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ENVIRONMENT
SCOTLAND

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ALBA

Property in Care (PIC) ID: PIC113

Designations: Listed Building (LB22172, Category A)

Taken into State care: 1978 (Leased)

Last reviewed: 2013

STATEMENT OF SIGNIFICANCE

BIGGAR GASWORKS



We continually revise our Statements of Significance, so they may vary in length, format and level of detail. While every effort is made to keep them up to date, they should not be considered a definitive or final assessment of our properties.



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BIGGAR GASWORKS

SYNOPSIS

Biggar Gasworks is located in Gasworks Road, Biggar, a short distance up the lane from the Cadger's Brig.

The works comprise a group of single-storey buildings, built in a variety of materials but chiefly random whinstone and slate roof, common brick and asbestos cement sheeting; the two gas holders are of iron. The works are notable for their completeness; retorts, condenser, purifiers, exhauster house, gas meter and gas holders, and the old gasman's cottage (built 1858 and subsequently converted into office and showroom). The retort house's brick chimney blew down in a gale in 1974, and only the stone stump now remains. Ancillary storage structures along the north side of the courtyard have also long been demolished.

The gasworks is now the only Victorian town gasworks surviving in Scotland, and one of only three remaining in the British Isles. The other two ; at Carrickfergus (Northern Ireland) and Fakenham (England) are also preserved as industrial time capsules.

The gasworks is run in partnership with the Biggar Museum Trust.

[Note: the former gas manager's house, across the lane from the gasworks, is now a private house and does not form part of the property in care.]

CHARACTER OF THE MONUMENT

Historical Overview:

- **1790s** – William Murdoch, born at Lugar (Ayrshire) but working in Cornwall for Boulton & Watt at the time, invents gas lighting, to replace tallow and oil.
- **1805** – a large cotton mill in Manchester is the first large-scale building to be lit by gaslight.
- **1812** – the Gas Light and Coke Company of London is established to bring gas lighting to the city's public streets and domestic consumers.
- **1839** – the Biggar Gas Light Company is formed to supply the town with gas light. It is among the first in Scotland to do so. The gas plant is made by Robertson & Wilson's foundry, Gorbals, Glasgow, and the original retort house is built by Watson & Robertson, of Biggar. The first gas is sold on 14 October that year.
- **c.1858** – demand for street gas lighting and domestic gas lighting in Biggar is such that a second, larger gas holder is installed. A single-storey house for the gas manager (John Ramsay, of Carluke) and his family is constructed at the same time. (This is later converted into the works' office and showroom, and a new two-storey house erected directly across the lane from the gasworks.)
- **1879** – a still larger gas holder is installed, and the original (1839) holder demolished. (Both the 1858 and 1879 holders remain, although much rebuilt and enlarged.)

- **1911** – the gasworks consumes 400 tons of coal during the year, to serve 320 consumers and over 100 street lights. By-products sold include coke and coal tar blocks.
- **1914** – the original retorts are removed and a new retort house built adjacent to the original, which becomes a coal store. New gas purification equipment (purifier beds, scrubbing and washing plant) is also installed.
- **1949** – the gas industry is nationalised by Clement Atlee’s Labour Government, but the change has no observable effect on Biggar Gasworks.
- **1964** – local ironmonger and town provost, Brian Lambie, opens a private museum in buildings behind his shop premises on High Street, Biggar. In **1968** it opens formally to the public as the Gladstone Court Museum, the ceremony being carried out by the poet Hugh MacDiarmid.
- **1973** – Biggar Gasworks closes (4 January), following the arrival of natural gas in the town (which is stored by Scottish Gas in a small structure at the south edge of the gasworks site). Negotiations begin between Scottish Gas, the Department of the Environment (DOE, now Historic Scotland) and the Royal Scottish Museum (RSM, now part of National Museums Scotland) regarding the acquisition of the site by the State as a ‘monument to industry’.
- **1974** – the retort house chimney is blown down during a January gale. It is decided not to rebuild it.
- **1978** – after much discussion between Scottish Gas, DOE and RSM (including assessing other gasworks as possible candidates - eg Langholm, Millport and Moffat), Biggar Gasworks is transferred into State care. DOE (now the Property Services Agency (PSA)) agrees to maintain the complex, whilst RSM agrees to run it as a visitor attraction.

Archaeological Overview:

Below the walking surface (a mixture of common brick, stone slab, gravel etc) will be a maze of services (cables, pipes, drains, etc) passing between the various buildings. Apart from a superficial record carried out in the early 1980s, shortly after the gasworks came into State care, little work has been done to record and assess these.

Further archaeological clues will exist in the standing structures. These have the potential to add significantly to our understanding of the nature of the processes, and of the nature of change to them over time.

Architectural/Artistic Overview:

The buildings, gasholders and open spaces were created with function firmly in mind.

The oldest building is the original retort house of 1839. A high, single-storey building, built of random whinstone walls with pink sandstone dressings and skews and a Scotch slate roof, it was stripped of its coal-fired iron retorts in 1914 and converted into the coal store. This resulted in the frontage facing onto the courtyard being largely removed and replaced by a sliding timber door wide enough to enable coal carts to unload. This was removed c.1980 and the original arrangement; of a central door and flanking windows was re-instated using photographic evidence and existing features.

The replacement retort house of 1914 was built beside the original. This was a slightly taller building, of common brick, stone lintels and sills, all coated with cement render, and given a distinctive 'Belfast' roof; a curved, corrugated asbestos cement sheet roof over a steel frame complete with roof ventilator along the ridge. The coal-fired retorts themselves, their associated fireboxes etc., are all intact, together with the steam boiler (still in working order), barrows and hand tools. The retort house's stone chimney base survives, but the brick stack itself collapsed in 1974, and has not been rebuilt.

The purifier shed, standing beside the original retort house, is an open-fronted structure; good ventilation was important at this particularly noxious part of the gas cleaning process. It has two cast iron purifier beds, emptied of its chemicals by Scottish Gas on closure of the works in 1973, but is otherwise complete, with lifting tackle, etc. The tar condenser pipes stand alongside.

The meter house, beside the purifier shed, is a simple stone structure with an asbestos cement roof. It houses a particularly fine gas meter installed in the 1950s.

The exhauster house, a brick building constructed in 1914 across the courtyard from the retort house/purifier shed, contains two important advances in gas cleaning technology; a Livesey washer and a rotary scrubber, both belt-driven. Outside it are fixtures associated with tar by-products (blocks and oil).

The two gasholders (1858 and 1879) were rebuilt in 1918 and 1939 respectively, with steel guides and slightly larger capacities. These are fast becoming the only remaining examples in Scotland.

The office and showroom, a pleasing single-storey building with random whinstone walls and slate roofs located to the right of the gasworks entrance, was built in 1858 to house the gasman and his family. When a new gas manager's house was erected across the lane from the works in the late 19th century, the former two-roomed cottage was converted for use as office and showroom. (It now serves as a modest visitor centre and artefact display.)

Social Overview:

Biggar Gasworks was an important part of Biggar life for over 130 years. When it was closed in 1973 the locals cheerfully debated the 'pros' and 'cons' of retaining it. The case 'for' was considerably helped by the inspirational Brian Lambie, local ironmonger and provost of Biggar, who had not long before established single-handedly the popular Gladstone Court Street Museum behind his shop premises in the High Street. Today the successor to that Museum, the Biggar Museums Trust, manages the works for Historic Environment Scotland.

The works now plays a positive role in Biggar town life, and the regular 'steam days' held throughout the summer, when the boiler steams and the gas engines run, are highly popular.

Spiritual Overview:

The gasworks plays no observable spiritual role.

Aesthetic Overview

Industrial factories are not normally known for their aesthetic qualities, and Biggar Gasworks is no exception. That said, the works has a certain charm, particularly when viewed from the exterior, either up Gasworks Lane or down from the Biggar Burn park. The array of varying height single-storey buildings sits in harmony with the circular metal gasholders, now repainted in their original livery. The ensemble nestles beside the Biggar Burn, on the edge of the old market town, and forms a pleasing and distinctive group.

The relative completeness of the works is a distinct 'plus'. Visitors may wander around the open courtyard and into the building interiors, which vary in light quality. The retort house, being the largest and gloomiest, has a particularly engaging atmosphere.

The faint whiff of coal gas pervades the works which, although not to most peoples' liking, adds a certain authenticity to the place.

The lack of a chimney stack deprives the works of one of its more attractive features.

What are the major gaps in understanding of the property?

- What is the full technical and social history of the gasworks? A comprehensive study of the available documentation associated with the gasworks is needed.
- What lies under the stone slabs, bricks and ash that forms the courtyard? A more comprehensive archaeological analysis is needed.
- What form did the demolished elements (eg, the external purifiers and gasworkers' accommodation at the north end of the site) take? Here too archaeological investigation will provide answers.

ASSESSMENT OF SIGNIFICANCE

Key Points

- Coal gas as a fuel for public and domestic consumption was an essential part of life for over 100 years. Biggar Gasworks is important as the sole surviving, and well-nigh complete, small town Scottish gasworks, once so common throughout this time. The complex was consciously taken into State care on its closure to ensure that this completeness was preserved.
- Throughout those 100 plus years, important new technologies were developed to improve the quality and supply of gas. Biggar Gasworks demonstrates those changes well, particularly through the preservation of its exhaust house.

Associated Properties

(other surviving gasworks in the UK) – Carrickfergus (Northern Ireland), opened 1855; Fakenham (Norfolk, England), opened 1846

(other gas museums) – *Flame!* Gas Museum, Leicester (England), managed by the National Gas Museum Trust; Athens Gasworks (Greece); Dunedin Gasworks (New Zealand); Warsaw Gasworks (Poland)

(other 'monuments of industry' in Historic Environment Scotland's care) – Bonawe Historic Iron Works; Bridge of Oich; Click Mill, Dounby; Kinnairdhead Castle and Lighthouse; New Abbey Corn Mill; Stanley Mills; Wanlockhead Beam Engine

Keywords:

coal; coke; coal gas; retort; purifier; gas meter; gas holder; William Murdoch; Scottish Gas

Selected Bibliography:

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