.*

building. Draney continued to haul the waste through the remainder of the summer and secured a revised appropriation of \$15,000 per annum to haul all D.C. garbage for the next decade.<sup>8</sup>

Throughout the 1880s, the waste stream grew appreciably, by as much as five hundred tons between 1887 and 1888, but there was a corresponding offset as the amount of night soil declined with the expansion of the sewer system.<sup>9</sup> Seasonal changes in the waste stream became apparent when the Health Department began documenting waste tonnage, most notably in July and August when watermelon consumption caused average weekly garbage production to jump from ten to fifty tons. By 1889 the steady increase of waste tonnage began to affect Draney's profits. The \$15,000 appropriation had not been changed since 1880, even though the waste stream and the city had both grown. To keep pace with a city riddled with alleyways and uneven roads,

Draney's company employed horse-drawn garbage collection carriages as well as individuals with push carts. All city garbage was hauled to Draney's private wharves in Georgetown and on the Eastern Branch of the Potomac, and from there it was supposed to be loaded on ships and taken outside the District to Four-Mile Run, where it was offloaded for local farmers to use as fertilizer.<sup>10</sup> To compensate for the overall waste stream growth, Doctor Townsend went back to Congress and secured an increase in the allocation of funds for waste hauling, making the contract worth \$25,000 per annum.

Throughout the 1880s and into the 1890s, biodegradable waste and ash were the primary causes of concern for haulers and for government officials, but what about the rest of the waste? Bottles, tin cans, rubber, cloth, and all other forms of waste that were becoming an increasing part of the waste stream were noticeably absent from this debate. This was thanks



*“Scows Unloading Rubbish at Sea,” from Munsey’s Magazine, 1900. Collection of Maggie Land Black. In this case the scows are carrying New York municipal waste, but similar scenes were common on the Potomac.*

to a group of poor, urban African Americans who made their living as trash pickers.

A typical trash picker, as described by *Washington Post* writer Sibyl O’Brien was: “one of those old negroes with a black pipe in his mouth, and a [p]air of dirty overalls pulled up to meet an old flannel shirt.” This group, consisting primarily of former slaves, made their living sifting through the castoffs of their wealthier white brethren looking for rags, bottles, and scrap metal that they then sold to one of roughly twenty junk shops in the District. These junk shops served as a hub for recycling discarded materials: paper and white rags went to paper mills, rubber to rubber factories, wool fabric was put into new men’s clothing, bottles were washed and resold to the company that first issued them, and virtually all metal was sent to some industry where it could be recast and repurposed.

Although some trash pickers worked curb-

sides and alleyways collecting refuse at the source, consumer demand for convenient pickup of refuse led many households to start adding this new category of waste, which by the turn of the century came to be called “rubbish,” to their ash bins to be hauled away. Within the District the primary destination for these ash bins was a large burn dump at the western end of B Street (today, along Constitution Avenue roughly at the present location of the State Department). At this dump site, primarily African American women used hooks to sift through the ash for valuables and scrap metal that would also end up at the junk shops.<sup>11</sup>

Entering the 1890s, the contract system of refuse collection continued to prove problematic for city officials. Dr. William C. Woodward, who replaced Townsend as the District of Columbia Health Officer, was forced to confront the fact that his small staff of inspectors was

simply unable to monitor all aspects of refuse collection and disposal. To offset this difficulty the contract was awarded to the National Sanitary Company managed by Sampson P. Bayly Jr., a former health officer who had worked under Dr. Woodward.<sup>12</sup> While Bayly believed his familiarity with the garbage system would help him turn a profit, the amount of garbage the District generated had long since exceeded the amount of waste farmers along Four Mile Run could use for fertilizer. When that market for their garbage reached capacity, the National Sanitary Company began dumping most of the garbage directly into the Potomac beyond District waters. In the 1890s, the city's monthly production was approximately three thousand tons of garbage, five hundred dead horses, and one thousand dead dogs, virtually all of which was deposited directly into the Potomac. Much of the garbage washed up on Alexandria's shores, prompting widespread discontent among Alexandrians, some of whom went so far as to capture and set fire to one of the National Sanitary Company's scows.<sup>13</sup> This, in turn, prompted the mayor of Alexandria to lodge a formal complaint against the District before Congress.

As a short-term solution, District officials instructed Bayly to dump the garbage on the Maryland side, in Broad Creek. Doctor Woodward and other city officials wanted an incinerator constructed within the District, believing that burning the garbage would solve any problems with neighboring jurisdictions and permit city inspectors ready access to the disposal site. The proposed incinerator was to cost \$30,500 in addition to the \$29,500 Congress had already appropriated for the collection and disposal of the District's garbage. The steep price tag for the incinerator ensured a lack of congressional support, and the additional funds were not approved by the Senate.<sup>14</sup>

Frustrated by District scows dumping garbage directly and indirectly on Virginia soil, Virginia authorities banned District vessels from coming ashore to dispose of garbage.

Further, since Congress had refused to fund the incinerator within the District, the National Sanitary Company was forced continue the "temporary" practice of dumping in Maryland waterways into 1895 for want of an alternative. During the winter of 1885, most of the Maryland's waterways froze, which left the garbage scows locked in ice and caused refuse to pile up on the wharf at G Street S.W. for weeks.<sup>15</sup>

By the summer of 1895, the continued problems arising from water disposal led city officials to make their first foray into the world of garbage incineration.<sup>16</sup> Europe, and especially Britain, had pioneered garbage incineration as the primary means of disposal, and it was widely believed that this technologically advanced method would alleviate many problems in the United States.<sup>17</sup> The announcement of the construction of an incinerator prompted the *Morning Times* to publish a list of twenty reasons why waste incineration was superior to feeding the garbage to livestock, citing both health and environmental concerns.<sup>18</sup> After considering several sites, the commissioners decided upon the terminus of South Capitol Street, believing the "industrial" character of the region made it the best place for an incinerator proposed by local entrepreneur, Samuel Brown.<sup>19</sup> An additional incinerator was built on South Water Street, though it had a substantially smaller capacity than the Brown incinerator.<sup>20</sup>

Both incinerators elicited varying levels of complaints about odor, and their results in actually incinerating the garbage were un spectacular. The high level of moisture in the garbage meant that incinerator operators had to add additional fuel, usually coal, which drove up incineration costs.<sup>21</sup> The District commissioners argued that the incinerators' poor performance was not their problem but an issue to be settled between the operators of the incinerators and the new District garbage contractor, Joshua N. Warfield.<sup>22</sup>

Warfield, who had only recently won the

contract from the National Sanitary Company, was embroiled in a fight with the citizens of the District over garbage collection routes. The District was growing rapidly, and many of the routes did not include newer homes in outlying neighborhoods. Once these neighborhoods were added to the contract, it often took weeks before routines were modified to actually visit the homes on the route.<sup>23</sup> Warfield claimed that individual citizens were not affording his company an ample opportunity to collect the waste because they were not storing it in the mandated containers. The contract specified that garbage collectors only had to pick up sealed wooden pails, and collection crews were not obligated to pick up any others.

Warfield was able to get the police to fine many of the homeowners whose containers were in violation.<sup>24</sup> On the other hand, the spotty collection of Warfield's company incurred heavy fines levied by the Health Department, amounting to \$465 in the month of August alone. Between the higher cost of incineration and the demands of more and more homes for curbside pickup, it is unsurprising that by 1897 incineration was largely abandoned and the garbage scows resumed their dumping in waterways, to the anger of nearby jurisdictions.<sup>25</sup>

The period of 1878 to 1900 was characterized by the tension between the District Health Department, which was primarily concerned with general welfare and sanitation, and the contractors, whose primary motivation was profit. The disposal industry and the early repurposing and recycling industries were not operating under any sort of environmental ethic, as most such industries are today. All efforts at disposal, repurposing, or recycling were centered on profit. As the nineteenth century drew to a close, the growth of mechanization in factories made it cheaper in many cases to produce a new item rather than reuse an old one. This industrial development reduced the profits of trash pickers and forced many out of the business.<sup>26</sup> By the beginning

of the twentieth century, the dwindling number of trash pickers was insufficient to remove the increasing amounts of rubbish from the waste stream. These changes, coupled with the dawn of a sense of governmental responsibility, brought about the next era of solid waste management in the District of Columbia.

From the inception of the commissioners in 1878 to 1900, the population of the District of Columbia grew from 177,624 in 1880 to 278,718 in 1900. During this population boom the racial demographics remained stable; whites consistently accounted for roughly two thirds of the District and black citizens made up the other third.<sup>27</sup> This population growth, coupled with the boom in the consumption of industrial products, ensured that the waste stream consistently outgrew projections year after year. In the nineteenth century, the District Commissioners had relied extensively on contractors to provide many of the services that were essential to the functioning of the city. But the constant renegotiation of budgeting and debates over price coupled with unsatisfactory performance was creating a growing sense that the municipality should take over collection and disposal of the city's waste.

The first major step in this direction came in 1900. Once they recognized that the problems associated with refuse collection and disposal were, in many respects, more an issue of logistics than medical expertise, the District Commissioners assigned responsibility for refuse collection to the growing Street Cleaning Department, under Superintendent of Street Cleaning Warner Stutler. Believing that the District was too reliant on contractors and was essentially overpaying for many services, Stutler changed the upcoming contract for street sweeping to ensure the District would take over all street sweeping. He achieved this by conducting street sweeping tests, after which he concluded that the District should only pay twenty cents per every one thousand square



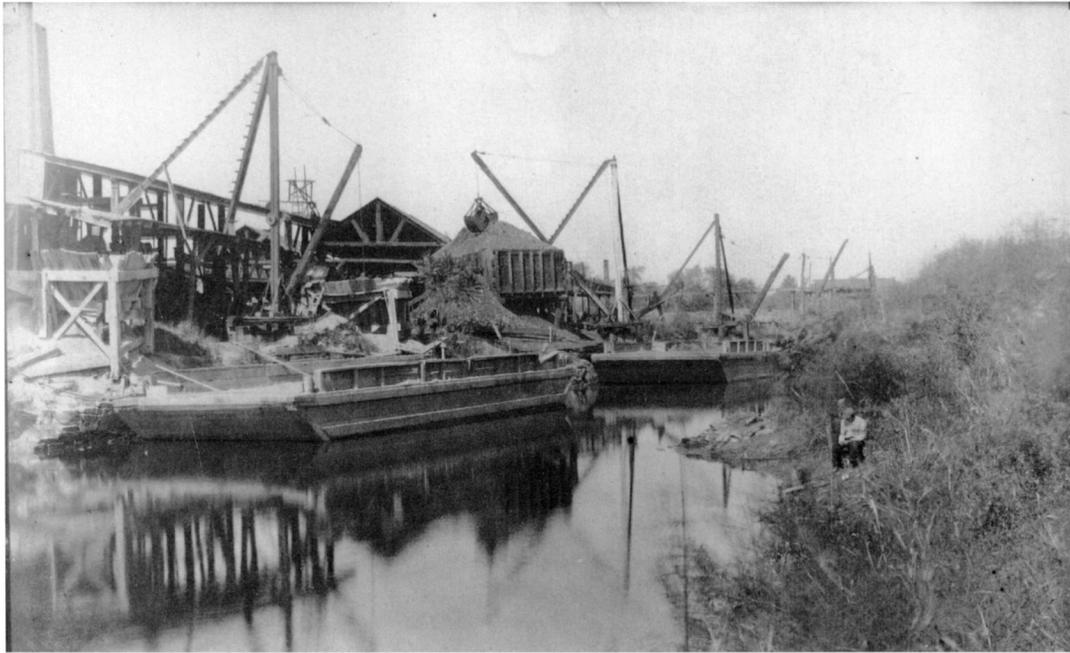
*Unidentified photograph of refuse workers, possibly “trash pickers.” (National Photo Company Collection, Library of Congress.)*

yards. Anticipating that no contractors would submit a bid at that low rate, Stutler had the commissioners add a clause to the congressional budget that allowed the municipality to take over street sweeping in the event that no acceptable bids were received. Stutler believed that the District could actually save money at the rate of twenty cents per one thousand square yards, and so was eager to take over the sweeping when no bids were received.<sup>28</sup>

Though the takeover of street cleaning marked the first significant foray into municipal control over the waste stream, Stutler felt the District was not yet ready to take over all collection and disposal of refuse. In 1900, Stutler and the commissioners still entertained several different bids for the collection and

disposal of ashes and garbage.<sup>29</sup> In an effort to make the garbage contract more profitable and allow for greater ease in collection oversight, the District passed a law in May 1901 forbidding the transportation of garbage within the District by anyone other than the company holding the contract with the District.<sup>30</sup> This law primarily targeted the poor, independent trash haulers and pickers, many of whom had agreements with individual hotels or restaurants for their waste, which was fed to hogs or used as fertilizer on small farms in Maryland and Virginia.<sup>31</sup> The garbage law enabled the city to award the entirety of its waste stream to a single hauler, but the question still remained: How was the waste to be disposed of?

Nationally, many municipalities were mov-



*Scene on the St. James Creek Canal, probably taken between 1910 and 1920, showing how industrialized the canal was at the time. (National Photo Company Collection, Library of Congress.)*

ing away from large-scale garbage incinerators. Between 1885 and 1908, 180 incinerators were built nationwide, reflecting the late nineteenth-century belief in the practicability of incineration, but by 1909 all but seventy-eight had been decommissioned, to be replaced by dumping.<sup>32</sup> Another practice that was widely discussed by various municipalities was garbage reduction—a process in which the garbage was subjected to pressure and heat in a large mechanical apparatus in order to extract grease. This grease was a saleable product for use in soap or candle manufacturing.<sup>33</sup> But garbage reduction plants proved even more difficult and unpopular than incinerators in many regions. In 1909, *Engineering and Contracting* magazine listed twice as many disadvantages as advantages for garbage reduction plants and concluded that “reduction plants cannot be made economical in small units, and are liable to create too much odor when located in a thickly settled district.”<sup>34</sup> For most municipalities, dumping was simply much

cheaper and less likely to cause political turmoil over noxious fumes than the available alternatives.<sup>35</sup>

Despite the growing unpopularity of alternative means of refuse disposal nationwide, Stutler and the District Commissioners actively courted innovative plans for refuse disposal because of the shortage of suitable dumping sites. On April 25, 1900, the city of Alexandria adopted resolutions to censure the District Commissioners for continuing to dispose of refuse in and around Alexandria, and specifically for the nearby District-operated fertilizer factory which was “the cause of much sickness in this city.” Alexandria officials demanded that the commissioners use incineration or reduction processes to dispose of their own waste within District limits.<sup>36</sup> In response to this pressure, of the five bids for refuse collection and disposal that Stutler and the commissioners considered in April 1900, three included plans to construct incinerators, and the other two proposed garbage reduction facilities.<sup>37</sup>



*Refuse plant workers, probably in the 1920s. (National Photo Company Collection, Library of Congress.)*

Stutler and the commissioners eventually worked out a system of garbage collection and disposal that appeased all parties. In 1901, Myron Melvin Parker, a former District Commissioner and prominent Washington Freemason, became the president of the Washington Fertilizer Company.<sup>38</sup> Parker was aware of the issues facing the commissioners and had his company build a reduction plant in Cherry Hill, Virginia, roughly thirty miles downriver from the capital, well out of sight of Alexandria and the District.<sup>39</sup> To facilitate transfer of the garbage to the reduction plant, Parker built a transfer yard at Second and K streets NE where garbage wagons could be weighed and placed on rail cars.<sup>40</sup> In May 1902, the Washington Fertilizer Company was awarded the exclusive right to haul all garbage in the District of Columbia.<sup>41</sup>

Despite high hopes, Parker ran into the same problems as prior contractors. In 1903, the Washington Fertilizer Company brought the District to court for breach of contract, arguing that the commissioners must compel their citizens to bring all dead animals to the company for processing in Cherry Hill. An appellate judge eventually ruled that the District could not compel its citizens to comply with the terms of a contract between the District and a private company.<sup>42</sup> By 1905 numerous service complaints caused the commissioners to place the Washington Fertilizer Company on probation for six months and required that they demonstrate significant improvement in service before their five-year contract could be renewed. Parker quickly realized that garbage hauling was not the profitable industry



*A circa 1915 photograph of a group of workers at the District refuse plant on H Street, N.E., near the Anacostia River. (National Photo Company Collection, Library of Congress.)*

he imagined it to be and left the company when it was placed on probation. Even without Parker at the helm, the Washington Fertilizer Company continued to hold the contract to haul garbage for the District of Columbia from 1905 to 1915, ultimately earning a five-year contract worth \$68,400 per year from 1910 to 1915.<sup>43</sup>

While Stutler and the commissioners struggled to find a company that could adequately handle the garbage contract, the collection of the remaining categories of waste went relatively smoothly. From 1878 until 1900, the District provided for ash collection from smaller private residences. In 1900, Stutler submitted a plan to extend the contract to include businesses, large apartment complexes, and hotels. Stutler was concerned that many of the larg-

est generators of ashes were not having their waste disposed of properly because many of the smaller private ash haulers had gone out of business when the city began awarding a contract for collection of ashes from households. The problem was one of money; collecting business and apartment ashes would cost an estimated \$35,000 per year, a substantial increase considering the city was already paying \$29,979 annually for the collection of household ashes. Because of its cost, Stutler's plan was not approved. In 1906, Stutler's successor, Superintendent John T. Twohay proposed a similar plan, though his estimate was that it would only cost an additional \$15,000 per year.<sup>44</sup> Again, the recommendation

stalled out in congressional budget committee. The resulting picture of ash collection in the District from 1900 until 1918 was that ash was put at the curb in metal containers and hauled by a horse-drawn, bottom-dump carriage to one of several small ash dumping sites on the periphery of the District. There a volunteer labor force comprised entirely of poor, black trash pickers deposited and spread the ash in exchange for permission to sift through it for unburned coal or any other salvage.<sup>45</sup>

The collection of night soil, household sewage, was awarded via contract to various haulers between 1900 and 1920. By 1914, only a small number of households on the periphery of the District still required night soil service, since most of the city was connected to the ever-growing sewer system. The night soil was



*Another view of refuse plant on H Street, N.E., “near Benning Road Bridge,” ca. 1910–13, and possibly the site where trash was burned. (National Photo Company Collection, Library of Congress.)*

hauled to a dock at the foot of South Capitol Street, where it was placed on a scow and towed to a farm in Maryland. Once there it was combined in a compost heap with street sweepings and manure for use as fertilizer. After 1906, a contract for hauling dead animals was established separate from the garbage-hauling contract as a result of the legal wrangling between the Washington Fertilizer Company and the District. Under it, dead animals were hauled to Four-Mile Run, near Alexandria, stripped of their hides, and then rendered into grease.<sup>46</sup>

Prior to 1910, the trash picker and junk shop had effectively disposed of most rubbish—the last category of waste—without the need for a contract, but as industry became more ef-

ficient, the price of reused materials dropped, driving most trash pickers out of business.<sup>47</sup> Rubbish, like ash, was disposed of at various burn dumps throughout the city or, in many cases, in yards and alleyways.<sup>48</sup> Burn dumping was a simple process where the materials were placed in a natural depression or an excavated area, set on fire to reduce the mass and increase compaction. New materials were then placed on top of the burned mass and the process was repeated. Burn dumping was not without hazards; in 1908 backyard rubbish burning accounted for eleven house fires within the District, and rubbish dumps another four.<sup>49</sup>

The successful District takeover of street sweeping under Superintendent Stutler, coupled with continued problems in administering

the garbage contract, created a growing sense that the District ought to take over collection of all waste. Many District officials believed that the Street Cleaning Department could perform the work more cheaply and with fewer service complaints than the private contractors.<sup>50</sup> This sentiment was echoed in contemporary Progressive literature by such groups as the League of American Municipalities, which explicitly argued for municipal takeover of collection and claimed that “Short term contracts are a complete bar both to economy and progress. Very few cities, large or small, have any adequate garbage disposal service.”<sup>51</sup>

In 1914, the District Commissioners contracted with Irwin S. Osborn, a “recognized expert in such matters” despite having only recently earned his degree in civil engineering, to conduct an extensive study of refuse disposal in the District and determine the feasibility of municipal collection. The report took roughly a year to complete, and in it Osborn initially considered seventeen different disposal plans consisting of various combinations of disposal methods. In his final report, Osborn collapsed the seventeen plans into three distinct options for the commissioners to consider. Option A envisioned commingled collection of garbage, rubbish, and night soil by the municipality, after which it would be sent to one of three proposed incinerator sites on Bryant Street and one in Georgetown on Water Street. Option B proposed that the city separately collect each waste category. Garbage and dead animals would be shipped via transfer yard to a proposed reduction plant operated by the District near Shepherds Ferry, while rubbish would be burned in a proposed incinerator near New York and Florida Avenues. The resulting ash would be mingled with household ash and used to fill low-lying areas. Option C was simply to make no changes and to continue to let the contract system handle all wastes.<sup>52</sup> The commissioners did not immediately act on Osborn’s report, largely because the First World War broke out, but its

recommendations and underlying philosophy proved central in shaping both the immediate and the long-term vision of District solid waste management.

During the war, the U.S. Department of Agriculture issued a bulletin advocating feeding garbage to hogs as an efficient way to obtain meat. In order to facilitate hog farming, the District repealed the 1901 garbage hauling restrictions and once again allowed small firms to receive permits to haul waste and compete for collection routes. By 1918, the District issued forty-two permits to haul garbage either to the city transfer yard for movement to Cherry Hill or to hog farmers. Citizens in large apartment complexes and businesses could enter into a contract with one of those haulers for the removal of their garbage, but those citizens whose refuse was collected by the Washington Fertilizer Company were still required to send their waste to the reduction plant at Cherry Hill. Unsurprisingly, there were problems with unlicensed haulers who did not conform to all applicable regulations for the storage and movement of garbage, mostly in the form of widespread theft of garbage cans and illegal disposal.<sup>53</sup>

In February 1918, District government agencies tried to get in on this hog farming enterprise. The District prison at Occoquan acquired one thousand hogs, reasoning that convict labor and relatively free feed would yield significant revenue. Irwin Osborn vocally opposed feeding garbage to hogs for logistical and sanitary reasons, and the contract between the District and the Washington Fertilizer Company proved unbreakable.<sup>54</sup> As long as the city had a single contractor who was guaranteed collection of all household waste, the city was unable to experiment in alternative forms of disposal.

Frustrated by the seemingly endless problems with contracted haulers and the inability of the city to freely pursue alternative means of disposal, Congress on May 6, 1918, passed a bill in which the first steps of the municipal

takeover of solid waste laid out in Option B of the Osborn report were enacted. The bill authorized \$85,000 to the commissioners for the purchase of the Cherry Hill reduction plant from the Washington Fertilizer Company, \$50,000 to buy rubbish dumping sites within the District, and \$200,000 to purchase pigs, livestock, and poultry “should the Commissioners of the District of Columbia find that the garbage in the District can be disposed of in a sanitary manner . . . by feeding it to the pigs, live stock, and poultry.”<sup>55</sup> This bill placed the District in the position to haul waste, though the Street Cleaning Department and the Commissioners decided the city was not yet ready to take on the massive project of collecting the waste, and so instead they focused on acquiring disposal sites.

Under the new bill there were now two active means of garbage disposal: Cherry Hill and hog farming, both controlled by the city. The Cherry Hill reduction plant had grown considerably to accommodate the waste stream and was seen as a viable and profitable way to dispose of the city’s garbage. In 1919 the city approved the Street Cleaning Department’s acquisition of two hundred hogs for a test farm to determine the feasibility of hog farming.<sup>56</sup> By 1920 the District had taken control of a rubbish disposal site on Mount Olivet and the rail transit yard, located in Trinidad NE, for shipping the waste to Cherry Hill.<sup>57</sup> Grease sales from Cherry Hill earned just over \$215,000 in 1920. Bolstered by the profits from Cherry Hill, the Street Cleaning Department began to acquire the wagons and horses necessary to begin collecting the waste on its own.<sup>58</sup> By 1922, the city had taken over virtually every aspect of collection and disposal for small households. District officials drew the line at any residence containing four or more units, as they had done with ash collection.<sup>59</sup> This issue periodically came up in budgetary sessions, but the cost of including garbage collection for large apartment complexes and businesses was enough to make legislators balk.<sup>60</sup>

The city hauled the garbage to the transit yard, and city-owned gondola rail cars hauled the waste to Cherry Hill.<sup>61</sup> The only exception to the District takeover of refuse collections and disposal was the contract for removing animal corpses, which was still awarded to a private contractor because of the increasingly sporadic nature of the work, a result of the growing automobile industry.<sup>62</sup>

By 1922, the compromise—the District would collect household waste for homes comprising three or fewer units, and private contractors would collect from larger residences—was fully in place. This allowed the District control of a significant portion of the waste stream, under which they could pursue their mandate of fiscal thrift and progressive, scientific disposal techniques. Between 1878 and 1922, the continuing problems with the contract system led to increased regulation and the eventual takeover of both collection and disposal by city officials. The principle driving factor in this transition was not a sense of civic responsibility or concern for the general welfare, important as that was in policy-makers’ thinking, but fiscal thrift. In testimony before the House of Representatives in 1921 regarding the District’s takeover of collection, Dr. William Fowler, the District’s health officer, argued that public health was “more than a question of dollars and cents.” Representative Stanley Kunz of Illinois interrupted, saying, “That is a question of dollars and cents, too.”<sup>63</sup> Such thinking permeated the legislative bodies that oversaw the District’s budget. Finding the least expensive solution took precedence over providing the most environmentally responsible option for the District. In the view of the Committee on the District of Columbia, the municipal takeover of solid waste collections and disposal was simply good financial management.

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 NOTES
 

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