

TALKING GARBAGE: A BRIEF HISTORY OF DOMESTIC WASTE DISPOSAL IN SUFFOLK

by TIM HOLT-WILSON

Summary

Domestic waste is a core component of many archaeological sites, and provides essential resources for the study of societies in time and space. The progressive systematisation of waste disposal practices in Suffolk is a response to urbanisation, population growth and changing material consumption patterns, within an evolving legal framework. This article outlines some of the historic trends for disposal in the county and their implications for the archaeological record, focusing particularly on the last 150 years. It also provides an overview of waste disposal in Suffolk at the present time.

INTRODUCTION

RUBBISH, BOTH ANCIENT and modern, is ubiquitous in Suffolk. Flint waste flakes from prehistoric tool making may be found scattered in fields, along with rubbish thrown from passing cars. Sherds of Roman pottery may be found in flowerbeds alongside galvanised steel roofing nails. But beyond this casual discard of unwanted objects, which forms a diffuse background noise throughout human history, there is a story of intentional and planned disposal, ranging from the creation of modest backyard middens and rubbish pits, to ‘bottle dumps’ and the massive landfill sites of today (Fig. 36).

AD HOC DISPOSAL

While human life was essentially sparse, rural and agricultural, its domestic waste products were biodegradable or did not challenge the ability of the environment to absorb or recycle them. The earliest waste disposal sites in Suffolk are just bits of wild landscape that our ancestors passed over. Discarded flint tools and flint flakes found at Pakefield are dated to around 700,000 BC.¹ Some 300,000 years later early humans left charcoal from their domestic campfires at Beeches Pit, Icklingham, and bones of butchered animals at Hoxne.² Rubbish deposition became more concentrated later in prehistory, as settlements became more permanent. Bronze Age occupation sites along the Fenland margin have been identified by scatters of domestic waste, including pot sherds, flint tool manufacturing debitage, heat-crackled flints (the detritus from water heating activity) and charcoal. Some sites with suitable preservation, such as Wilde Street, Mildenhall, have occupation layers containing discarded fragments of worked wood and bone. At West Row, a scatter of animal bones was identified as a rubbish disposal area, perhaps associated with seasonal occupation. At nearby Swales Fen, a concentration of heat-crackled flint was identified as a possible domestic cooking site.³

Rubbish accumulates everywhere round human settlement. While Suffolk has nothing like the ‘tel’ mounds of the Middle East, where successive cities were built on the rubbish and detritus of their predecessors, it does have thick buried occupation layers in towns, and has plenty of multi-period sites. A trial pit at Lower Brook Street, Ipswich, revealed over three metres of organic-rich layers of occupation debris beneath seventeenth-century houses.⁴



FIG. 36 – The accumulation of commercial waste at Bramford landfill site, 2009
(image by courtesy of Suffolk County Council).

Debris from Mesolithic, Neolithic, Iron Age, Roman as well as Early Saxon occupation was encountered while excavating the West Stow site.⁵ A glance over the deserted house site of Luck's Mill, Weybread, will reveal fragments of seventeenth- and eighteenth-century pottery, clay pipes and twentieth-century bottle glass in the topsoil.

Moats and farmyard ponds have received their fair share of domestic rubbish over the centuries; much medieval and later pottery and animal bone was found when the moat at South Elmham Hall was cleaned out.⁶ Any hole in the ground was ripe for filling with rubbish; small-scale pits were dug in Middle Saxon Ipswich, possibly for gravel extraction, then backfilled with midden material.⁷ Rubbish was also scattered outside settlement boundaries when loads of manure, plus a random cargo of domestic rubbish, were carted from farmyard middens and spread on the fields. This practice goes back to prehistoric times.

Middens built up in urban as well as rural milieux. All kinds of waste were deposited in streets or back yards: everything from night-soil, through soot, ashes and animal manure, to slaughterhouse and tannery debris. It was evidently also dumped in watercourses, as the Nuisances in Towns Act (1388) prohibited waste disposal in public waterways and ditches.⁸ Accumulations were sporadically carted away and dumped in heaps outside the settlement boundaries. In late medieval Ipswich, local by-laws concerning public nuisances and misdemeanours were enforced by twelve borough officials known as headboroughs, who issued regular reports known as 'Dirt Books'. They portray the waste disposal practices of the times. Refuse from the fish and cattle markets, and from the slaughtering of beasts on the Cornhill, sometimes blocked the streets. In 1415/16 they fined William Chambre 6d for letting his servants dump fourteen wagon loads of muck in the north ditches of the town. In 1541 scavengers were elected in every parish of Ipswich to clear garbage from the streets. In sixteenth-century Ipswich there were several designated dumping sites for rubbish outside the walls; one was the Cold Dunghills, situated on the east side of what is now Upper Orwell Street. In 1565 Elizabeth Goodwin, a widow, was fouling a watercourse with her 'jakes house'. In 1610 a privy or 'house of office' shared by eight households was creating a nuisance because it was open and full.⁹ The layers of 'black earth' familiar to town archaeologists

originate from these ceaseless accumulations of organic-rich waste.¹⁰ Poor people were able to make a living collecting night-soil (a practice known as gong farming) and from scavenging saleable objects and materials such as dog muck (useful for tanning leather), rags and bones, soot, ashes, wood, coals and paper. We are reminded of the Golden Dustman in the Dickens novel *Our Mutual Friend*, who grew rich from the pickings of his dust heaps in London.

Before the Industrial Revolution, much industrial production was small-scale and localised, carried out for local markets by craftsmen and artisans. The distinction between domestic and industrial waste is blurred in these cottage industries. Excavation of Middle Saxon Ipswich has revealed many such small sites, where spindle whorls, loomweights, iron slag and smelting debris, and fragments of bone, horn and antler provide evidence for small-scale industries of iron smelting, spinning and weaving, bone and antler working. Waterlogged deposits at Bridge Street have preserved large quantities of waste leather from shoemaking. However, Saxon Ipswich is also a noted example of early industrial mass production: pottery waste has been excavated over a wide area at Carr Street, the source area for 'Ipswich Ware' pottery.¹¹

LOCAL SYSTEMATISATION

The story of waste over the last 150 years is one of progressive organisation of waste collection and disposal, in contrast to the casual or haphazard methods of bygone times. From about 1770 onwards, the social, economic and demographic changes which accompanied the Industrial Revolution intensified and concentrated the problem of domestic waste. Population grew, consumer goods became more widespread, and more people moved to the towns. The traditional country methods of waste disposal, such as feeding food waste to pigs or filling pits near the dwelling, were not so practical in towns. By the 1840s it had become clear that collective solutions were urgently needed. In 1842 the *General Report on the Sanitary Condition of the Labouring Population of Great Britain* by Edwin Chadwick was published, making the link between poor living conditions and ill health, and recommending proper drainage and refuse collection.

An age of sanitation began. Official provision of refuse collection and disposal facilities was kick-started by various local government Acts which empowered local Councils to set up committees and raise money on the rates to carry out their new civic duties. The impetus came from the Public Health Act of 1848, which required inspectors to visit each town and report back to Parliament. These reports make revealing reading about sanitary conditions and refuse removal in these communities. For instance, just over the Norfolk border in Diss

'All the refuse from a slaughter-house ... runs down the surface of Church Street and is much complained of by the inhabitants; there is no sewer. Close behind the National School there is a foul stagnant open ditch, evidently the receptacle of night soil from houses ... the owner of the adjoining property uses the contents in his garden as manure'.

'In the Saracen's Head yard I found a pool of filth about 12 feet diameter. The landlord dams up the ditch, gets out the refuse and exchanges it with farmers for stable straw'.

'A great many of the best houses and sale-shops have cesspools or dead wells in the cellar, and a pump is put in two or three times a week, and the fluid night soil and filth sent along the streets, filling the houses with stench'.¹²

It appears that Diss was typical of towns of the period. In Ipswich

The inhabitants are very jealous of any interference on the part of the authorities with the refuse and soil of their houses. This refuse is packed at the back or sides of their dwellings, and sold for manure.¹³

Committees were given responsibilities for different aspects of refuse disposal; Ipswich had its Refuse Removal and Sewerage Committees.¹⁴ In 1875 the Public Health Act was passed, obliging local authorities to arrange the removal and disposal of waste.¹⁵ A local government network was set up in the 1880s and 1890s.¹⁶ Waste collection and disposal in Suffolk then became the responsibility of a network of Borough Councils, Urban and Rural District Councils (BCs, UDCs and RDCs), as did sewage treatment.

The night-soil trade was systematised. In Ipswich it was collected by carts from privies and closets, then taken to three depots on the outskirts of town, at the Hadleigh, Westerfield and Foxhall Roads, for composting in heaps. In 1883 a grand total of 2640 loads were transported, netting the Borough £1057 9s in sales to farmers.¹⁷ At Erbarton metal detectorists have discovered scatters of late Victorian objects unwittingly carted out with the night soil-trade from the town.¹⁸ This trade in night-soil continued into the twentieth century, wherever there remained significant numbers of houses with earth closets.¹⁹ At Eye, the horse-drawn collection was known as the 'Bumby Cart'.²⁰ In 1936, Brandon RDC were advertising for the services of a public scavenger, a post which involved collecting the contents of 400 closet pails and 568

ash bins as well as all unburnable refuse (Fig. 37).²¹

The introduction of water closets from the 1850s onwards improved household hygiene but meant that fluid sewage treatment was increasingly needed in urban areas. The earliest method was to irrigate land with liquid waste, and bacterial action was trusted to decompose it. Osiers and top fruit such as black currants could be grown in the enriched soil.²² One such sewage farm with a steam pumping engine was opened by the Borough Council at Bury St Edmunds in 1863 on meadows near the Tollgate, Fornham Road. Complaints soon began to be received about the 'offensive smell' of the site and the quantity of untreated matter entering the River Lark. The matter was aired in the town as the 'Sewage Question'. A report in 1884 identified a range of problems, including woefully insufficient land to accomplish decomposition and the tendency for the town's storm drainage to overwhelm the system.²³ The solution was a larger works with filtration bed technology, which

MILDENHALL RURAL DISTRICT COUNCIL

PARISH OF BRANDON

The Council invite Tenders for the services of a

PUBLIC SCAVENGER

for a period of 12 months commencing April 1st, 1936.

There are approximately 400 closet pails & 568 galvanized ash bins and similar receptacles, to be emptied weekly, which number may be increased. In addition the contractor will be required to collect all unburnable refuse, such as old tins and bottles, etc., from all houses in the parish.

The contractor will be required to provide all horses and men for the job and also a suitable covered vehicle for the refuse, but the Council will provide a cart for the contents of closet pails.

Full particulars and form of tender can be obtained from the Sanitary Inspector, Mr. H. W. T. Trotter, Council Offices, Mildenhall or from the undersigned. Tenders must reach me not later than 21st March, 1936. Envelopes to be marked "Scavenging." The Council does not bind itself to accept the lowest or any tender.

Signed **A. V. LLEWELLYN,**
Clerk to the Council.

Council Offices,
Mildenhall,
March, 1936.

A. E. Simpson & Sons, Printers, Mildenhall.

FIG. 37 – Advertisement for public scavenger, Brandon RDC, 1936 (reproduced by kind permission © Forest Heath District Council, courtesy of Suffolk Record Office, Bury St Edmunds branch, ref. EF505/4/14).

opened in 1887 some five miles downstream on isolated land at West Stow Heath. Once again there were problems with capacity, decomposition and overflows, with ‘objectionable organic impurities’ entering the River Lark and ‘sickening and intolerable smells’ being recorded in the 1890s, prompting particular complaints from residents downstream in Mildenhall.²⁴

The increasing volumes of rubbish generated by society were also causing disposal problems for local authorities. Collected refuse was typically dumped in piles then sorted by scavengers – often female – who were employed to remove objects and materials of value for resale. Rags went to make paper; broken glass was powdered to make sandpaper; bones were used to make tooth brushes and buttons; bits of sponge could be made into spirit lamps; men’s hair could be used for syrup strainers.²⁵ The typical composition of rubbish at this time was therefore over 80 per cent dust, ashes and cinders, as the following figures from 1892 show.

Dust, cinders, ashes	Vegetable & animal matter	Paper	Straw, fibre	Glass	Tins, iron	Bones	Rags	Misc. incl. Coal, crockery
83.2%	4.6%	4.3%	3.2%	1.4%	1%	0.5%	0.4%	1.4%

TABLE 1²⁶

After scavenging, the irredeemable remainder of the rubbish was either dumped, or sent to incinerators known as ‘refuse destructors’. They were unpopular because of the large quantities of filthy smoke they emitted. In 1898 there was a rowdy public meeting at Lowestoft in protest at the Borough Council’s plans to erect one near cottages at Smith’s Marsh.²⁷ There were, however, many benefits to having destructors: they greatly reduced the rubbish mountain, their residues of ash and clinker could be sold to make building materials such as breeze blocks and paving stones, and they could be used to generate steam. One was installed at Constantine Road, Ipswich, in 1903: it powered a steam engine which generated electricity for the Borough trams.²⁸ Another, installed at Felixstowe in 1906, assisted in sewage pumping and aeration. Obtaining the right quality of refuse to raise enough steam was an ongoing problem for the operators. At Felixstowe at least seven tons of combustible refuse were needed per day for economically viable operation, which was difficult as much of the combustible matter was removed before it entered the plant to stop rubbish heaps from catching fire.²⁹ By 1929 the one at Lowestoft was ‘lacking steam’ and the furnace needed to be fitted with a fan to make it work effectively.³⁰

In the smaller towns, rubbish was collected by private contractors and dumped in disused pits or on marshy land purchased or leased from farmers. By 1929 the Lowestoft Borough pit at Normanston had filled up and the Council were negotiating to acquire an old brick and gravel pit nearby at Fir Lane. Within two months of opening local residents were complaining of the smell from the dump.³¹ At Carlton Colville two farmers contracted to remove the village’s rubbish and dumped it in two disused clay pits. At Eye the Borough Council disposed of its rubbish and night soil on a marsh at Eye Town Moors. At Beccles the Borough Council used a sandy island in the Waveney marshes known as Boney’s Island.³²

In rural areas refuse was less of a problem because it could be disposed of informally – in time-honoured fashion – into pits, ponds or ditches. An old pit at Gravel Hill was used in Nayland in the 1930s and ‘40s. At Little Thurlow residents could use a pit near the church, accessible on one Saturday per month; rubbish was also dumped in ponds at Little Thurlow Green. Individual householders made their own dumps, or dug pits in the garden for disposing of durable rubbish such as cinders, bottles, metals and broken crockery. A pond at Kirton

Rectory was backfilled with domestic rubbish during the Edwardian period.³³ These domestic sites may often be recognised today by the presence of nettles and elder trees, which can thrive in soil contaminated by coal ash and iron. On country estates, landowners maintained their own dumps for themselves and their tenants.³⁴ These informal practices continued substantially into the 1950s and '60s, and continue sporadically to the present day.

In 1936 the Public Health Act gave local authorities power to prosecute people for illicit dumping or scavenging, and set out rules for managing landfill sites.³⁵ 'Controlled tipping' at Council sites became the norm, whereby dumps were systematically covered over with a capping of earth. The composition of a fresh domestic rubbish dump in Britain at this time was typically:

Dust, cinders, ashes	Vegetable matter & putrescibles	Paper	Metal	Textiles	Glassware	Unclassified	Plastics
57%	14%	14%	4%	2%	3%	6%	0%

TABLE 2³⁶

Most people heated their homes using coal fires, which explains the high proportion of dust and cinders. There were only small amounts of textiles, glass and metals because most of these were reclaimed by dump workers, or were collected by rag and bone men. The dumps of the period were almost always on fire because of smouldering cinders tipped into them. This means that today they are composed of 90 per cent ash and cinders, with only residual glass, metals and ceramics.³⁷ Combustibles and organic matter tended to be burnt off.

During WWII, recycling and recovery of waste became an important part of the war effort. Salvage Stewards were appointed in towns, and aluminium milk bottle tops were collected to make Spitfires, bones to make cordite, and wool to make uniforms. Bins and boxes to collect metals, paper etc, were set up in the streets. Food waste from communal kitchens was collected and rendered into pig food.³⁸ Presumably rubbish tips were lean places in the War years.

Public sewage works were widely installed after the War, for example Honington (Thingoe RDC, 1954) and Debenham (Gipping RDC, 1956), although places such as Fressingfield and Brandon³⁹ had been discussing installations as early as the 1930s. The works at Botesdale Warren were originally built to serve the prisoner-of-war camp in Redgrave Park; by 1953 Hartismere RDC were using it to treat sewage sourced from both Rickinghall and Botesdale.⁴⁰

The composition of rubbish changed markedly in the 1950s and '60s, as the amount of disposable packaging grew, plastics were introduced, and electricity and gas replaced coal as principal domestic fuels. The density of refuse decreased, but its overall volume increased.⁴¹ In 1968 the typical national composition of rubbish was as follows.

Dust, cinders, ashes	Vegetable matter & putrescibles	Paper	Metal	Textiles	Glassware	Unclassified	Plastics
21%	18%	37%	9%	2%	10%	2%	1%

TABLE 3⁴²

As the amount of waste needing disposal continued inexorably to rise, local authorities were having increasing difficulty finding landfill space. They became adept at locating suitable holes in the ground. Deben RDC had no fewer than five dumps in the 1960s, at Bredfield, Hollesley, Melton, Ufford and Waldingfield. It filled small pits with domestic rubbish at the request of farmers, though many of these sites were on porous rock types, and would not have been licensed today because of risk to groundwater.⁴³ Between 1950 and 1974 Ipswich Borough Council filled in a wide, wooded valley called Beggar's Hollow near Landseer Road; it has now been landscaped as Landseer Park (Fig. 38).⁴⁴ In 1962 St Edmundsbury Borough Council began to fill the old sewage beds at West Stow.⁴⁵ Sometimes rubbish was transported to another District for disposal; Ipswich used the Sink's Pit at Little Bealings in the Deben UDC area.⁴⁶ Another option was to reduce its volume by using pulverisors, vertical axle hammer-mills to break down the rubbish to a 50–75mm particle size. There were five operating in Suffolk during the 1960s, at Brome, Haverhill, Newmarket, Whelnetham and Yoxford.⁴⁷ Hartismere RDC filled a disused railway cutting on the Eye–Mellis branch line with pulverised rubbish from the Brome plant, and St Edmundsbury filled one at Little Whelnetham.⁴⁸ Incinerators continued to be used, though their days were numbered: modern rubbish did not burn at high enough temperatures, and there was increasing public opposition on grounds of environmental health.⁴⁹ Woodbridge UDC ran its own incinerator at Gazebo Farm.⁵⁰ A new one opened in Ipswich at Cliff Quay in 1950 to replace the 47-year-old equipment at Constantine Road.⁵¹

Another option to reduce the burden on ratepayers was to increase the amount of waste recycled. In 1967 the Civic Amenities Act gave local authorities the responsibility for providing facilities where people could bring items of bulky household waste free of charge. From the 1970s onwards, these Civic Amenity sites became a focus for recycling initiatives, where bottles, paper, metal and textiles could be deposited by conscientious – and increasingly environmentally-aware – members of the public.



FIG. 38 – The landscaped landfill site at Landseer Park; viewed from Sandyhill Road, Ipswich (photo © author).

In 1974 the Control of Pollution Act introduced the first waste-licensing legislation. Hitherto local authorities had no legal obligation to keep records of what was disposed of where and by whom. The only statutory controls had been provided by the Town and Country Planning Acts, and the planning authorities considered applications for refuse disposal only insofar as they affected local amenities, e.g. if they were close to houses.⁵² In 1974 local government reorganisation led to the abolition of the UDCs, RDCs and smaller Boroughs Councils, and responsibility for waste collection and disposal were split between local authorities and the County. The new Borough and District Councils became waste collection authorities; the County became the unitary waste disposal authority.

DISPOSAL AT COUNTY LEVEL

In 1974, domestic waste landfill sites in Suffolk became the responsibility of the County Council. The following sites were among those transferred:⁵³

District Council areas	Sites
Babergh	Sproughton, Sudbury
Forest Heath	Barton Mills, Lakenheath
Mid Suffolk	Coddenham, Stowmarket, Woolpit
St Edmundsbury	Lt Whelnetham, Nowton, West Stow
Suffolk Coastal	Aldeburgh, Foxhall, Kesgrave, Westleton
Waveney	Beccles Marshes, Homersfield, Oulton Camps Heath, Oulton Broad, Southwold

The Council began a rationalisation programme of the domestic sites, and by 1976 the number had been reduced to eleven; some were closed because they had filled up, and others because they did not meet stringent new licensing regulations under the Control of Pollution Act. Closed sites were landscaped and eventually brought back into agricultural use. At West Stow the old dump became part of a Country Park. As part of its statutory duties the Council began monitoring all sites for gas and liquid effluent, known as leachate.

In 1993 the County Council undertook a review of waste disposal in Suffolk.⁵⁴ Nationally, the typical composition of domestic rubbish at this time was:

Fines**	Vegetable matter & putrescibles	Paper	Metal	Textiles	Glassware	Misc.	Plastics
8%	26%	32%	6%	2%	8%	9%	9%

**Note: presumably including dust and ashes

TABLE 4⁵⁵

Research showed that only a small proportion of this waste was being recycled. Nine per cent of total waste produced in the County was domestic, of which only 5 per cent was reclaimed by bottle banks and can banks. However this picture began to change from 1996 onwards, when a new Landfill Tax stimulated recycling by levying £7 per tonne on household waste

going to landfill – a figure which increased to £10 per tonne in 1999.⁵⁶ In 1999 the EU Council Directive 1999/31/ec on the landfill of waste came into effect, aiming to reduce negative effects of landfill on the environment.⁵⁷ In 2003 the Waste and Emissions Trading Act set targets for reducing the amount of biodegradable waste going into landfill. As the volume of domestic waste continued to rise,⁵⁸ and various national and European government laws began to take effect, councils needed to find ever more ingenious ways of reducing landfill. A policy guidance model known as the ‘waste hierarchy’ gained currency, ranking waste treatment methods in order of desirability. It became part of UK law in 2011.⁵⁹

- 1 Reduction (reducing production of waste)
- 2 Re-use (e.g. refilling bottles, remoulding tyres)
- 3 Recovery (recycling, composting, waste to energy)
- 4 Disposal

Today, disposal of domestic rubbish in Suffolk is carried out on at a truly industrial scale. Local councils collect household waste on a weekly basis, and the quantity is impressive. In 2010/11, each person in the county was estimated to generate 493 kg of waste.⁶⁰ In 2001/02, the category ‘municipal waste’ (mostly household waste) is estimated to have totalled 382,000 tonnes;⁶⁰ it grew to 388,000 tonnes in 2010/11. Rubbish is segregated into three categories at the kerbside: dry recyclables (including paper and most plastics), compostables (including garden and certain types of kitchen waste) and residual. The stated aim is to recycle or compost at least 60 per cent of municipal waste.⁶¹

The recorded composition of household rubbish in Suffolk in 2016 was:

Fines	Vegetable matter & putrescibles*	Paper	Metal	Textiles	Glassware	Misc.	Plastics
1.35%	40.42%	16.58%	3.95%	2.89%	7.07%	19.43%	8.3%

*Includes 23.4% garden waste

TABLE 5⁶²

In 2004, residual waste was dealt with at four ‘super sites’, Foxhall, Great Blakenham, Lackford and Wangford, managed by independent disposal companies. These sites had enough capacity to fill projected demand, with environmental safeguards in place, such as tough polythene liners to contain leachate, and wells to monitor and extract gases and leachate. Sites such as Foxhall were expanded by being ‘overfilled’, that is to say new layers of rubbish were mounded up over previously closed areas.⁶³ Today, only the Great Blakenham site is open for business, for reasons that will be explained.

As of 2014, dry recyclables from all the local authorities have been sent to a single materials recycling facility at Great Blakenham run by the Viridor company (Fig. 39).⁶⁴ It is equipped with mechanical sorters (including magnets, screens and ballistic machines), optical sorters, and hand-picking lines. In addition, there are eighteen facilities across the county where householders can take bulky domestic items such as old furniture, washing machines and garden waste, and can also dispose of a wide range of recyclables, including shoes, bottles and cardboard. Some kinds of material, such as car components, are not accepted at these sites because their disposal would overlap with commercial arrangements. Some of the bulky waste is sold to dealers, some is recycled, and the rest is sent for permanent disposal.

Compostables are taken to seven organic waste treatment plants, for composting or anaerobic digestion. Green waste is either composted in windrows or in a container. Windrow composting involves dumping the waste in rows and turning it regularly to ensure breakdown over a six- to nine-month cycle. Contained composting is used to process biodegradable waste which may contain food residues such as animal bones. There are plants at Parham and Cliff Quay, Ipswich. The latter was a pioneering co-composter when it opened in 1996 to deal with a mixture of shredded green waste and sewage sludge on an 18-day cycle. In 2006 the plant was upgraded to take food waste.⁶⁵ The composted product is sold to farmers and householders.



FIG. 39 – Processing domestic rubbish at the Energy From Waste plant at Great Blakenham, 2015 (*image by courtesy of SUEZ/SITA UK*).

The opening of an ‘energy from waste’ plant at Great Blakenham in 2014 at a cost of £180 million marked a return to incineration as an option for household waste disposal in Suffolk. In its first year of operation it processed 161,351 tonnes of the county’s household rubbish which would otherwise have gone to landfill.⁶⁶ Its outputs included over 153 MWh of electricity generated, 9000 tonnes of recovered metals and over 55,000 tonnes of bottom ash.⁶⁷

CODA

Where once refuse disposal, materials recovery and recycling could largely be dealt with by householders and a variety of enterprising collectors and recyclers, the sheer volume and variety of waste materials produced in today’s consumer society has meant that mass management solutions have become necessary. This historical phenomenon will be visible in the future archaeological record in the form of the large late twentieth- and early twenty-first-century landfill sites. It is estimated that no fewer than 958,000 tonnes of domestic waste were sent to landfill between 2008/09 and 2015/16, of which approximately 790,000 now lie stratified in the county. That being said, the quantity declined very steeply in recent years, from an estimated 181,344 tonnes (2008/2009) to 1243 tonnes (2015/2016).⁶⁸ This is explained by the success of the aforementioned ‘energy from waste’ and recycling initiatives; only a useless residue now goes to landfill at Great Blakenham. These changes in landfill quantity and quality have implications for the archaeological record. As stratified deposits, landfill sites are structured archives which can be analysed for information about changing patterns of consumption and disposal in society. For instance, the proportions and types of plastic may act as stratigraphic marker materials.⁶⁹ As taphonomic studies have shown, constituents may tend to be preserved in the absence of circulating air and liquids; they tend to enter a state of arrested decay or ‘mummification’, which increases their archaeological potential.⁷⁰ As we have seen in Tables 1–5, relative proportions of dump constituents have

varied over time, and a significant fall-off of archaeological information can be expected in the early twenty-first century record. Also, the integrity of Suffolk's landfill sites as archaeological archives would be vulnerable if they were ever mined in future as sources of fuel or raw materials in a resource-depleted world.⁷¹ Ultimately, surviving examples will enter the geological record; their likely destiny, on geological timescales, is to become 'anthropic rocks', or lithified midden deposits. They will join the variety of anthropogenic 'artificial ground' deposits available to archaeologists, and their 'technofossil' elements may even challenge the taxonomic skills of future palaeontologists.⁷²

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NOTES

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